

**EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME  
REGARDING SELECTED POSTPARTUM PSYCHIATRIC  
ILLNESS IN TERMS OF KNOWLEDGE AND  
ATTITUDE AMONG PRIMI MOTHERS IN  
KASTURBA MEMORIAL HOSPITAL  
AT DINDUGAL.**

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

**2008 - 2010**

**EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME  
REGARDING SELECTED POSTPARTUM PSYCHIATRIC  
ILLNESS IN TERMS OF KNOWLEDGE AND  
ATTITUDE AMONG PRIMI MOTHERS IN  
KASTURBA MEMORIAL HOSPITAL  
AT DINDUGAL.**

**Certified Bonafide Project Work  
Done By**

**MS. W. Sampooram**

**M.Sc., Nursing II Year  
Bishop's College of Nursing  
Dharapuram.**

---

**Internal Examiner**

---

**External Examiner**

**COLLEGE SEAL**

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

**2008 - 2010**

# CHAPTER-I

## INTRODUCTION

“Women without prevention is like a stalk of straw before a spark of fire”

**-Webster**

### **BACKGROUND OF THE STUDY**

**WHO, (2009)** states that Mental Health refers to a broad array of activities directly or indirectly related to the mental well-being component included in the WHO's definition of health: "A state of complete physical, mental and social well-being, and not merely the absence of disease". It is related to the promotion of well-being, the prevention of mental disorders, and the treatment and rehabilitation of people affected by mental disorders.

Maternal mental health problems pose a huge human, social and economic burden to women, their infants, their families, and society and constitute a major public health challenge. Although the overall prevalence of mental disorders is similar in men and women, women's mental health requires special considerations in view of women's greater likelihood of suffering from depression and anxiety disorders and the impact of mental health problems on childbearing and childrearing, too. Depression and anxiety are approximately twice as

prevalent globally in women as in men, and are at their highest rates in the lifecycle during the childbearing years, from puberty to menopause. Studies of depression and anxiety show their incidence to be approximately 5% in non-pregnant women, approximately 8-10% during pregnancy and highest (13%) in the year following delivery. Suicide is one of the most common causes of maternal death in the year following delivery in developed countries. Psychosis, by contrast, is relatively rare and occurs in only 1 to 2 women for every 1000 giving birth. The rates of psychosis following delivery may be higher in less developed countries, where infection may contribute to its occurrence.

**WHO, (2008)**

**Niraj Ahuja, KP., (2002)** states that Pregnancy and puerperium are highly stressful periods in a women's life. The person is threatened by physical changes, physiological changes and endocrinal changes occurring in one's body, recognition of psyche in accordance with the new ' mother - role especially in the first pregnancy, body image changes and unconscious intra psychic conflicts relating to pregnancy, childbirth and motherhood becomes activated.

Many as 16% of mothers develop mental illness in the puerperium. The risk of becoming mentally ill during the puerperium is greater than at other times in the women's reproductive life. Many factors are associated with puerperal mental illness such as lack of confiding relationship and support, marital tension, socio economic problems and a previous psychiatric history. Puerperal mental disorders are postnatal blues, postnatal depression and puerperal psychosis. Postnatal blues is a transient self limiting condition with no known serious after effects. It is considered a normal reaction to child birth and is common in primi gravida. Postnatal depression is the most frequent neurotic disorders during postnatal period. The majority of women recover spontaneously. Puerperal psychosis affects approximately 1-2 per 1000 births. Puerperal psychosis is a psychiatric emergency.

**Sreevani, R., (2006)**

**Kaplan, P., (2007)** stated that the most robust data indicate that an episode of post partum psychosis is essentially an episode of a mood disorder, usually a bipolar disorder but possibly a depressive disorder. Relatives of those with post partum have an incidence of mood disorders that is similar to the incidence in relatives of persons with mood disorders.

## NEED FOR THE STUDY

**A report from the Hindu newspaper - Sundaramurthi, S., (2007)** stated that as a result, out of 1,825 births reported in the district Namakkal district, Tamilnadu 1,065 were at PHCs and government hospitals, which was 58.4 percent of the total number of deliveries. This was 11.4% higher than the total deliveries reported in August.

**A report from the Hindu newspaper - Arumugam, S., (2008)** stated that a total of 1, 53,922 deliveries were reported in the PHCs in 2007-2008 which was higher than the 2006-2007 figure of 82,532 deliveries in Salem district, Tamilnadu.

**A report from the Hindu newspaper - Elango, S., (2009)** stated that a total of 24,941 deliveries have been recorded in all the PHCs in Chennai, Tamilnadu for the month of July, at an average of 16 deliveries per PHC. The total number of caesarean deliveries conducted at PHCs during the year 2008-2009 is 1,237.

**Henshaw, S., (2000)** stated that postnatal depression follows 13% of deliveries and blues affect 50 - 80% of new mothers.

**Mayumi, W., (2008)** stated that the prevalence of postpartum depression was 12.8% among Japanese women. The findings suggest that maternity blues is a strong predictor of postpartum depression.

**Beck, CT., (2006)** stated that Maternity blues or postpartum blues may be a normal reaction to the dramatic physiologic changes that occur after delivery. Symptoms that begin in the first few days after delivery, peak on the fifth day and last up to ten days, which includes crying, irritability, fatigue, anxiety and emotional liability. Early studies found that the post partum blues occur in 50% to 75% of new mothers.

Post partum blues is described as “a thief that steals the mother hood” without clinical intervention, post partum blues can have long lasting implications for both the mother and child.

**Balzac, HD., (2005)**

**American psychiatric association, (2006)** estimated that accordingly, one out of eight post natal women may experience blues in their life time, it affects 11.5 million people every year and approximately 15% of the patients commit suicide.

The prevalence of post partum blues among women one to four days after birth in population based surveys was 15% to 18. Subsequent studies found very similar prevalence's.

**Lumley, J., (2005)**

**Lazarus, J., (2005)** stated that Post partum blues affects 10% to 20% of the women in the developed countries and negatively influences maternal, infant and family health.

Two out of three mothers under go the baby blues, a feeling of let down after the emotional experience of child birth.

**Daftary, S., (2006)**

**Department of mental health New York, (2005)** stated that globally the prevalence of baby blues is as high as 80% of the new mothers

**Ozdemir, H., (2005)** stated that the prevalence of maternity blues in Turkish women was 13.1%

**Agoub, M., (2004)** Conducted a study to determine the prevalence and factors associated with postpartum depression among Moroccan mothers. The subsequent point prevalence was 6.9%, 11.8% and 5.6% respectively at 6 weeks, 6 and 9 months.

The overall prevalence of postnatal depression was 21% in Beka'a a rural area and caesarean section decreased the risk of postnatal depression.

**Chaya, M., (2002)**

**Tannous, L., (2008)** stated that the postnatal depression prevalence rate found was 20.7% among southern Brazil women and the prevalence of postnatal depression is higher than the figures found in most developed countries and similar to figures found in developing countries.

**Domnic, T.S., (2001)** stated that the 1 month prevalence rates for major and minor depression were 5.5% and 4.7% respectively. At 3 months, the corresponding prevalence rates were 6.1% and 5.1% among Chinese women. Together, 13 participants suffered from one or more forms of psychiatric disorder in the first 3 months postpartum.

**Yoshida, K., (2008)** stated that postnatal depression occurs in 10-15% of Western women. The incidence of postnatal depression was 12 and 17% in the English and Japanese women respectively.

The postnatal depression is a serious problem across cultures and affects approximately 1 in 8 women sometime in the first year after giving birth.

**Sheridan, P., (2005)**

Postnatal depression is probably the most widely discussed perinatal mood disorder. Defined as arising in or persisting into the first postnatal year it affects around 13% of women following childbirth.

**Kirstle, N., (2007)**

**Azidah, S., (2006)** conducted a study on postnatal depression and socio cultural practice among postnatal mothers in Kotabahru, Malaysia. The prevalence of postnatal depression at 4-6 weeks of postpartum was 20.7%.

**William, et. al., (2006)** screened community based postnatal depression in the first month after delivery at Massachusetts, USA. The findings show that prevalence of postnatal depression to be about 19.7%.

**Radhabai and Prabhu, T., (2002)** conducted an epidemiological study at Government hospital for women and children at Egmore, Chennai to evaluate the prevalence of post partum psychiatric morbidity on 478 new mothers. General Health questionnaire and

Edinburgh Depression scale were used on day 3 and 3 weeks postpartum to identify women with psychiatric morbidity. The prevalence of postpartum psychiatric morbidity was 33.4% and 6.5% of cases had major illness with postnatal depression and psychosis.

A descriptive study was conducted to assess the level of depression among postnatal mothers in selected urban maternity hospitals at Belgaum, Karnataka. The study reveals around 12% of the postnatal women had score 8 and below 27% of them had 9-12 score and 61% had 13 and above score.

**Anuchitra, S., (2009)**

A descriptive study was conducted to assess the prevalence of postnatal depression among primi postnatal mothers at Government hospital, Dharapuram. Postnatal depression is the most common disorder during postnatal period. It occurs in 10% to 15% of women onset is usually within first month often between day 3 and day 14. Findings showed that 64% of the mothers had scores from 13 and above. 26% of the mothers had scores from 10-12, 10% of the mothers had scores below 9. The study reveals that most of the primi postnatal mothers (90%) reveal various levels of depression during the postnatal period.

**Glory, D., (2009)**

Report says that prospective controlled study of postpartum women with severe blues increases the risk of depression in the six months following childbirth.

**Henshaw, C., (2004)**

**Simona, T., (2009)** states that the causes of postnatal depression are fluctuation in hormone levels after delivery is one of the most common. High risk of postnatal depression is bipolar disorder, family history of depression, and stress from external sources such as financial problems or lack of family support.

In fact for 25% of women who have bipolar disorder, the condition began with a post partum psychosis.

**Sharma and Mazmanian, P., (2003)**

**Kathleen Blanchard, A., (2009)** stated that the risk of postpartum psychosis is greater in women above the age of 35 who give birth for the first time.

Untreated postnatal depression has significant impact on the child including adverse effects on cognitive, emotional and social development of the child in addition to impaired mother - infant bonding.

**Yeson Alici ,B., (2003)**

**Ruta, M., (2007)** states that untreated postpartum affective illness places both the mother and infant at risk associated with effects on child development and behavior.

The most severe form of postnatal depression which affects one in 500 mothers and has been linked to suicide and infanticide could be genetic according to new research.

**Amelia Hill ,S., (2008)**

**Radha Krishnan, S., (2009)** reported that promotion of mental health and prevention of mental disorders in rural settings by involving Mahila Mandals in creating awareness among women related to postnatal depression, postnatal psychosis and menopause related problems.

**Cindy, P., (2005)** states that the only intervention to have a clear preventive effect was intensive postpartum support provided by a health professional. The most promising intervention is the provision of intensive, professionally based postpartum support.

Nurses can educate new mothers and their families to help prevent postpartum depression in a number of ways. A nurse who identifies and addresses the issues early on is able to assist the new mother with seeking treatment and support. Nurses play a crucial role in providing interventions and treatment for postpartum depression, beginning with identification. Screening for risk factors is the first crucial step to discover postnatal depression. The nurse can also promote support within the family by discussing the condition and can help the mother get in touch with support groups.

**Castine, P., (2007)**

Nurse's role plays a vital role in the prevention of postpartum psychiatric illness and also the prevalence rate is high in the postnatal blues and postnatal depression when compared with postpartum psychosis. The above mentioned reasons initiated the researcher to conduct this study.

## **STATEMENT OF THE PROBLEM**

A study to assess the effectiveness of structured teaching programme on selected postpartum psychiatric illness in terms of knowledge and attitude among primi mothers in kasturba memorial hospital at Dindugal.

## **OBJECTIVES OF THE STUDY**

1. To assess the pre test knowledge and attitude scores regarding selected post partum psychiatric illness among primi mothers.
2. To assess the post test knowledge and attitude scores regarding selected postpartum psychiatric illness among primi mothers.
3. To compare the pre test and post test knowledge scores regarding selected postpartum psychiatric illness among primi mothers.
4. To compare the pre test and post test attitude scores regarding selected post partum psychiatric illness among primi mothers.
5. To determine the correlation between the post test knowledge and attitude scores regarding selected postpartum psychiatric illness among primi mothers.
6. To determine association between the post test knowledge scores regarding selected postpartum psychiatric illness with their selected demographic variables among primi mothers.

7. To determine association between the post test attitude scores regarding selected postpartum psychiatric illness with their selected demographic variables among primi mothers.

## **OPERATIONAL DEFINITION**

**Effectiveness:** It means producing intended result. In this study effectiveness refers to the gained level of knowledge and develop desirable attitude as determined by significant difference between pre and post test knowledge and attitude scores among primi mothers regarding selected postpartum psychiatric illness which is measured in terms of statistical measurements.

**Structured teaching programme:** It means a systematic planned series of information to group of people so as to help them to learn. In this study it is an individual teaching on selected postpartum psychiatric illness which includes postnatal blues, postnatal depression and postpartum psychosis to primi mothers for 45 minutes to create awareness on knowledge and attitude regarding selected postpartum psychiatric illness by using compact disc with lap top.

**Selected postpartum psychiatric illness:** It means mental illness during post partum period which is chosen. In this study selected post partum psychiatric illness are the mental illness such as post natal blues, post natal depression and post partum psychosis.

**Knowledge:** Information and awareness acquired through experience or education. In this study it is the level of understanding of primi mothers about selected postpartum psychiatric illness which is measured by structured interview schedule and its scores.

**Attitude:** It means the way of thinking or feeling about someone or something. In this study a pattern of mental views or opinion regarding selected post partum psychiatric illness among primi mothers which is measured by five point Likert scale and its scores.

**Primi mothers:** It means a woman who is pregnant for the first time has delivered a child. In this study it refers to women who have delivered the first baby through surgical incision in the lower abdomen.

## **ASSUMPTIONS**

- Primi mothers may have less knowledge regarding selected post partum psychiatric illness.

- Structured teaching programme will help to gain knowledge and desirable attitude regarding selected postpartum psychiatric illness among primi mothers.

## **HYPOTHESES**

- H1 - The mean post test knowledge scores is significantly higher than the mean pre test knowledge scores regarding selected postpartum psychiatric illness among primi mothers.
- H2 - The mean post test attitude scores is significantly higher than the mean pre test attitude scores regarding selected postpartum psychiatric illness among primi mothers
- H3 - There will be a significant correlation between the post test Knowledge and attitude scores regarding selected postpartum psychiatric illness among primi mothers.
- H4 - There will be a significant association between the post test Knowledge scores regarding selected postpartum psychiatric illness with their selected demographic variables among primi mothers.
- H5 - There will be a significant association between the post test attitude scores regarding selected postpartum psychiatric illness with their selected demographic variables among primi mothers.

## **DELIMITATIONS**

The study is limited to

- Fifty samples.
- Study period is only for five weeks

## **PROJECTED OUTCOME**

At the end of the study the primi mothers are expected to have increased level of knowledge and develop positive attitude towards selected postpartum psychiatric illness. It will help the primi mothers in early identification of postpartum psychiatric illness and its treatment so that we can prevent the mental illness during puerperium period.

## CONCEPTUAL FRAMEWORK

Conceptual framework helps to express abstract ideas in a more reality understandable or precise form of the original conceptualization. The conceptual framework for this study was direction from wiedenbach's helping art of clinical nursing theory (1969).

According to Ernestine wiedenbach(1969) nursing is nurturing and caring for someone in a motherly fashion. Nursing is a helping service that is rendered with compassion, skill and understanding to those in need for care, counsel and confidence in the area of health. The practice of nursing comprises a wide variety of services each directed toward the attainment of one of its three components.

- Step I : Identification of the need for help.
- Step II : Ministration of the help needed.
- Step III : Validation that need for help was met.

### **Central purpose:**

According to the theorist the nurse's central purpose defines the quality of health she desires to effect or sustain in her patient and specifies what she recognizes to be her special responsibility in caring for the patient.

In this study the central purpose is the primi mothers to gain knowledge and desirable attitude on selected postpartum psychiatric illness.

#### **STEP I- IDENTIFICATION OF THE NEED FOR HELP:**

According to the theorist within the identification component there are four distinct steps. First the nurse observes the patient, looking for an inconsistency between the expected behaviour of the patient and the apparent behaviour. Second she attempts to clarify what the inconsistency means. Third she determines the cause of the inconsistency. Finally she validates with the patient that her help is needed.

In this study the general information which comprises the age, education, occupation, type of family, family monthly income, religion, residence and family history of mental illness. In this study the primi mothers are identified based on the inclusion criteria, purposive sampling technique was used to assign the primi mothers

#### **STEP II: MINISTRATION OF THE HELP NEEDED**

According to the theorist in ministering to the patient the nurse may give advice or information, make a referral, apply a comfort measures or carry out a therapeutic procedures. The nurse will need to

identify the cause and if necessary make an adjustment in the plan of action.

Ministration of the help needed has two components.

- ❖ Prescription

- ❖ Realities

- ❖ **Prescription:**

According to the theorist a prescription is directive to activity. It specifies both the nature of the action that will most likely lead to fulfillment of the nurse's central purpose and the thinking process that determines it.

In this study prescription is plan of care to achieve the purpose which includes development, validation of structured teaching programme on selected postpartum psychiatric illness which includes postnatal blues, postnatal depression and postpartum psychosis.

- ❖ **Realities**

According to the theorist the realities of the situation in which the nurse is to provide nursing care. Realities consist of all factors -physical, physiological, emotional and spiritual that are at play in a situation in which nursing actions occur at any given moment. Wiedenbach's

defines the five realities as the agent, the recipient, the goal, the means and the framework.

- **Agent:**

According to the theorist, the agent is the practicing nurse or her delegate is characterized by personal attribute capacities, capabilities and most importantly commitment and competence in nursing. In this study the investigator is the agent.

- **Recipient:**

According to the theorist the recipient is the patient, is characterized by the personal attributes, problem, capabilities, aspirations and most important the ability to cope with the concerns or problems being experienced. In this study the recipients are primi mothers.

- **Goal:**

According to the theorist the goal is the desired outcome the nurse wishes to achieve. The goal is the end result to be attained by nursing action. In this study it refers the primi mothers to gain knowledge and attitude regarding selected postpartum psychiatric illness.

- **Means:**

According to the theorist the means comprise the activities and devices through which the practitioner is enabled to attain her goal. The means include skills, Techniques, procedures and devices that may be used to facilitate nursing practice. In this study it refers to implementation of structured teaching programme using CD with lap top for 45 minutes on selected postpartum psychiatric illness.

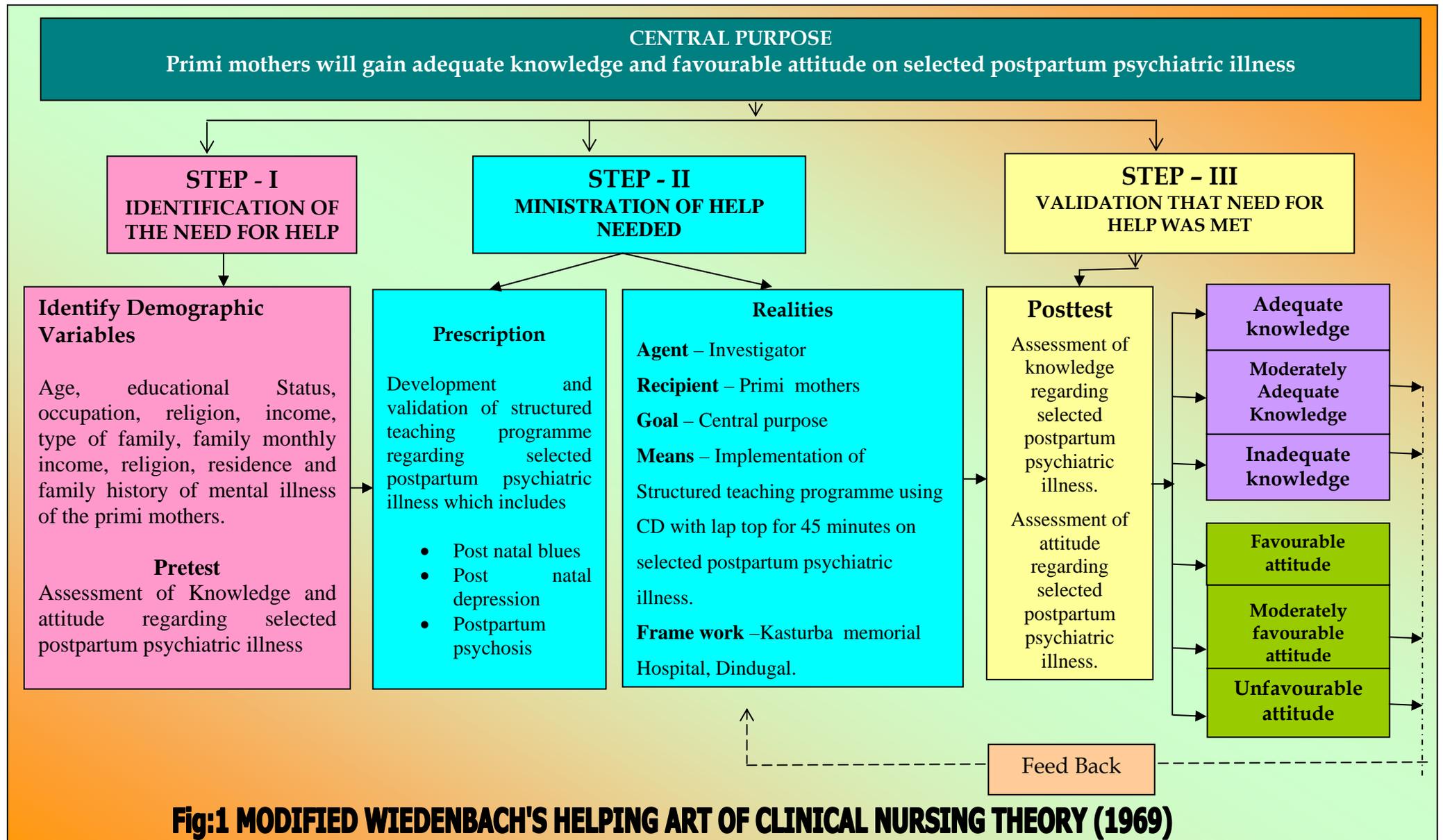
- **Framework:**

According to the theorist the framework is consists of the human environmental, professional and organizational facilities that not only make up the context within which nursing is practiced but also constitute is currently existing limits. In this study it refers to postnatal ward at Kasturba memorial hospital, Dindugal.

### **STEP: III VALIDATION THAT NEED FOR HELP WAS MET.**

According to the theorist the third component is validation. After help has been ministered the nurse validates that the actions were indeed helpful. Evidence must come from the patient that the purpose of the nursing actions has been fulfilled.

In this study the validation need for help was met by means of post test assessment of knowledge and attitude regarding selected postpartum psychiatric illness and positive outcome mothers had adequate knowledge and favorable attitude. Negative outcome mothers had moderately adequate knowledge, inadequate knowledge and moderately favourable attitude and unfavorable attitude which in turn may need ministering the needed help.



## CHAPTER-II

### REVIEW OF LITERATURE

The review of literature is a broad comprehensive in depth, systematic and literal review of scholarly publication, unpublished scholarly print materials, audiovisual materials and personal communication.

The review of literature of the present study has been organized under the following headings

PART -I : OVERVIEW OF SELECTED POSTPARTUM  
PSYCHIATRIC ILLNESS

PART -II

A -STUDIES RELATED TO SELECTED POSTPARTUM PSYCHIATRIC  
ILLNESS

- (i) STUDIES RELATED TO POSTNATAL BLUES
- (ii) STUDIES RELATED TO POSTNATAL DEPRESSION
- (iii) STUDIES RELATED TO POSTPARTUM PSYCHOSIS

B - STUDIES RELATED TO STRUCTURED TEACHING  
PROGRAMME.

C - STUDIES RELATED TO VIDEO AS A MEDIA.

## **PART - I OVERVIEW OF SELECTED POSTPARTUM PSYCHIATRIC ILLNESS**

Pregnancy and puerperium are highly stressful periods in women life. Common puerperal mental disorders are postnatal blues, postnatal depression and postpartum psychosis. About 70% to 80% of all mothers suffer from postnatal blues. Postnatal depression occurs 10% -15% during the first month after delivery. Postpartum psychosis occurs 1% in 1000 deliveries.

**Lynna, Y., (2005)**

### **POSTNATAL BLUES**

It is considered a normal reaction to child birth and affects about 70% to 80% of all postnatal mothers. These are more common in primi gravida.

#### **Etiology**

- Hormonal influences e.g. changes in estrogen, progesterone and prolactin levels, seems to be implicated as the period of increased

emotionality appears to coincide with the production of milk in the breast.

- Lack of social support

### **Clinical Features**

- Feelings of sadness
- Crying
- Irritability
- Mild depression
- Anxiety
- Insomnia

### **Treatment**

- These blues pass of within a few days. The support given to mother in the postnatal period may help them to cope with their feelings and have significant contributions to their emotional well being and adaptation to motherhood

**Fortinash, T et. al., (1996)**

### **POSTNATAL DEPRESSION**

Post natal depression is the most frequent disorder during postnatal period. It occurs in 10% to 15% of women. Onset is usually

within the first, post partum month, the first post partum month often on returning and usually between day 3 and day 14.

### **Causes of postnatal depression**

- Hormonal shifts during postpartum period.
- Marital dissatisfaction
- Inadequate social support
- Stressful life events

### **Clinical features of postnatal depression**

- Poor concentration
- Feeling of guilt and worthlessness
- Lacks energy and motivation
- Lacks of interest in usual activities
- Social withdrawal
- Feeling tired
- Inability to cope
- Irritating
- Anxiety
- Sleep disturbances (sleeping less than usual)
- Changes in appetite or weight
- Recurrent thoughts of death or suicide
- Negative feelings towards baby

## **Treatment**

### **Psychotherapy**

Individual therapy or group therapy can be very effective in the treatment of post partum depression.

### **Cognitive Therapy (CT)**

Cognitive therapy aims to challenge and dispel negative thoughts of the mother that can lead to depression.

### **Psychodynamic psychotherapy**

This similar to psycho analysis is that the therapist will encourage the mother to talk freely, without fear of judgment. The idea is that bringing the true feelings up from the subconscious and into the open will help the postnatal mother to understand and tackle the depression.

**Keltzner, L., (2003)**

### **Postpartum depression counseling**

Other forms of counseling are available.

### **Problem solving therapy**

Is a structured technique whereby the therapists help to identify, the specific problems

## **Marriage counseling**

In case of experiencing marital difficulties or are feeling unsupported at home, marriage counseling could be very beneficial.

## **Antidepressants**

Anti depressants like amitriptyline and tetracyclic drugs are used.

## **Breast feeding during Antidepressants**

It is important to know that the medication can be passed to the baby through breast milk. Hence breast feeding should be avoided.

## **Coping with postnatal depression**

The postnatal mother should seek adequate social support and ventilate her feelings with her husband, friends relatives etc

**Noreen Careen , F., (2007)**

## **Impact of postnatal depression in children**

### **Behavioral problems**

Children of depressed mother are more likely to develop behavioral problems down the line, including sleep problems, temper tantrums, aggression and hyperactivity.

### **Delays in cognition development**

Development is often delayed in babies and children who have depressed mothers.

They may also have many other learning difficulties, including problems with school.

### **Social Problems**

Children of depressed mothers have difficulty establishing secure relationships. They may find it hard to make friends in school.

### **Emotional Problems**

Children of depressed mothers have lower self esteem are more anxious and fearful more passive and less independent.

### **Depression**

The risk for developing major depression early in life is particularly high for the children of mothers with post partum depression.

**Haber, S., (1997)**

### **POST PARTUM PSYCHOSIS**

Post partum psychosis is a very serious mental condition that requires immediate medical attention. Usually described as a period when a woman losses touch with reality, the disorder occurs in women who have recently given birth. Typically the onset of symptoms occurs 3-7 days after delivery.

## **Causes of postpartum psychosis**

### **Psychosocial factors**

Psychosocial factors such as marital status, social support and obstetrical complications and the development of post partum psychosis symptoms.

### **Genetic factors**

Family histories of women with post partum psychotic disorders reveal a high incidence of mood disorders.

### **Biological factors**

Sudden changes in hormone levels after child birth trigger the onset of psychiatric symptoms.

### **Signs and symptoms**

- Usually affective in nature, either manic or depressive but with liability and mixed mood status are common
- Delirium like presentation Hallucination (hearing voices) to kill the baby
- Delusions (paranoid, persecution)
- Extreme agitation and anxiety
- Confusion and disorientation
- Rapid mood swings

- Bizarre behavior
- Inability or refusal to eat or sleep
- Suicidal thought
- Thoughts of harming or killing the baby

### **Treatment**

Post partum psychosis is a medical emergency requiring the mother hospitalization for her protection and that of the infant.

Treatment for post partum psychosis. E.g. tricyclic antidepressants and electro convulsive therapy for depression episode, antipsychotic and lithium for manic episode.

### **Breast feeding on antipsychotic and mood stabilizer medications**

Anti psychotic medications and mood stabilizer can pass into the mother's breast milk. So breast feeding should be avoided during medications.

### **Complications of postpartum psychosis**

#### **Suicide**

Post partum psychiatric admission serves as a major services as a marker for increased suicide risk. Post partum women who committed suicide tended to use violent methods (self incineration, jumping from a height, jumping in front of a train).

## **Infanticide**

Infanticide summarizes some of the psychiatric legal and treatment issues pertaining to this tragic complication of mental illness. Post partum psychosis is a risk factor for infanticide.

**Wanda, k., (2006)**

## **PART -II**

### **A- STUDIES RELATED TO SELECTED POSTPARTUM PSYCHIATRIC ILLNESS**

#### **(i) STUDIES RELATED TO POSTNATAL BLUES**

**Stanly, P., et. al., (2006)** conducted a study to assess the risk factors for more severe blues symptoms include relationship difficulties, history of depression during pregnancy, prenatal anxiety, high level of stress, low level of social support, poor martial relationship and bad obstetrical history such as complications due to pregnancy and low socio economic status were characterized as risk factors.

**Bordeaux, T., (2006)** conducted a study on characterization of postnatal blues and influence of psychosocial factors was done by taking women days following birth, most women were showing science of move changes, commonly named post natal blues. Social support was undertaken 95 women were included in the final sample. The

intensity of postnatal was explained by the type of pregnancy ( $P = 0.002$ ), high level of stress in relation to the care of the baby ( $P = 0.074$ )

**Adewuya, S., (2005)** conducted a study to investigate the risk factors involved in a group of Nigerian post partum women was undertaken five hundred and two post partum women who had a normal vaginal delivery in 5 health centers in Ilesha Township were assessed with the maternity blue scale daily for the first 10 days post partum. The predictors of maternity blues include significant mood change during the pregnancy, past admission during the pregnancy, female and single mothers.

**Sakumoto, K., (2002)** conducted a study to investigate the prevalence of postpartum blues in mothers whose babies are cared for in a newborn nursery, compared with mothers providing rooming in care among Japan women. To diagnose maternity blues and depression, the Stein's questionnaire and the Edinburg postnatal depression scale were used, 97 and 93 women were managed by newborn nursery care and by rooming in care, respectively. Of these women a total of 181 women were considered for analysis. Blues was noted in 31 of 92 mothers (33.7%) receiving newborn nursery care and in 18 of 89 (20.2%) receiving rooming in care with a significant difference ( $p < 0.05$ ) and in

49 of 181 (27.1%) as a whole. Maternity blues is experienced by 25% of Japanese primiparous women.

**Patel, V et. al., (2002)** had detected postnatal blues in 23% of the mothers in Goa and a Meta analysis had shown an average prevalence of postpartum blues of 13% in general population

## **(ii) STUDIES RELATED TO POSTNATAL DEPRESSION**

**Lee, D., (2009)** conducted a longitudinal study on prevalence of antenatal depression as the powerful predictor of postnatal depression among Chinese women. At 38 weeks of pregnancy, 238 consecutive women were invited to return for psychiatric assessment. Seventy women (29%) declined to participate, and another 11 (5%) defaulted the SCID interview. Among the 157 women interviewed, the 1-month prevalence of antenatal depression was 4.4%. The 1-month prevalence of all psychiatric diagnoses was 6.4%. The prevalence of antenatal depression and all psychiatric diagnoses for the entire pregnancy was 6.4% and 8.3%, respectively.

**Tashakori, A., (2009)** conducted a study on potential assessment of some risk factors of partum depression in Iran, a descriptive cross sectional study reveals the prevalence of positive screening test was 21.4% unwanted pregnancy, marital dissatisfaction, infant gender

dissatisfaction, lower socio economic status, lower educational level, infant illness and previous depression were significantly higher among women with high score on the Edinburgh post natal depression scale.

**Satoh, A., (2009)** conducted a study on factors associated with postpartum depression in Japan. One hundred and sixty nine women were selected and administered with Edinburg postnatal depression scale. The primiparas showed a significant high score than the multiparas. The EPDS (Edinburg postnatal depression scale) decreased with the frequency of delivery in the groups of mothers in their twenties and thirties. The co operation of the husband was associated with a decreased EPDS score both for the primiparas and multiparas .

**Robertson, E., (2009)** conducted a study on antenatal risk factors for postpartum depression. Studies were identified and critically appraised in order to synthesize the current findings. The search resulted in the identification of two major meta-analyses conducted on over 14,000 subjects, as well as newer subsequent large-scale clinical studies. The findings from the meta-analyses of over 14,000 subjects, and subsequent studies of nearly 10,000 additional subjects found that the following factors were the strongest predictors of postpartum depression- depression during pregnancy, anxiety during pregnancy, experiencing stressful life events during pregnancy or the early

puerperium, low levels of social support, and a previous history of depression. Critical appraisal of the literature revealed a number of methodological and knowledge gaps that need to be addressed in future research. These include examining specific risk factors in women of lower socioeconomic status, risk factors pertaining to teenage mothers, and the use of appropriate instruments assessing postpartum depression for use within different cultural groups.

**Jane More, T et.al., (2009)** conducted a study on counseling in postnatal depression in Northern England and the results revealed that women diagnosed with postnatal depression six weeks after given birth who received any form of counseling were 40% less likely to suffer from such symptoms six months later.

**Glory, D., (2009)** conducted a descriptive study to assess the prevalence of postnatal depression among primi postnatal mothers at Government hospital, Dharapuram. The population selected for the study was primi mothers through purposive sampling method. The sample size was 60 postnatal mothers selected based on inclusion criteria. Data was collected using structured interview schedule using Edinburg postnatal depression scale. Findings showed that 64% of the mothers had scores from 13 and above. 26% of the mothers had scores from 10-12, 10% of the mothers had scores below 9. The study reveals

that most of the primi postnatal mothers (90%) reveal various levels of depression during the postnatal period. Among the demographic variables education has got a significant association with the level of postnatal depression among primi postnatal mothers. Findings of the demographic variables include 64% of primi mothers were in the age group of 20-25 years, 44% had primary education, 74% of them were house wives, 94% of them were Hindus, 78% were from rural areas, 90% of the mothers had income below Rs.5000, 54% of the mothers belonged to joint family and 46% of the mothers belonged to nuclear family.

**Anuchitra, S., (2009)** conducted a descriptive study to assess the level of depression among postnatal mothers in selected urban maternity hospitals at Belgaum, Karnataka. Population of the study was 100 postnatal mothers with live babies, hospitalized or visited the hospital at any time during 7-45 days after delivery. The study subjects were selected by using purposive sampling. Data collection tool consisted of demographic variables, Edinburg postnatal depression scale to assess the postnatal depression. The study reveals around 12% of the postnatal women had score 8 and below 27% of them had 9-12 score and 61% had 13 and above score. 69% of the samples belonged to the age group of 22-29 years, 25% of them were uneducated. 67% of

postnatal mothers were house wives, 87% were Hindus, 65% were from rural area and 49% were having income of Rs 2001-3000. Chi square test revealed that there was significant association between the education levels, religion with postnatal depression.

**Gausia, K., (2008)** conducted a study on magnitude and contributory factors of postnatal depression to estimate the prevalence of PND and its associated risk factors among Bangladeshi women. A cohort of 346 women was followed up from late pregnancy to post-partum. Socio demographic and other related information on risk factors was collected on structured questionnaires at 34-35 weeks of pregnancy. The Edinburgh Postnatal Depression Scale (EPDS-B) was used to measure depression status at 34-35 weeks of pregnancy and at 6-8 weeks after delivery. The prevalence of PND was 22% [95% confidence interval (CI) 17.7-26.7%] at 6-8 weeks post-partum. After adjustment in a multivariate logistic model, PND could be predicted by history of past mental illness [odds ratio (OR) 5.6, 95% CI 1.1-27.3], depression in current pregnancy (OR 6.0, 95% CI 3.0-12.0), perinatal death (OR 14.1, 95% CI 2.5-78.0), poor relationship with mother-in-law (OR 3.6, 95% CI 1.1-11.8) and either the husband or the wife leaving home after a domestic quarrel (OR 4.0, 95% CI 1.6-10.2). The study findings highlight the need for programme managers and policy

makers to allocate resources and develop strategies to address PND in Bangladesh.

**Ramchandani, PG., (2008)** conducted a study aimed to investigate risk factors for the occurrence of postnatal depression in urban South African women. One thousand and thirty-five women were interviewed in the antenatal period and subsequently completed the Pitt Depression Questionnaire in the postnatal period. 170/1035 (16.4%) women were probable cases of postnatal depression. The strongest independent predictors of postnatal depression were exposure to extreme societal stressors (witnessing a violent crime/danger of being killed) (adjusted Odds Ratio 2.468 (95% Confidence Interval 1.509, 4.037)) and reporting difficulties with their partner (adjusted OR 1.645 (1.088, 2.488)). There was some loss of the sample during follow-up (35.1%), which was to be expected given the turbulent nature of the study setting. The measures were questionnaires administered by interview. Postnatal depression is common in women in developing world settings, such as this part of Southern Africa. Although some of the risk factors for postnatal depression were similar to those identified in studies in developed nations, some important differences exist, most notably antenatal exposure to extreme societal

stressors. This study shows that it is possible to identify women at risk during pregnancy in a developing world setting.

**Godoy, PC., (2008)** conducted a study to determine the prevalence and risk factors associated with PPD in puerperal women in Temuco, Chile. The Edinburgh Postnatal Depression Scale was administered to 73 puerperal women aged 15 to 32 years, between 40 to 45 days after delivery. 20 women with and 20 women without post partum depression (PPD) were interviewed and their clinical records were reviewed to assess their perinatal care. The prevalence of PPD in the whole sample was 50.7%. An individual physical risk factor was alcohol consumption during pregnancy. Family risk factors were a poor relationship with the father of the child during pregnancy, a history of mental health problems in close family members, a history of family violence and a poor relationship with parents during puerperium. Having more children was socio demographic risk factor. Post partum depression is common. The characterization of risk factors should lead to the implementation of preventive strategies.

**Peter, J., (2008)** conducted a randomized double blind clinical trial at National institute of mental health in United States, which evaluates the efficacy of estrogen treatment in women with postpartum depression. Estradiol therapy has a prophylactic effect in women at

high risk for developing postpartum depression. Studies also suggest that estradiol has anti depressant effect in women.

**Kauppi, A., (2008)** a conducted study on maternal depression and filicide case studies of ten mothers at Finland. This study described ten cases of filicides committed by mothers who intentionally killed one or more of their children within 12 months after delivery. The data were collected from police and court records, forensic psychiatric records, autopsy reports, and other medical records. The mean age of the mothers was 28.5 years and of the victims 4 months. Most mothers had had house calls from the public health nurse or psychologist. The mothers' conditions deteriorated rapidly, and the filicide was committed when the mother was left alone with the baby against her will.

**Klainin, P., (2008)** conducted a study on the prevalence of postnatal depression in Asian countries from 64 samples ranged from 3.5% to 63.3% of postnatal depression. The findings showed that the risk factors for postnatal depression were antenatal depression, obstetric complications, social demographic variables and cultural factors. The study showed that the current state of knowledge regarding risk factors of postpartum depression has its implications for clinical practice.

**Katrina, M., (2008)** conducted a study among 30 UK women to explore the women's view and experience of antidepressants as a treatment for postnatal depression. Most of the women had negative views towards antidepressants as a treatment for postnatal depression at the time of randomization. Some women reported that over a course of their illness, through time and contact with others including health professionals their view towards antidepressants had changed and they took medication.

**Letourneau, N., (2007)** conducted descriptive study to assess the support needs, support resources, barriers to support, and preferences for support intervention for women with postpartum depression. Multisite, exploratory, descriptive study in which qualitative data were collected on support needs, the availability of resources, perceived barriers to support, and preferences for support of women who have experienced symptoms of postpartum depression. Conducted in 24 Alberta and 17 New Brunswick mothers were interviewed individually and in groups 5 Alberta and 6 New Brunswick mothers were interviewed. For most mothers, one-on-one support was preferred when postpartum depression is recognized. Group support should be available once the mothers start to feel better and are able to comfortably interact with other mothers in a group format. This suite of

alternatives needs to be underpinned by concerted public education efforts.

**Amy Lynn, F., (2007)** conducted a pilot study explored relationships between postpartum depression and child harming thoughts among women at USA. Fifty mothers from an outpatient paediatric office completed the Edinburgh Postnatal Depression Scale (EPDS), Postpartum Depression Predictors Inventory-Revised (PDPI-R), and Beck Anxiety Inventory (BAI). Participants also completed the Child Thoughts Inventory (CTI), a modified version of the Yale-Brown Obsessive-Compulsive Inventory (Y-BOCS) and Florida Obsessive-Compulsive Inventory (FOCI). Results indicated significant positive correlations between postpartum depression and anxiety and frequency and intensity of child harming thoughts. In addition, having a poor self-view was significantly correlated with intensity of child harming thoughts and previous anxiety was correlated with both frequency and intensity of child harming thoughts. Despite the fact that mothers experiencing postpartum mood disturbances rarely harm their infants the findings of this pilot study suggest that these women may have frequent and intense ego-dystonic thoughts about harming their children. Results also suggest that postpartum depression and anxiety may share similar cognitive processes.

**Max Abbott, W., (2006)** conducted a study to assess the prevalence of and risk factors for postnatal depressive symptoms in a cohort of mothers of Pacific Island infants in Auckland, New Zealand. The data were gathered as part of the Pacific Island Families Study, in which 1376 mothers were interviewed when their babies were 6 weeks old. The interview included the Edinburgh Postnatal Depression Scale (EPDS).16.4% of mothers was assessed as probably experiencing depression. Prevalence rates varied from 7.6% for Samoans to 30.9% for Tongans. The prevalence of depressive symptoms among Pacific mothers is at the upper end of the range typically reported.

**Glen, D., (2006)** conducted a study on postnatal depression among Surabaya Indonesia women. The Edinburgh Postnatal Depression Scale, used for the first time in Indonesia, evaluated demographic data and risk factors to determine any correlation of women with and without postpartum depression. Some 434 women attending antenatal care were included in the study beginning the third term of pregnancy and concluded four to six weeks postpartum. Finding of 22.35 percent of postnatal mothers reporting postpartum depression in the study is similar to other studies. No significant differences were found between women with and without postpartum depression when evaluating demographic variables. Significant

differences between the two groups were found when comparing risk factors. Also, women who had more risk factors had postpartum depression. The need for educational programs to create awareness and assist in identifying the condition early is important. Finally, ongoing support of mothers during the postpartum period is necessary in preventing postpartum depression

**Dennis, CL., (2006)** conducted a study on Canadian women's perception of support and conflict in the development of postpartum depressive symptoms. Self administered measures of partner support, partner conflict and depression scales were assessed. Women with depressive symptoms at 8 weeks postpartum specific had significantly lower perception of relationship and postpartum specific partner support.

**Hussian, J et. al., (2006)** studied the prevalence and correlates of postnatal depression among Pakistan women. Results says that 36% women scored > 12 on EPDS (Edinburg postnatal depression scale) high depression score was associated with lower social support and increased stressful life events and higher levels of psychological distress in the antenatal period.

**Green, K., (2006)** conducted a study to sought further identify the prevalence and related socio cultural and physical factors in Arab Emirates. It was found that at 3 months this sample had 22% of mothers falling into the depression category and another 22% falling in the borderline depression category. At 6 months this fell to 12.5% depression category and 19.6% borderline depression. Relationships between higher depression scores and risk factors included were not breastfeeding, giving birth to the first child, poor self body image and view of weight, poor relationship with mother in law and an older age at marriage.

**Hanley, J., (2006)** conducted a study to examine the experiences of Welsh mothers diagnosed with postnatal depression by qualitative interviews using a semi-structured questionnaire to clarify mothers' thoughts and feelings within the postnatal period in semi-rural part of south-west Wales. 30 mothers with one or more children participated in the study. Most of the mothers were from lower socio-economic groups. Mothers had little knowledge of the effects of postnatal depression before becoming pregnant, and were initially reluctant to confide or share their feelings. Economic pressures determined a second income and necessitated mothers returning to work. This left them with little quality time for their babies and family. The prime support networks,

which in previous generations were grandmothers, were absent, and mothers relied on social services and voluntary support groups. A greater understanding of the emotional and social effects of childbirth may help mothers to avoid feelings of isolation and the inability to cope. Discussing the issues of socio-emotional strain during pregnancy may help the mother to recognise the symptoms that identify postnatal depression, legitimise the condition and begin the recovery process.

**Andrews, J., (2005)** conducted to examine mental health treatment rates at 3 and 4 months postpartum for women who identified with postpartum depression among European, American, Hispanic women. In the screening 122 women were identified with postpartum depression symptoms who enrolled in the study and 117 participated in all assessments. At 3 and 4 months postpartum only 14 women (12%) received psychotherapy and fewer received psychopharmacologic treatment. In comparison to women with low postpartum depression symptoms were in therapy at 3 and 4 months.

**Theresa Lawrie, A., (2005)** conducted a study on Double-blind randomised placebo-controlled trial to determine the effect of postnatal administration of the long-acting progestogen contraceptive, norethisterone enanthate, on postnatal depression and on serum hormone concentrations, and their association with depression on a

tertiary care hospital in Johannesburg, South Africa. Population was 180 postnatal women using a non-hormonal method of contraception. Random allocation within 48 hours of delivery to norethisterone enanthate by injection, or placebo. Depression scores in the three months postpartum as rated by the Montgomery-Åsberg Depression Rating Scale (MADRS) and the Edinburgh Postnatal Depression Scale (EPDS); serum  $17\beta$ -oestradiol, progesterone, testosterone and the  $17\beta$ -oestradiol: progesterone ratio at six weeks postpartum. Mean depression scores were significantly higher in the progestogen group than in the placebo group at six weeks postpartum (mean MADRS score 8.3 vs 4.9;  $P = 0.0111$ ; mean EPDS score 10.6 vs 7.5;  $P = 0.0022$ ). Mean serum  $17\beta$ -oestradiol and progesterone concentrations were significantly lower in the progestogen group compared with the placebo group at six weeks postpartum. There were no correlations between any of the hormone parameters and depression at six weeks.

**Hen, SS., (2004)** conducted a study to explore the association depressive symptoms and social support in Taiwanese women. A correlational survey design using the EPDS (Edinburg postnatal depression scale) to measure depression was employed and postpartum social support questionnaire was used to measure social support. It was found that the greater the level of social support received by the

women, the lower the risk of postnatal depressive symptoms experienced.

**Park, YJ., (2004)** conducted a study to determine the predictors of postpartum depression. One hundred- sixty one women within one year after delivery from one public health centre located in the northern area of Seoul were used in this study. The average item score of the EPDS was 6.67. 12.4% of respondents, who scored above a threshold 12, were likely to be suffering from a depression of varying severity. The fitness of the model for explaining postpartum depression from six variables, plan for pregnancy, family support, quality of marital relation, perceived social support, life events, childcare stress, and self-esteem, was statistically significant and the predictive power of these variables was 90.9%. The significant predictors of postpartum depression were family support and childcare stress. Further research is needed to identify the prevalence rate of postpartum depression using more reliable sampling methods from a population. Nursing interventions need to be developed for promoting family support and reducing childcare stress.

**Ruta, M., (2004)** conducted a pilot study at Massachusetts General Hospital, Boston, among 8 female out patients aged 18 to 45 years were enrolled in on week open label trial of Bupropion SR for

postpartum depression. 6 out of 8 subjects demonstrated 50% decrease in Hamilton depression rating scale. Three subjects achieved remission at week eight.

**Dominic Lee, T.S., (2004)** conducted a study to investigate the socio cultural risk factors of postnatal depression using ethnographically informed epidemiological methods among Chinese Hong Kong women. A total of 959 women were assessed at their first ante-partum visit (baseline), in the third trimester, immediately after delivery, and 3 months postpartum. Six domains of risk factors were examined. The dependent variable was postnatal depression (as defined by the Edinburgh Postnatal Depression Scale) at 3 months post-partum. Conflict with mother-in-law, marital dissatisfaction, past depression and antenatal depression independently predicted the occurrence of postnatal depression. The cultural practice of – a Chinese post-partum custom of mandated family support – was associated with better social support and a slightly lower risk of postnatal depression. Socio cultural aspects of the immediate puerperium shape maternal emotional well-being. In-law conflict is an important source of household distress in many Asian societies. The findings have implications for clinical practice and future studies.

**Gonidakis, F., (2003)** conducted a study to investigate the prevalence and time course related factors of PPD in a Greek urban environment as well as possible relations of PPD with certain clinical and socio demographic factors .The study was performed on a sample of 402 women that were recruited from a university obstetric clinic in Athens, Greece, during the first 24 hours after delivery. The women completed the Edinburgh Postnatal Depression Scale through telephone interviews. The telephone interviews were conducted the first week as well as the first, third, and sixth month after delivery. In addition, the. A cut off point of 12 in the Edinburgh Postnatal Depression Scale was used to define PPD. Eighty (19.8%) of the women in the sample experienced PPD during the first 6 months after delivery. The development of PPD was related significantly to the following factors: stressful events during pregnancy ( $P=.01$ ), maternity blues on the seventh day after delivery ( $P=.01$ ), obsessive preoccupation with cleaning ( $P = .04$ ), and judgment that the baby is crying excessively at the first month interview ( $P = .02$ ). The women's emotional condition before and after delivery, obsessionality, and difficulties in regulating the infant's emotions appear to contribute to the development of PPD during the first 6 months after delivery.

**Ingram, J.C., (2003)** conducted a study a prospective study on hormonal predictors of postnatal depression at 6 months in breastfeeding women at United Kingdom involving 54 breastfeeding mothers of mixed parity and similar socio-economic status and education used bivariate analysis to look for associations between hormone levels and postnatal depression. Total oestradiol, total progesterone, prolactin and thyrotropin (TSH) levels were determined at four time points (ante- and postnatally) from finger-prick blood spots by fluoro-immunoassay. EPDS (Edinburg postnatal depression scale) and life event check lists were completed at 6 months postpartum. Ten women were screened positive for sub-clinical depression (score $\geq$ 10). Bivariate analysis showed that antenatal prolactin and postpartum progesterone levels were significantly associated with postnatal depression at 6 months (p=0.03). Only the result for progesterone persisted in a multiple logistic regression, which controlled for life events. Women with lower progesterone levels in the immediate postnatal period were more likely to be depressed at 6 months.

**Dwenda, P., (2003)** conducted a study on The Effectiveness of Various Postpartum Depression Treatments and the Impact of Antidepressant Drugs on Nursing Infants at America. Postpartum depression is seen in approximately 13% of women who have recently

given birth; unfortunately, it often remains untreated. Important causes for under treatment of this disorder are providers' and patients' lack of information about the effectiveness of various treatments, and their concerns about the impact of treatment on nursing infants. This article presents research based evidence on the benefits of various treatments for post partum depression and their potential risks to nursing infants.

**Manichandran, P., (2002)** conducted a study on Post partum depression in a cohort of women from a rural area of Tamil nadu, India to determine the incidence of and risk factors for developing post partum depression. Research assessed 359 women in the last trimester of pregnancy and 6-12 weeks after delivery depression and for putative risk factors. The incidence of post-partum depression was 11% (95%). Low income, birth of a daughter when a son was desired, relationship difficulties with mother-in-law and parents, adverse life events during pregnancy and lack of physical help were risk factors for the onset of post partum depression.

**Vikrampatel, S., (2002)** conducted a study on mothers in Goa, India regarding gender, poverty and postnatal depression. This study described the natural history of depression in mothers who recently gave birth in a low income country and to investigate the effect of risk

factors, particularly related to infant gender bias, on the occurrence and outcome of depression. The authors studied a group of pregnant mothers recruited during their third trimester of pregnancy from a district hospital in Goa, India. The mothers were interviewed at recruitment, 6-8 weeks, and 6 months after childbirth. Interview data included presence of antenatal and postnatal depression, obstetric history, economic and demographic characteristics, and gender based variables (preference for male infant, presence of marital violence) Depressive disorder was detected in 59 (23%) of the mothers at 6-8 weeks after childbirth, 78% of these patients had clinically substantial psychological morbidity during the antenatal period. More than one-half of the patients remained ill at 6 months after delivery.

**Radhabai and Prabhu, T., (2002)** conducted an epidemiological study at Government hospital for women and children at Egmore, Chennai to evaluate the prevalence of post partum psychiatric morbidity on 478 new mothers. General Health questionnaire and Edinburgh Depression scale were used on day 3 and 3 weeks postpartum to identify women with psychiatric morbidity. The prevalence of postpartum psychiatric morbidity was 33.4% and 6.5% of cases had major illness with postnatal depression and psychosis. Chi

square reveals there was no association between education of postnatal mothers with postpartum psychiatric illness.

**Chaya, M. Campell om, et. al., (2002)** conducted a descriptive study on post partum depression, prevalence and determination in Lebanon and Beirut a rural area among 396 women. The study revealed that lack of social support and prenatal depression were significantly associated with post partum depression in both areas and it pointed out that caregivers should use pre and post natal assessment to identify and address women at risk of postpartum depression.

**Chabrol, H., (2002)** conducted a controlled randomized study on women at risk prevention of postpartum depression at France. Research is needed to evaluate the efficacy of prevention and treatment for postpartum depression. Subjects were screened with the Edinburgh Postnatal Depression Scale (EPDS) at the obstetric clinic. 258 mothers at risk (EPDS scores 9) were randomly assigned to a prevention/treatment group or a control group. The prevention group received one cognitive-behavioural prevention session during hospitalization. At 4 to 6 weeks post-partum, subjects were screened again with the EPDS, after drop-out rates (refusals plus no return of the second EPDS) of 25.4% (33/130) in the intervention group and 10.9% (14/128) in the control group. Mothers with probable depression (EPDS scores 11) were assessed

using the Hamilton Depression Rating Scale (HDRS) and the Beck Depression Inventory (BDI). 18 mothers with major depression continued in the treatment group or in the control group 30. Treated subjects received a cognitive-behavioural programme of between five and eight weekly home-visits. Compared with the control group, women in the prevention group had significant reductions in the frequency of probable depression (30.2% *v.* 48.2%).

**Sanderson, C.A., (2002)** conducted a study on postnatal depression for sudden infant death in Netherland there were 32,984 live births and 42 babies died with the cause registered as sudden infant death syndrome. Multivariate analysis showed that high Edinburgh postnatal depression scale 95% was the most important factor.

**Claudia Klier, M., (2001)** conducted a study on Interpersonal psychotherapy adapted for the group setting in the treatment of postpartum depression among Australian women. The current investigation extends prior work by examining the efficacy of a group IPT approach for the treatment of postpartum depression. Depression scores of 17 women diagnosed with postpartum depressive disorder (DSM-IV criteria) decreased significantly from pre- to post-treatment. Follow-up assessments at 6 months revealed continuation of the treatment effect. Results indicate that IPT adapted for a group model

has positive implications for the treatment of postpartum depression, demonstrating both short-term and longer-term effects in the reduction of depressive symptomatology.

### **(iii) STUDIES RELATED TO POSTPARTUM PSYCHOSIS**

**Hultman, CM., (2009)** conducted a study on risk factors of postpartum psychosis following child birth among Sweden mothers. During the first 90 days post-partum, 892 women were recorded as having been hospitalized due to psychoses. As expected, incidence rates for psychosis peaked in the first month after birth (285 of the 892 hospitalizations were in the first seven days, and 523 were in the first 14 days). About half of the hospitalizations ( $n = 436$ ) were of women who had no previous psychiatric hospitalization. Specific to the first 90 days post-partum (but not later), higher maternal age was associated with increased risk of psychosis, and higher infant birth weight and maternal diabetes appeared protective. There was a different pattern of risk factors in the second 90-day period and in all women (i.e., including those with previous psychiatric hospitalization). Overall, these findings suggest that there is a specific independent risk for psychosis in the early post-partum period.

**Christina, M., (2009)** found new onset of mental illness from postpartum psychosis affects among Sweden women age 35 or older following first child birth. They found that women once age 35 were 2.4 times more likely to suffer a psychotic episode after child birth.

**Nager, A., (2008)** conducted a study to assess the severity of postpartum psychosis calls for further research on the association between obstetric variables and psychiatric disorders. A total of 1, 33368 Swedish first time mothers were included. Respiratory disorder in the neonate, severe birth asphyxia, preterm birth Caesarean section, perinatal death were associated with an increased risk of postpartum psychosis.

**Chandra, S., (2008)** conducted a study on Prevalence and correlates of suicidality among India women with post partum psychosis in an inpatient setting. A total 82 post partum women consecutively admitted to the psychiatric unit of the National Institute of Mental Health and Neurosciences, India during 18 months were assessed using the Comprehensive Psychopathology Rating Scale (CPRS) for psychopathology and suicidality. Thirty one women (38%) reported suicidal ideation, of whom 15 (18%) had attempted suicide in the current episode. Suicidal ideation and suicide attempts were more frequent in women with depression, and insidious onset of the current

illness and those with higher scores on the depressive dimension. Suicidal ideation was also significantly associated with ideas of harm to the infant ( $p < 0.05$ ). There is a high prevalence of suicidal ideation and suicide attempts in this group of patients. Depressive symptoms in postpartum psychosis appear to be the most important risk factor predicting suicidal ideation and attempts.

**Ahokas, P., (2001)** conducted a pilot study on the positive treatment effect of estradiol in postpartum psychosis. 10 mothers received serum estradiol was measured at weekly intervals during 6 weeks of treatment with sublingual 17(beta) estradiol. The findings of this pilot study suggest that an insufficient level of estradiol plays a role in the development of postpartum psychosis.

## **B - STUDIES RELATED TO STRUCTURED TEACHING PROGRAMME**

**Gjerdingen, D., (2009)** conducted a pilot study on stepped collaborative care intervention for women with postpartum depression and evaluate health differences between self-diagnosed depressed and non depressed women. Five hundred six mothers of infants from 7 clinics completed surveys at 0 to 1, 2, 4, 6, and 9 months postpartum and a Structured Clinical Interview for DSM-IV (SCID). SCID-positive

depressed women were randomized to stepped collaborative care or usual care. Nine-month treatment, health, and work outcomes were evaluated for stepped care women (n = 19) versus control depressed women (n = 20), and self-diagnosed depressed women (n = 122) versus non depressed women (n = 344). Forty-five women had SCID-positive depression whereas 122 had self-diagnosed depression. For SCID-positive depressed women, the stepped care intervention increased mothers' awareness of their depression diagnosis (100% vs 61%;  $P = .008$ ) and their receipt of treatment (94% vs 56%;  $P = .019$ ). Self-diagnosed depressed women (vs non depressed women) had more depressive symptoms and acute care visits, worse general and mental health, and greater impact of health problems on regular activities. The stepped care intervention improved women's knowledge of their postpartum depression diagnosis and their receipt of treatment. However, our formal diagnostic procedures missed many women whose depressed mood interfered with their health and function.

**Rajamani, S., (2008)** conducted a quasi experimental study to assess the effectiveness of prophylactic information on maternal adjustment in terms of postnatal blues at Government Hospital, Madurai. Majority 29 (96.7%) of the postnatal mothers in the experimental group had mild baby blues and 1(3.3%) had moderate

blues. Whereas a larger percentage 16 (53.3%) of the mothers in the control group had moderate baby blues, 11(36.7%) of the postnatal mothers had severe blues in the control group and 3(10%) of the postnatal mothers had mild blues. The prophylactic information regarding maternal adjustment was found to be effective in reducing the postnatal blues. Chi square reveals that there was no association between the postnatal blues score and type of family of the post natal mothers in the experimental group.

**Kleeb, B., (2005)** conducted randomized a study to assess influence of prophylactic information on the frequency of baby blues among German speaking women. Researcher obtained valuable information from 169 women, only 12(15%) women of the informational group experienced baby blues. Oral and written statement about baby blues given postpartum can be effective instrument to lower its frequency.

**Shu Hen, S., (2002)** conducted a study on effectiveness of informational support in reducing the severity of postnatal depression among Taiwan women. The result stated that women who received informational support about postnatal depression 6 weeks after giving birth experienced lower EPDS scores at 3 months postpartum than those who did not receive this information.

## **C - STUDIES RELATED TO VIDEO AS A MEDIA**

**Vik, K., (2006)** conducted a study on video interaction guidance offered to mothers with postnatal depression at Norway. The data were collected through interviews and analyzed on phenomenological basis. Hypothesis states that the pictures on the TV screen are especially powerful to bring forth a change in the mothers self image.

**Jane Hanley, T., (2007)** conducted a study on a critical analysis of video tapes on postnatal depression for use by mothers in several countries Australia, South Africa, USA and UK and similarly in all video tapes reviewed with regard to the feelings expressed by mothers.

# CHAPTER - III

## METHODOLOGY

Methodology of the study includes approach and design of the study, setting of the study, population, criteria for sample selection, sample size, instrument and scoring procedure, developing and testing of the tool, method of data collection and plan for data analysis.

### RESEARCH APPROACH

An evaluative approach was used to assess the effectiveness of structured teaching programme on selected postpartum psychiatric illness among primi mothers.

### RESEARCH DESIGN

The design used in this study was one group pretest and post test pre experimental design.

Schematic representation of one group pretest and posttest design.



O1 Indicates pretest knowledge and attitude regarding selected post partum psychiatric illness.

- X Indicates structured teaching programme on selected postpartum psychiatric illness.
- O2 Indicates post test knowledge and attitude regarding selected post partum psychiatric illness.

## **SETTING OF THE STUDY**

The study was conducted at Kasturba memorial hospital, at Dindugal. The hospital consists of 300 beds with various wards such as male medical ward, male surgical ward, female medical ward, female surgical ward, labour ward, postnatal ward, OPD, operation theatre, post operative ward, NICU and family planning ward. Postnatal ward has two units-one for normal delivery mothers and the other for caesarean mothers. Postnatal ward for caesarean mothers consists of 40 beds. Approximately monthly about 350-400 deliveries were conducted in a month in which 250 mothers undergo normal delivery and around 100 mothers undergo caesarean section.

## **POPULATION**

The population of this study was primi mothers admitted in Kasturba memorial hospital, at Dindugal.

## **SAMPLE**

Sample constitutes primi mothers who have undergone caesarean section admitted in postnatal ward at Kasturba memorial hospital at Dindugal.

## **CRITERIA FOR SAMPLE SELECTION**

### **Inclusion criteria**

- Primi mothers who have undergone Lower segment caesarean section
- Primi mothers who are available during the data collection between 4<sup>th</sup> and 8<sup>th</sup> postoperative day after delivery.
- Primi mothers those who are willing to participate.
- Primi mothers those who are able to speak in Tamil or English.

### **Exclusion criteria**

- Mothers who are critically ill

## **SAMPLE SIZE**

Sample size comprises of 50 primi mothers.

## **SAMPLING TECHNIQUE**

Purposive sampling technique was used in this study.

## **DESCRIPTION OF THE TOOL**

Structured interview schedule consists of the following parts

**PART-I** It consists of demographic variables like age, educational status, type of family, family monthly income, occupation, Religion, residence and family history of mental illness.

**PART-II** This section includes structured knowledge questionnaire which consists of 25 multiple choice questionnaires on knowledge regarding selected postpartum psychiatric illness.

**PART-III** This section includes Five point Likert scale which consists of 15 items to assess the attitude of primi mothers regarding selected postpartum psychiatric illness with 5 responses which includes 10 positive and 5 negative statements.

## **SCORING PROCEDURE**

### **PART-II**

The structured knowledge questionnaire consists of 25 multiple choice questions. Each question has got 4 options. Each right answer was scored 1 and each wrong answer was scored 0.

The scores were measured as follows

<b>Level of knowledge</b>	<b>Knowledge score</b>	<b>Percentage</b>
Adequate	17-25	65-100%
Moderately Adequate	9- 16	34 - 64%
Inadequate	0 - 8	<33%

### **PART-III**

The five point Likert scale consists of 15 statements. Each has 5 responses such as strongly agree, agree, uncertain, disagree and strongly disagree.

The scores were measured as follows

<b>Five point likert scale</b>	<b>Positive statements</b>	<b>Negative statements</b>
Strongly agree	5	1
Agree	4	2
Uncertain	3	3
Disagree	2	4
Strongly disagree	1	5

<b>Level of attitude</b>	<b>Score</b>	<b>percentage</b>
Favourable	51-75	67-100%
Moderately favourable	26-50	34 -66%
Unfavourable	1-25	<33%

## **VALIDITY AND RELIABILITY OF THE TOOL**

### **Validity**

Validity of tool was established in consultation with guide and 4 nursing experts in the field of psychiatric nursing, Psychiatric medicine and statistics. The tool was modified according to the suggestions and recommendations of expert if needed.

### **Reliability**

The reliability of the structured knowledge questionnaire was assessed by test rest method to assess the stability Where Karl Pearson correlation of coefficient formula was used. The value was found to be reliable( $r=0.93$ ) Internal consistency was assessed by using split half technique where Spearman Brown prophecy was used to assess the reliability of structured knowledge questionnaire. The value was found to be reliable ( $r=0.88$ ).Hence the structured knowledge questionnaire was found to be reliable.

The reliability of the attitude five point Likert scale was computed by test retest method. Karl Pearson correlation of coefficient formula was used and the value was found to be reliable ( $r=0.9$ ). Hence the five point Likert scale was found to be reliable.

## **PILOT STUDY**

The pilot study was conducted in Kasturba memorial hospital, at Dindugal for a period of 7 days after obtaining informed consent. Subjects who were fulfilling the inclusion criteria were selected by using purposive sampling technique in which 2-3 samples were taken per day. The pilot study was conducted among 5 primi mothers. Demographic variables was collected and the knowledge of primi mothers was assessed by using a structured interview schedule and attitude was assessed by using five point Likert scale before giving structured teaching programme. Immediately after the pre test individual structured teaching programme was given for five primi mothers for 45 minutes and its effectiveness was assessed on the fifth day by using the same structured knowledge questionnaire and attitude five point Likert scale. Data was analyzed using descriptive, inferential statistics and the findings of the pilot study showed that mean post test knowledge score (16.2) was higher than the mean pre test knowledge score (8.6). The mean post test attitude score (60.4) was higher than the

mean pre test attitude score (48.2). Knowledge pretest and post test 't' value was 16.8 and attitude pretest and posttest 't' value was 7.05 at 5% level of significance. There was a positive correlation between knowledge and attitude scores ( $r=0.99$ ). It was found that the tool was feasible and practicable for conducting the main study.

## **DATA COLLECTION PROCEDURE**

The data collection was done in Kasturba memorial hospital, at Dindugal. The data was collected for the period of 5 weeks from 50 samples. Before conducting the study written permission was obtained from chief medical officer and nursing superintendent. After obtaining permission from the chief medical officer, primi mothers were informed about the objectives of the study. The samples were interviewed accordingly those who met the inclusion criteria by using purposive sampling technique. On the first day pretest was conducted using demographic variables, structured questionnaire to assess the knowledge and Five point Likert scale to assess the attitude of primi mothers and on the same day structured teaching programme was given to 2-3 mothers individually for 45 minutes through compact disc with lap top and on the fifth day post test was done using the same structured questionnaire and Likert scale to assess the knowledge and

attitude of primi mothers regarding selected postpartum psychiatric illness. The data were analyzed using statistical measurements.

## PLAN FOR DATA ANALYSIS

The description and inferential statistics was used in the study.

DATA	METHOD	PURPOSE
Descriptive Statistics	Frequency, percentage Mean and standard deviation.	To describe the demographic variables of primi mothers and to assess the knowledge and attitude scores regarding selected postpartum psychiatric illness.
Inferential statistics	Paired 't' test	To evaluate effectiveness of structured teaching programme regarding selected postpartum psychiatric illness among primi mothers.
	Karl Pearson	To find out the relationship between post test knowledge and attitude scores regarding selected postpartum psychiatric illness.
	Chi-square test	To find out the association between post test knowledge scores with their selected demographic variables among primi mothers. To find out the association between post test attitude scores with their selected demographic variables among primi mothers.

## **PROTECTION OF HUMAN SUBJECTS**

The proposed study was conducted after the approval of Dissertation Committee. The written permission was obtained from the chief medical officer, Kasturba memorial hospital, Dindugal. Oral consent of each subject was obtained before starting the data collection. Assurance was given to them that confidentiality will be maintained.

## CHAPTER – IV

### DATA ANALYSIS AND INTERPRETATION

This chapter deals with the analysis and interpretation of the data collected to assess the effectiveness of the structured teaching programme on knowledge and attitude of primi mothers regarding selected postpartum psychiatric illness.

Keelinger (1973) defines analysis as the categorizing of data to obtain to research problem or questions.

**[Polit]**

Data were collected from 50 primi mothers in Kasturba memorial Hospital at Dindugal using structured interview schedule and five point likert scale. The data were obtained, analyzed and presented under the following headings.

#### **ORGANIZATION OF THE DATA**

The data has been tabulated and organized as follows:

Sec A: Distribution of demographic variables among primi mothers.

Sec B: Comparison between pre test and post test knowledge and attitude scores regarding selected postpartum psychiatric illness among primi mothers.

Sec C: Correlation of post test knowledge scores with attitude scores regarding selected postpartum psychiatric illness among primi mothers.

Sec D: Association of post test knowledge scores and selected demographic variables of primi mothers.

Sec E: Association of post test attitude scores and selected demographic variables of primi mothers.

## SECTION - A

### Distribution of demographic variables among primi mothers.

**Table- 1** Percentage distribution of primi mothers according to their demographic variables.

S.No	Demographic variables	Frequency	%
1	Age ( in years) a. < 20 b. 21 - 25 c. 26 - 30 d. 31 - 35	15 27 6 2	30 54 12 4
2	Educational status a. No formal education b. Primary education c. Secondary education d. Higher secondary education e. Degree and above	10 5 18 15 2	20 10 36 30 4
3	Occupation a. Housewife b. Private employee c. Government employee d. Self employee	35 9 2 4	70 18 4 8
4	Type of family a. Joint family b. Nuclear family	36 14	72 28

5	Family monthly income a. Below Rs. 1000 b. Rs. 1001 - 2000 c. Rs. 2001 - 3000 d. Above Rs. 3000	12 31 5 2	24 62 10 4
6	Religion a. Hindu b. Christian c. Muslim d. Other	42 6 2 -	84 12 4 -
7	Residence a. Urban b. Semi urban c. Rural	15 15 20	30 30 40
8	Family history of mental illness a. Yes b. No	1 49	2 98

Table 1 showed distribution of primi mothers according to their demographic variables of age, educational status, occupation, type of family, family monthly income, religion, residence and family history of mental illness.

Distribution of primi mothers according to their age depicts that the highest (54 %) of the mother were in the age group of 21 - 25 years and (30 %) of the mother were in the age group of below 20 years and (12 %) of the mother were in the age group of 26 - 30 years. However least (4 %) of the mother were in the age group of 31 - 35 years. (Fig-2)

Distribution of primi mothers according to their education showed that the highest (36 %) of the mothers were studied up to secondary education and (30 %) of the mother were studied up to higher secondary and (20 %) of the mother with No formal education. However least (4 %) of the mother were studied up to graduate. (Fig-3)

Distribution of primi mothers according to their occupation depicts that the highest (70%) of the mothers were housewife and (18 %) of the mother were private employee. However (8 %) of the primi mothers were self employee and whereas only (4 %) of the mothers were Government employee. (Fig-4)

Distribution of primi mothers according to their type of family showed that the highest (72 %) of the mothers were from joint family. Whereas (28 %) of the mother were from nuclear family. (Fig-5)

Distribution of primi mothers according to their family monthly income depicts that the highest (62 %) of the mothers belonged to the income group of Rs.1001 - 2000. Whereas (24 %) of the mothers belonged to the income group of below Rs.1000. Around (10 %) of the primi mothers belonged to the income group of Rs.2001 - 3000. Only (4 %) of the primi mothers belonged to the income group of above Rs.3000. (Fig-6)

Distribution of primi mothers according to their religion showed that the majority of (84 %) of the primi mothers were Hindu whereas 12 % of the mothers were Christian and only 4 % of the mothers were Muslim and none of the mothers were from other religion. (Fig-7)

Distribution of primi mothers according to their residence showed that the highest (40 %) of Mothers were from rural area whereas one third of (30 %) mothers were from urban area and however (30%) mothers were from semi urban area. (Fig-8)

Distribution of primi mothers according to their family history of mental illness showed that the majority of mothers (98 %) had no family history of mental illness and only (2%) of mothers had family history of mental illness. (Fig-9)

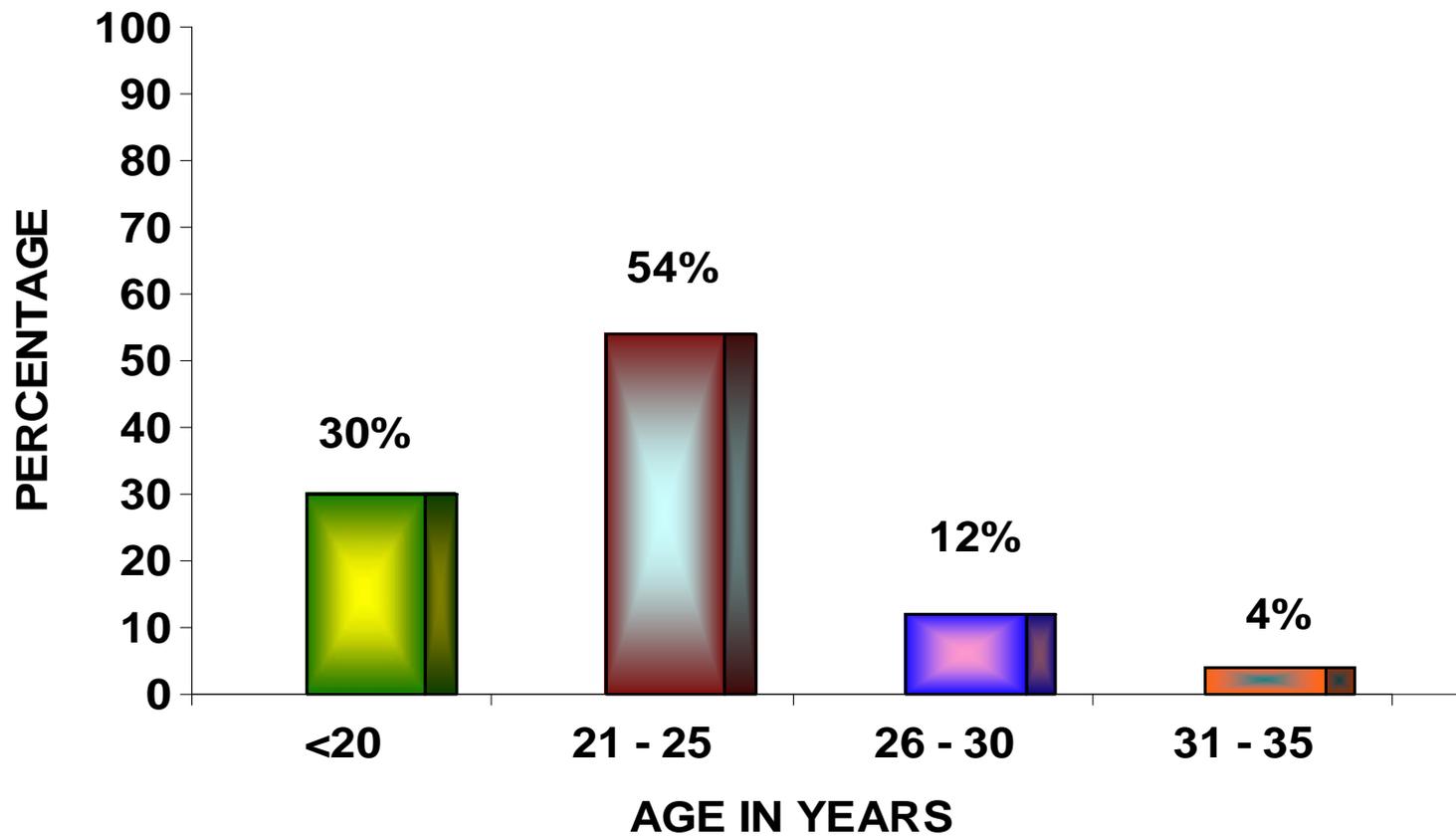


Fig: 2 Percentage distribution of primi mothers according to their age.

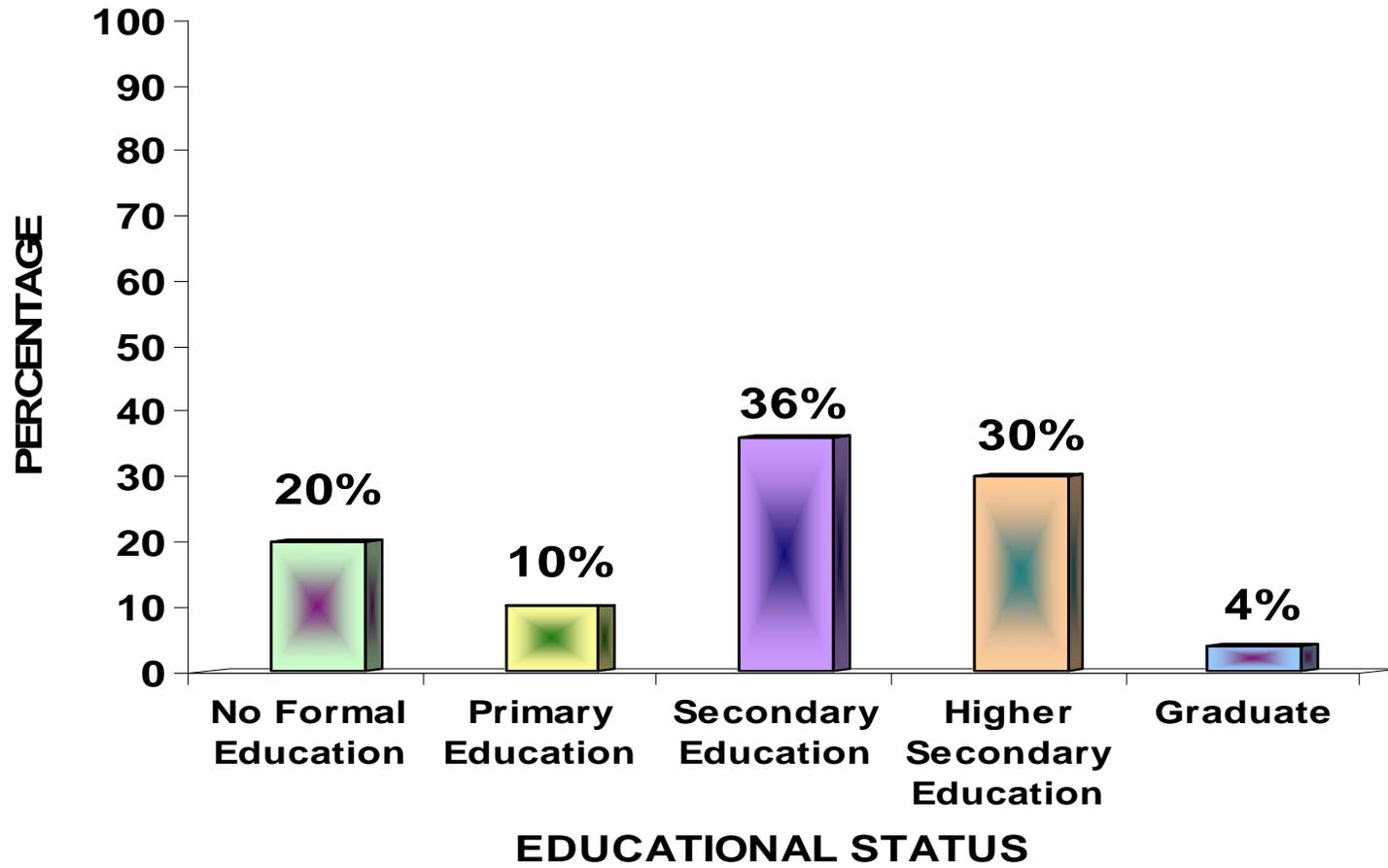


Fig: 3 Percentage distribution of primi mothers according to their education.

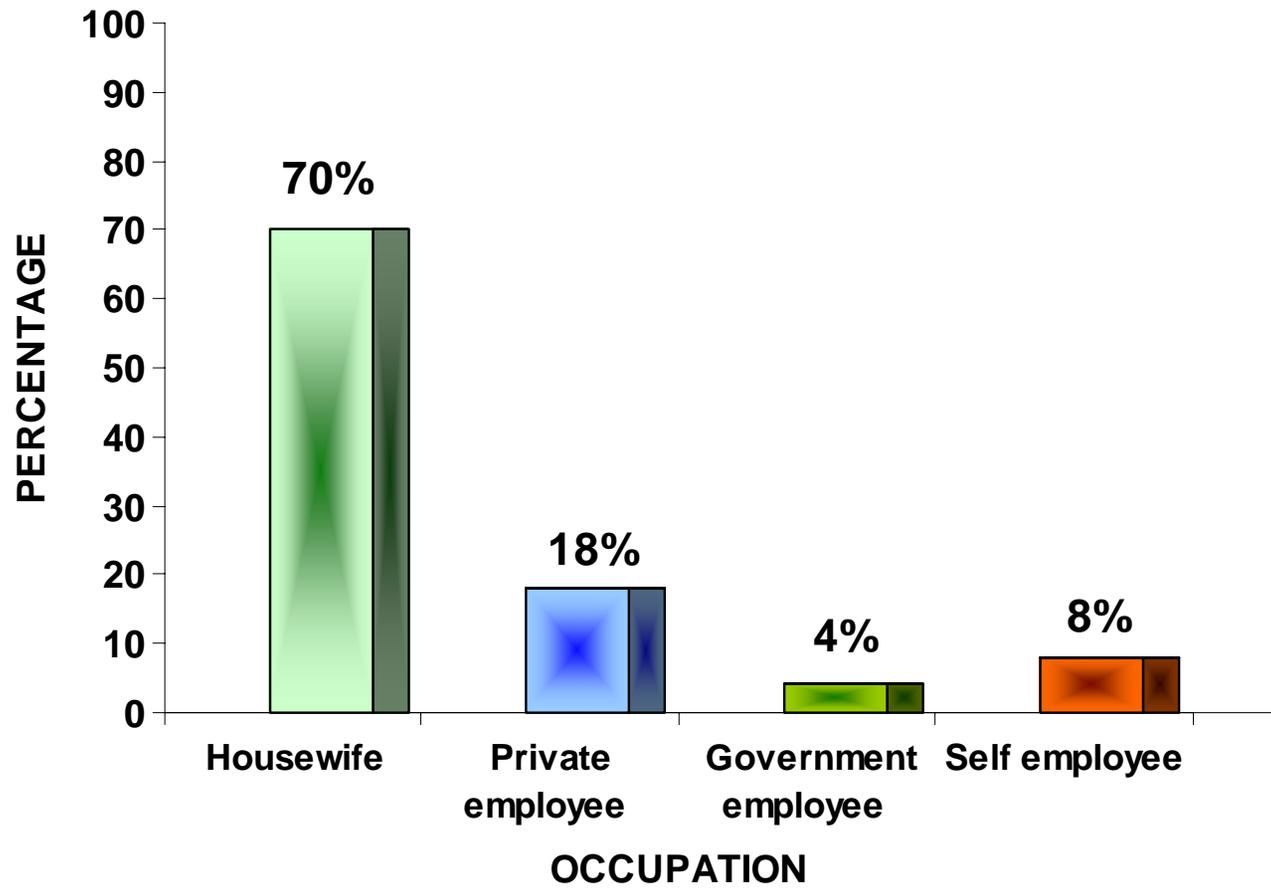
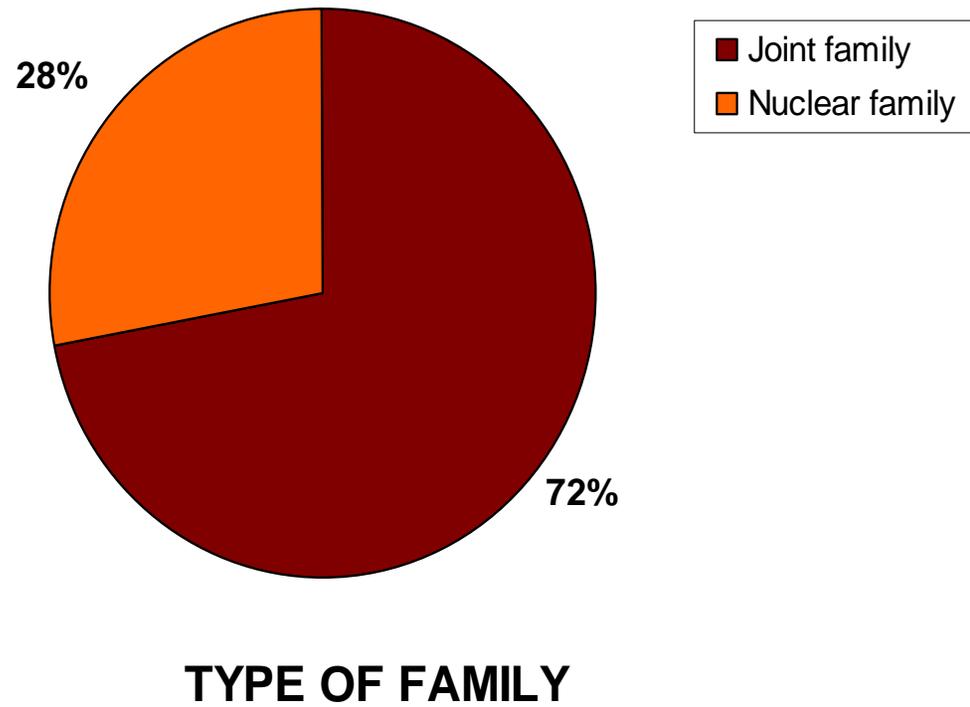


Fig: 4 Percentage distribution of primi mothers according to their occupation



**Fig: 5 Percentage distribution of primi mothers according to their type of family**

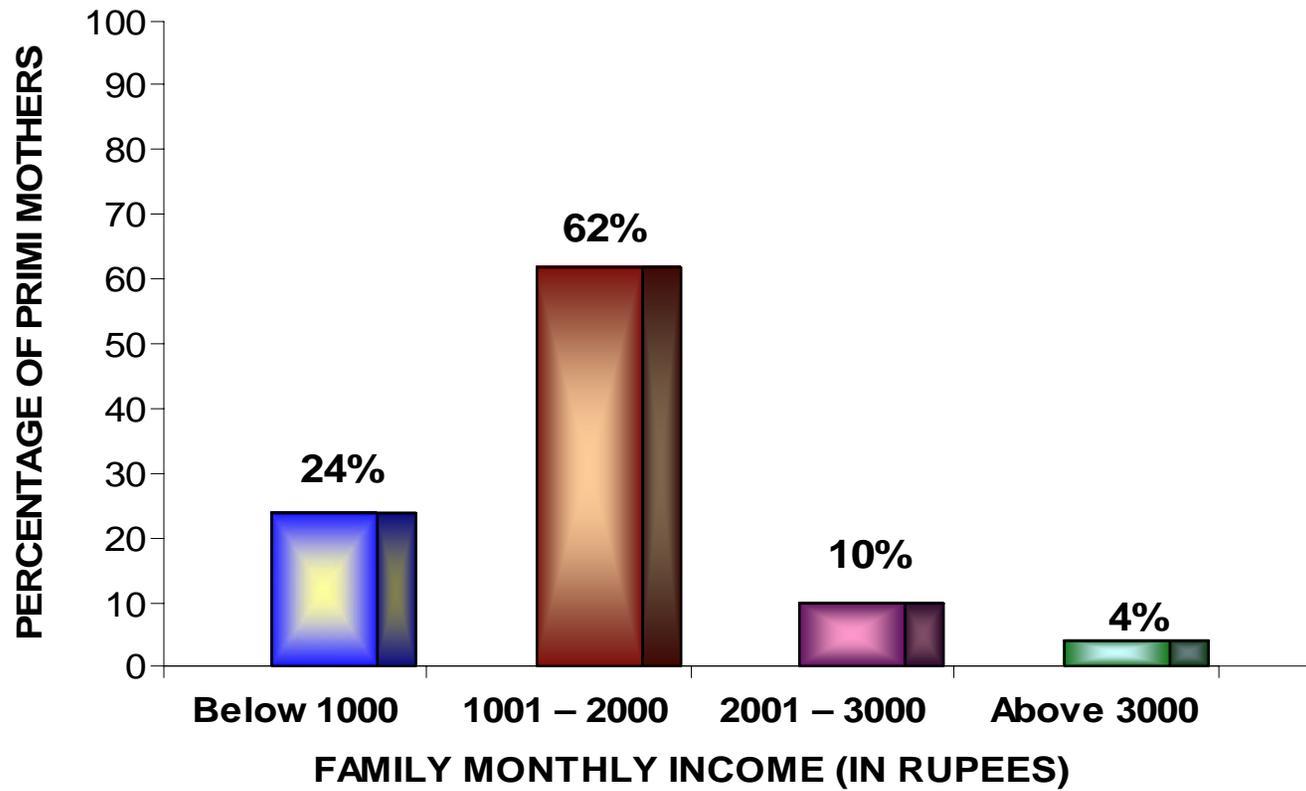
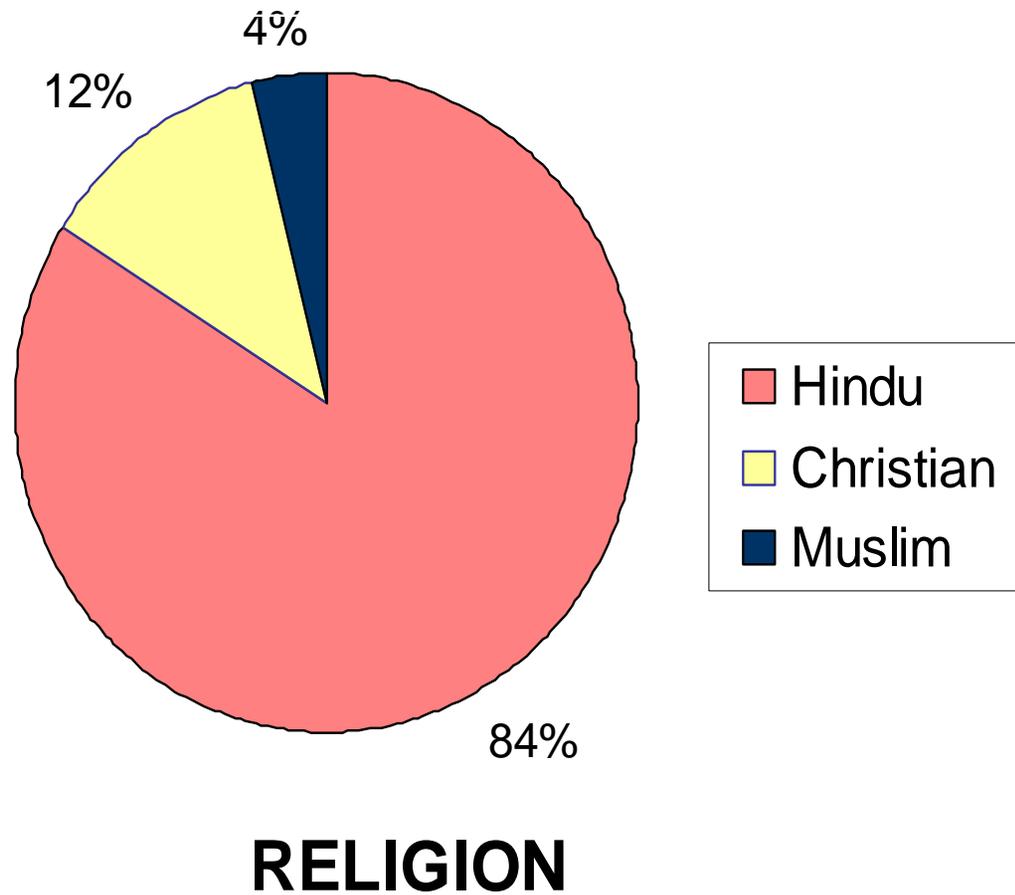
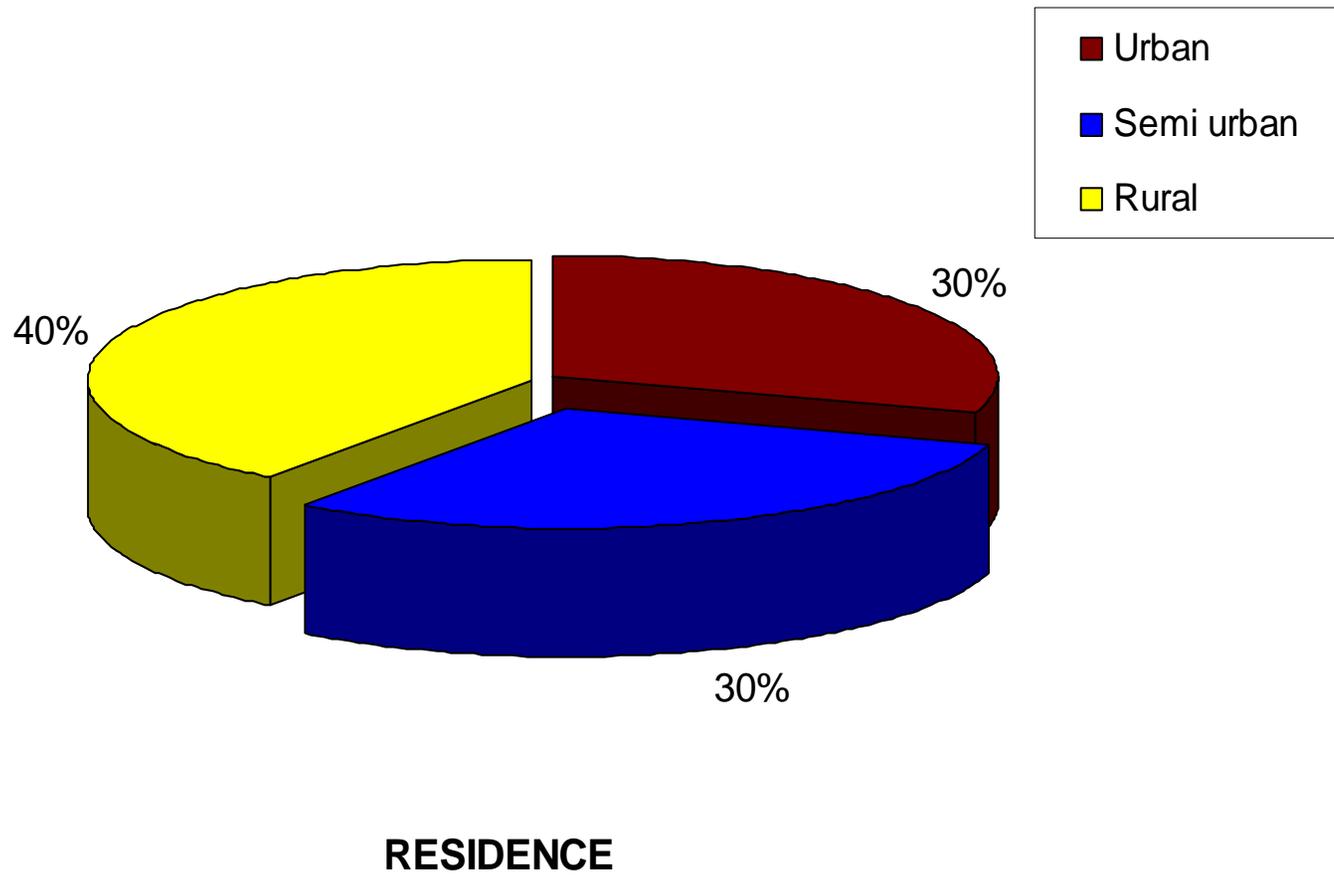


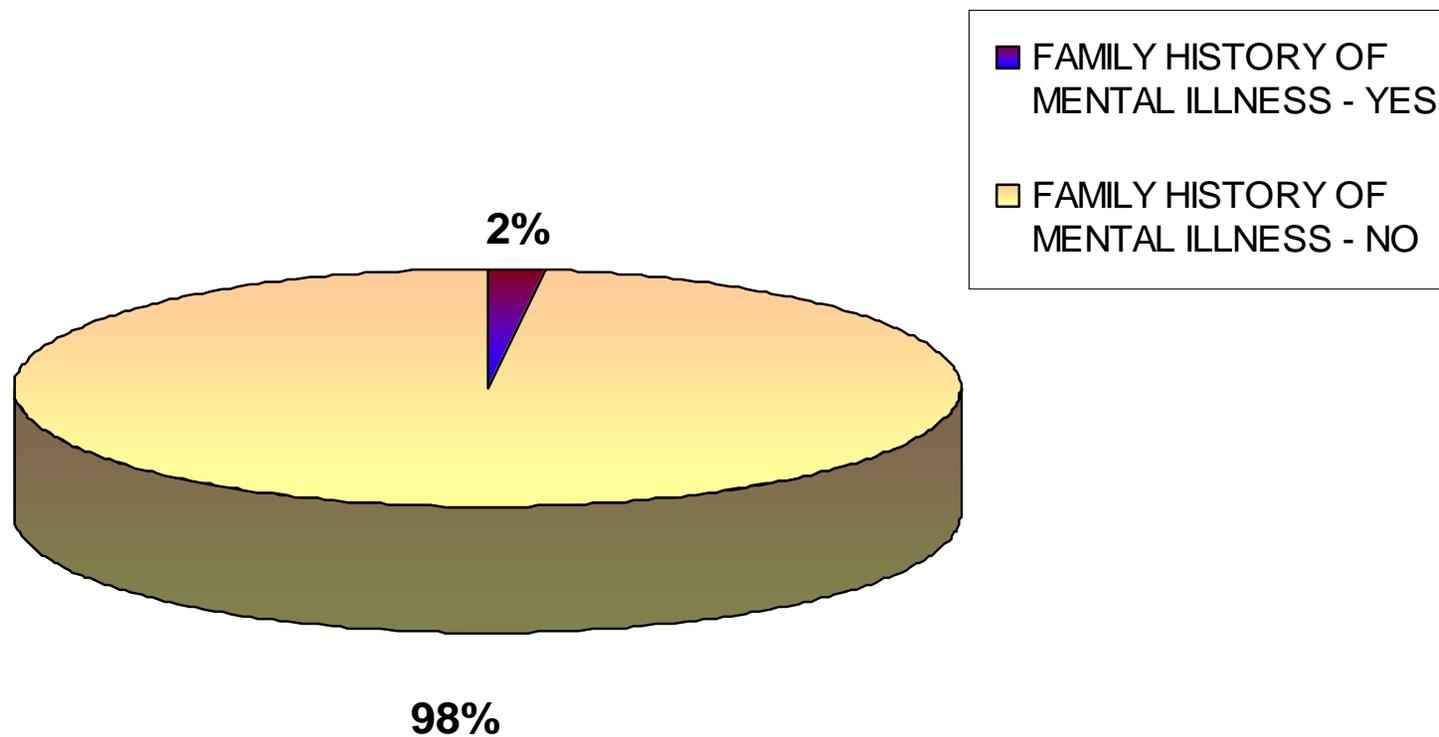
Fig: 6 Percentage distribution of primi mothers according to their family monthly income



**Fig: 7 Percentage distribution of primi mothers according to their religion**



**Fig: 8 Percentage distribution of primi mothers according to their residence**



**FAMILY HISTORY OF MENTAL ILLNESS**

**Fig: 9 Percentage distribution of primi mothers according to their family history of mental illness.**

## SECTION-B

**Comparison between the pre test and post test knowledge and attitude scores on selected postpartum psychiatric illness among primi mothers.**

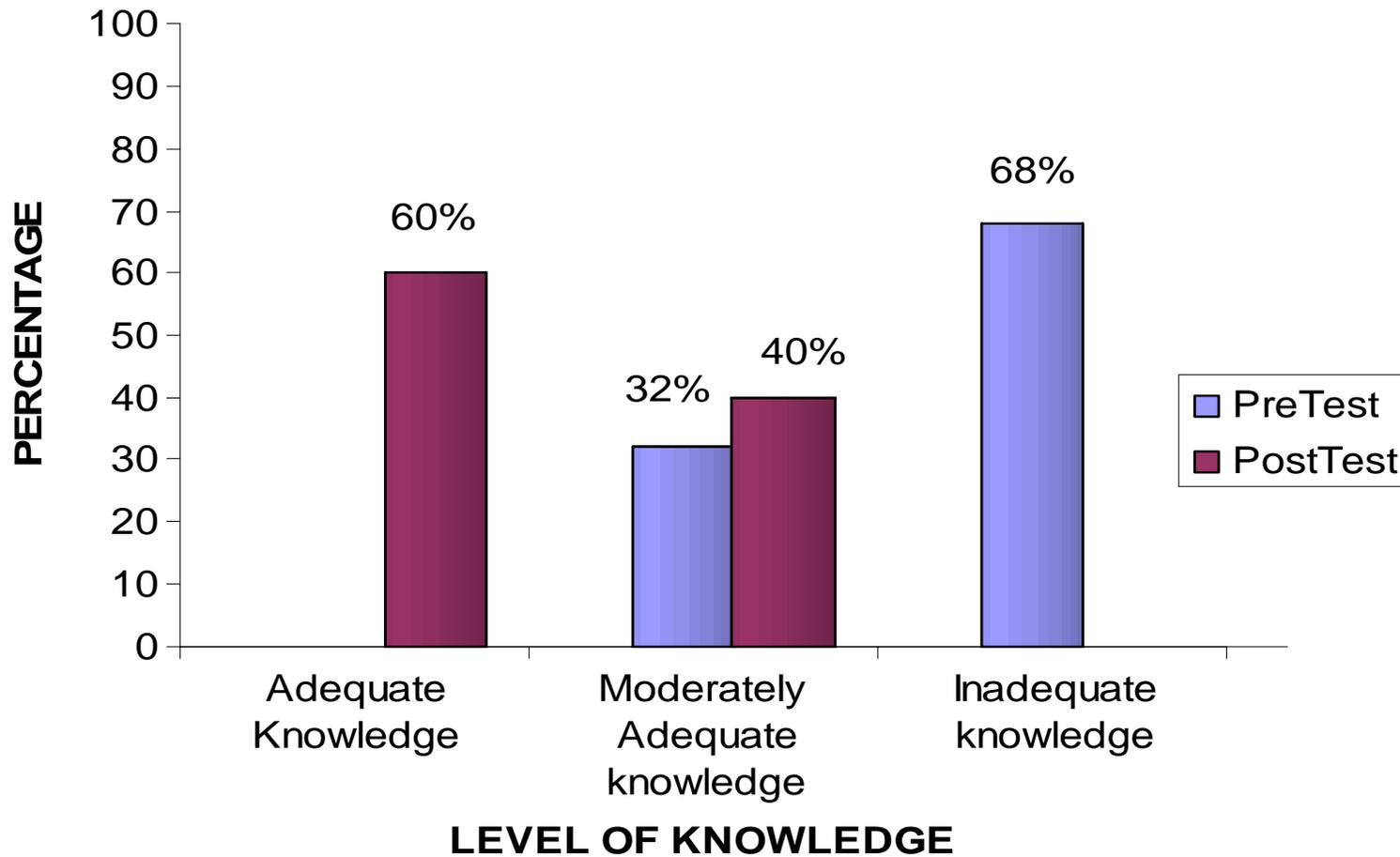
**Table-2** Comparison between the pre test and post test knowledge scores on selected postpartum psychiatric illness among primi mothers.

n=50

Level of Knowledge	Pretest		Post test	
	F	%	F	%
Adequate Knowledge	-	-	30	60
Moderately Adequate Knowledge	16	32	20	40
Inadequate Knowledge	34	68	-	-
Total	50	100	50	100

Table 2 showed that in pre test majority (68%) of primi mothers had inadequate knowledge and (32%) of primi mothers had moderately adequate knowledge on selected postpartum psychiatric illness.

In post test majority (60%) of primi mothers had adequate knowledge and (40%) of primi mothers had moderately adequate knowledge on selected postpartum psychiatric illness.



**Fig-10 comparison between pre test and post test knowledge scores among primi mothers.**

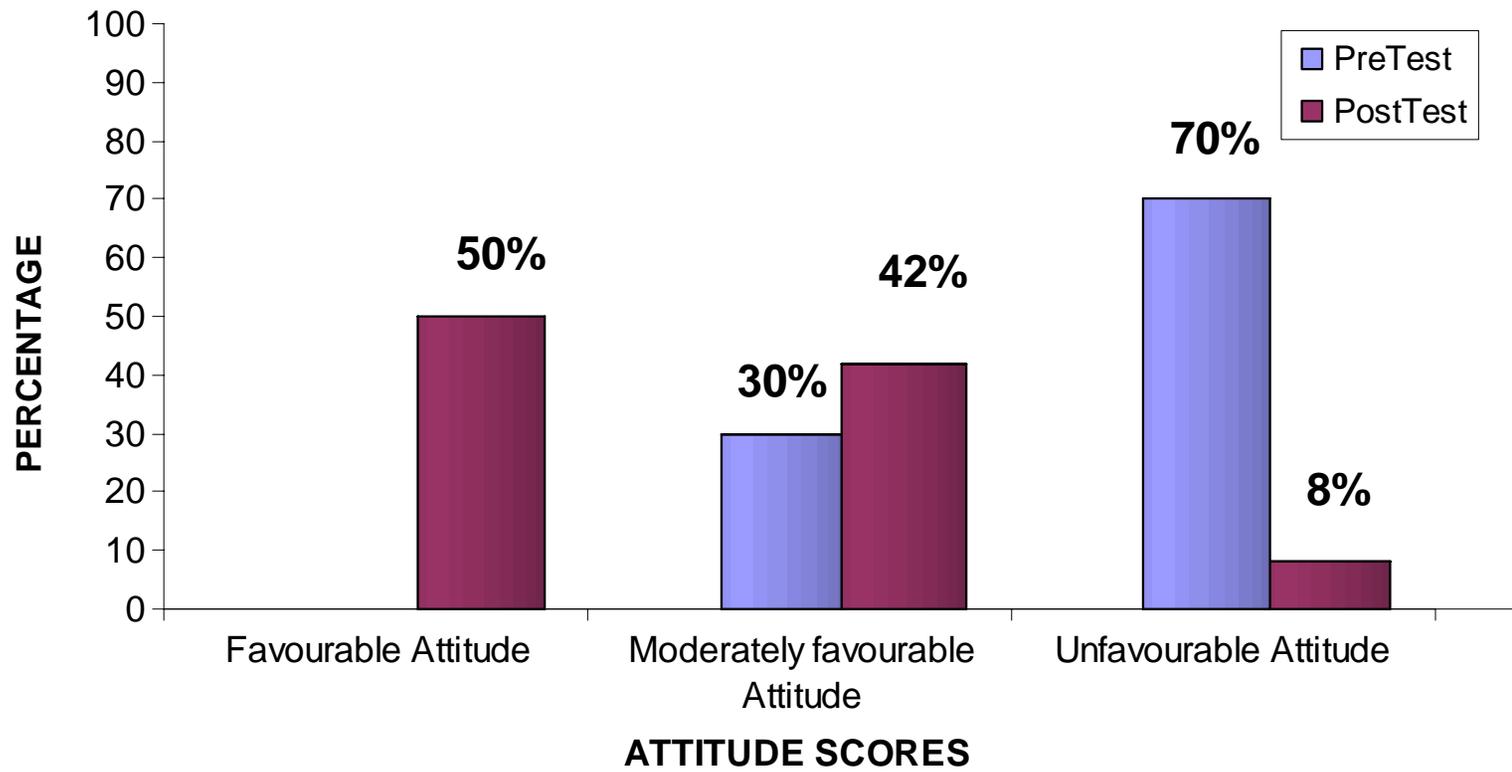
**Table-3 :** Comparison between the pre test and post test attitude scores on selected postpartum psychiatric illness among primi mothers.

n=50

Level of Attitude	Pretest		Post test	
	F	%	F	%
Favourable attitude	-	-	25	50
Moderately favourable Attitude	15	30	21	42
Unfavourable Attitude	35	70	4	8
Total	50	100	50	100

Table 3 showed that in pre test majority (70%) of primi mothers had unfavourable attitude and (30%) of primi mothers had moderately favourable attitude on selected postpartum psychiatric illness.

In post test majority (50%) of primi mothers had favourable attitude and (42%) of primi mothers had moderately favourable attitude and least (8%) of primi mothers had unfavourable attitude on selected postpartum psychiatric illness.



**Fig-11 comparison between pre test and post test attitude scores among primi mothers**

**Table 4:**

Comparison of Mean, Standard deviation and 't' value of pre and post test knowledge scores on selected postpartum psychiatric illness among primi mothers.

S.No	Variables	Mean	S.D	't' value	Table value
1	Pre test	7.46	2.63	21.6	2.0
2	Post test	14.84	4.53		

df= 49 n=50  
p<0.05

Table 4 showed the comparison of Mean, Standard deviation and 't' value of pre and post test knowledge scores on selected postpartum psychiatric illness among primi mothers were 7.46 ( $\pm = 2.63$ ) and 14.84 ( $\pm = 4.53$ ) respectively. The post test scores were higher than the pre test mean scores. The 't' value was 21.6 which was significant at 0.05 level. The 't' value calculated was greater than the table value. The findings showed that the primi mothers gained knowledge after implementing the structured teaching programme.

**Table-5**

Comparison of Mean, Standard deviation and 't' value of pre and post test attitude scores on selected postpartum psychiatric illness among primi mothers.

n = 50

S.No	Variable	Mean	S.D	't' value	Table value
1	Pre test	19.44	7.16	19.13	2.00
2	Post test	44.52	12.64		

df= 49

p < 0.05

Table 5 showed the comparison of Mean, Standard deviation and 't' value pre and post test attitude scores on selected postpartum psychiatric illness among primi mothers were 19.44 ( $\pm$  7.16) and 44.52 ( $\pm$  12.64) respectively. The post test mean scores were higher than the pre test mean scores. The 't' value is 19.13 which were significant at 0.05 level. From the findings it was clear that the primi mothers showed positive attitude after implementing the structured teaching programme.

## SECTION - C

**Correlation of post test knowledge scores with attitude scores regarding selected postpartum psychiatric illness among primi mothers.**

**Table 6:** Correlation of post test knowledge scores with attitude scores regarding selected postpartum psychiatric illness among primi mothers.

n= 50

S No	Variable	Mean scores	Coefficient of correlation	Table value
1	knowledge	14.84	0.92	0.1964
2	Attitude	44.52		

df= 48 p < 0.05

Table -6 showed the comparison between the mean post test knowledge and attitude scores of primi mothers and there was positive correlation  $r = 0.92$  between post test knowledge and attitude scores of primi mothers on selected postpartum psychiatric illness.

## SECTION – D

**Association of post test knowledge scores and selected demographic variables of primi mothers.**

**Table 7:** Association of post test knowledge scores and selected demographic variables of primi mothers.

n= 50

S. No	Demographic variables	Level of Knowledge						$\chi^2$	Table value	Inference
		Adequate		Moderate		Inadequate				
		No	%	No	%	No	%			
1	<b>Age</b>									
	a. Below 20 yrs	5	10	10	20	-	-	0.023	3.841	NS
	b. 21 - 25 yrs	20	40	7	14	-	-			
	c. 26 - 30 yrs	4	8	2	4	-	-			
	d. 31 - 35 yrs	1	2	1	2	-	-			
2	<b>Education</b>									
	a. No formal education	1	2	9	18	-	-	12.84	3.841	S
	b. Primary education	4	8	1	2	-	-			
	c. Secondary education	13	26	5	10	-	-			
	d. Higher sec education	10	20	5	10	-	-			
	e. Graduate	2	4	-	-	-	-			

3	<b>Occupation</b>									
	a. Housewife	20	40	15	30	-	-			
	b. Private employee	7	14	2	4	-	-	0.47	3.841	NS
	c. Government employee	2	4	-	-	-	-			
	d. Self employee	1	2	3	6	-	-			
4	<b>Type of family</b>									
	a. Joint family	22	44	14	28	-	-	0.047	3.841	NS
	b. Nuclear family	8	16	6	12	-	-			
5	<b>Family monthly income (in Rs)</b>									
	a. Below 1000	2	4	10	20	-	-	0.42	3.841	NS
	b. 1001 - 2000	23	46	8	16	-	-			
	c. 2001 - 3000	3	6	2	4	-	-			
	d. Above 3000	2	4	-	-	-	-			
6	<b>Religion</b>									
	a. Hindu	25	50	17	34	-	-			
	b. Christian	3	6	3	6	-	-	0.1059	3.841	NS
	c. Muslim	1	2	1	2	-	-			
	d. Others	-	-	-	-	-	-			
7	<b>Residence</b>									
	a. Urban	10	20	5	10	-	-			
	b. Semi urban	10	20	5	10	-	-	0.37	3.841	NS
	c. Rural	10	20	10	20	-	-			

8	Family history of mental illness									
	a. Yes	-	-	1	2	-	-	0.23	3.841	NS
	b. No	30	60	19	38	-	-			
df = 1		NS - Not Significant				S - Significant		p < 0.05		

Table -7 showed the Chi square value were calculated to find out the association between Knowledge of primi mothers with their selected demographic variables of age, educational status, occupation, type of family, family monthly income, religion, residence and family history of mental illness.

It was found that that there was association with post test knowledge scores and education of the mothers whereas Demographic no association was found with post test knowledge scores other variables such as age, type of family, occupation, family monthly income, religion, residence and family history of mental illness.

## SECTION - E

**Association of post test attitude scores and selected demographic variables of primi mothers.**

**Table 8 :** Association of post test attitude scores and selected demographic variables of primi mothers.

S. No	Demographic variables	Level of attitude						$\chi^2$	Table value	Inference
		Adequate		Moderate		Inadequate				
		F	%	F	%	F	%			
1	Age									
	a. Below 20 yrs	4	8	10	20	-	-	2.1	3.841	NS
	b.21 – 25 yrs	17	34	10	20	-	-			
	c.26 – 30 yrs	5	10	1	2	-	-			
	d.31 – 35 yrs	2	4	0	-	-	-			
2	Education									
	a.No formal education	9	18	1	2	-	-	0.37	3.841	NS
	b.Primary education	1	2	4	8	-	-			
	c.Secondary education	8	16	10	20	-	-			
	d.Higher sec education	10	20	5	10	-	-			
	e.Graduate	2	4	-	-	-	-			
3	Occupation									
	a. Housewife	15	30	20	40	-	-	0.26	3.841	NS
	b. Private employee	7	14	2	4	-	-			
	c. Government employee	2	4	-	-	-	-			
	e. Self employee	1	2	3	6	-	-			

4	Type of family									
	a. Joint family	21	42	15	30	-	-			
	b. Nuclear family	7	14	7	14	-	-	0.27	3.841	NS
5	Family monthly income									
	a. Below Rs.1000	2	4	10	20	-	-			
	b.Rs.1001- 2000	21	42	10	20	-	-	2.47	3.841	NS
	c.Rs.2001 - 3000	4	8	1	2	-	-			
	d. Above Rs.3000	2	4	-	-	-	-			
6	Religion									
	a. Hindu	22	44	20	40	-	-			
	b. Christian	6	12	-	-	-	-	0.120	3.841	NS
	c. Muslim	1	2	1	2	-	-			
	d. Others	-	-	-	-	-	-			
7	Residence									
	a.Urban	9	18	6	12	-	-			
	b.Semi urban	10	20	5	10	-	-	0.03	3.841	NS
	c.Rural	10	20	10	20	-	-			
8	Family history of mental illness									
	a.Yes	-	-	1	2	-	-	0.21	3.841	NS
	b.No	29	58	20	40	-	-			

df = 1      NS - Not Significant      S - Significant      p < 0.05

Table-8 showed Chi square values were calculated to find out the association between the attitude of primi mothers with age, educational status, occupation, type of family, monthly income, religion and residence and family history of mental illness.

It was found that there was no association between age, educational status, occupation, type of family, family monthly income, religion, residence and family history of mental illness. Therefore no significant association found between attitude and demographic variables.

## CHAPTER - V

### DISCUSSION

This discussion chapter deals with sample characteristics and objectives of the study. The aim of this present study was to evaluate the effectiveness of structured teaching programme regarding selected postpartum psychiatric illness among primi mothers at Kasturba memorial hospital at Dindugal.

- **Description of the demographic variables of primi mothers**

Distribution of primi mothers according to their age group depicts that the highest percentage (54%) of mothers were in between the age group of 21-25 years. This finding is consistent with the study conducted by Glory, D., (2009) who reported that 64% of primi mothers were in the age group of 20 -25 years. Highest (36%) primi mothers were studied secondary education. Almost (70%) of the primi mothers were house wives. This finding is consistent by the study conducted by Anuchitra, S., (2009) who reported that 67% of postnatal mothers were house wives. Majority (72%) of the primi mothers were from joint family. Highest (62%) of the primi mothers were in the income group between Rs.1001 - Rs.2,000. Highest percentage (84%) of the primi mothers were Hindus. This finding is consistent by the study conducted

by Anuchitra, S., (2009) who reported that 87% of the postnatal mothers were Hindus. Highest (40%) of the mothers were from rural area. Highest (98%) of the mothers had no family history of mental illness.

The findings of the study were discussed according to the objectives as follows:

- Assess the pre test knowledge and attitude scores regarding selected post partum psychiatric illness among primi mothers.
- Assess the post test knowledge and attitude scores regarding selected postpartum psychiatric illness among primi mothers.
- Compare the pre test and post test knowledge scores regarding selected postpartum psychiatric illness among primi mothers.
- Compare the pre test and post test attitude scores regarding selected postpartum psychiatric illness among primi mothers.
- Determine the correlation between the post test knowledge and attitude scores regarding selected postpartum psychiatric illness among primi mothers.
- Determine association between the post test knowledge scores regarding selected postpartum psychiatric illness with their selected demographic variables among primi mothers.

- Determine association between the post test attitude scores regarding selected postpartum psychiatric illness with their selected demographic variables among primi mothers.

**Objective 1 : Assess the pre test knowledge and attitude scores regarding selected post partum psychiatric illness among primi mothers.**

Assessment of knowledge regarding selected postpartum psychiatric illness among 50 primi mothers, 68% had inadequate knowledge (table 2) in pretest. Assessing the attitude regarding selected postpartum psychiatric illness among 50 primi mothers, 70% had unfavourable attitude (table 3) in pretest. From the table 2 and table 3 it revealed that there was a need for structured teaching programme for primi mothers regarding selected postpartum psychiatric illness. This finding is consistent with the study findings of Klainin, P., (2008) who reported that the current state of knowledge regarding risk factors of postpartum depression has its implications for clinical practice.

This finding is also consistent with the findings of Hanley, J., (2006) who reported that the mothers had little knowledge on the effects of postnatal depression.

**Objective 2 : Assess the post test knowledge and attitude scores regarding selected postpartum psychiatric illness among primi mothers**

The assessment of posttest knowledge regarding selected postpartum psychiatric illness among 50 primi mothers, 60% of the primi mothers had adequate knowledge (table 3), 40% of the primi mothers had moderately adequate knowledge. Assessment of posttest attitude regarding selected postpartum psychiatric illness showed that 50% of the primi mothers had developed favourable attitude and 42% of the primi mothers had developed moderately favourable attitude and least 8% had unfavourable attitude. After being exposed to structure teaching programme showed that knowledge and attitude scores had been markedly increased.

The study is consistent with the study findings of Shu-Hen, S., (2002) stated that Taiwanese women who received informational support about postnatal depression 6 weeks after giving birth experienced lower EPDS scores at 3 months postpartum than those who did not receive this information.

This study is also consistent with the study findings of Katrina, M., (2008) stated that most women had negative views towards antidepressants as a treatment for postnatal depression at the time of randomization. Some women reported that over a course of their illness, through time and contact with others including health professionals their view towards antidepressants had changed and they took medication.

**Objective 3 : Compare the pre test and post test knowledge scores regarding selected postpartum psychiatric illness among primi mothers.**

The assessment of knowledge score of primi mothers after being exposed to structured teaching programme showed that knowledge score had been markedly increased as evidenced by the post test analysis. Table 6 revealed that knowledge level of primi mothers in posttest had mean score of 14.84 ( $\pm=4.53$ ) which was higher than the mean score of 7.46 ( $\pm=2.63$ ) in the pretest. It is significant at  $p<0.05$  level.  $H_1$  - the mean posttest knowledge score is higher than mean pretest knowledge score, hence  $H_1$  is accepted.

This study is also consistent with the study findings of Rajamani,S., (2008) stated that there was difference between the mean blue score of the postnatal mothers in the experimental group and control group. This indicates apparent decrease in the level of blues for the postnatal mothers in the experimental group after receiving prophylactic information on maternal adjustment.

**Objective 4 : Compare the pre test and post test attitude scores regarding selected post partum psychiatric illness among primi mothers.**

Table 5 showed that the attitude level of primi mothers in posttest had mean score of 44.52 ( $\pm$ =12.64) which was notable score compared to the mean score of 19.44 ( $\pm$ =7.16) in the pretest. It is significant at  $p < 0.05$  level.  $H_2$  - the mean posttest attitude score is higher than mean pretest attitude score. Hence  $H_2$  is accepted.

**Objective 5 : Determine the Correlation between posttest knowledge scores with attitude scores regarding selected postpartum psychiatric illness among primi mothers.**

There was positive correlation ( $r=0.92$ ) between mean posttest knowledge and attitude scores of primi mothers (table 6). Further it could be inferred that knowledge and attitude depends on each other.

The reason might be when the knowledge is improving, attitude also will develop positively. H<sub>3</sub> - there is a significant correlation between the posttest knowledge score and attitude score. Hence H<sub>3</sub> is accepted.

**Objective 6 : Determine association between posttest knowledge scores regarding selected postpartum psychiatric illness with their selected demographic variables among primi mothers.**

Chi-square values were calculated to find out the association (table 9) of the post test knowledge scores of primi mothers with their age ( $\chi^2=0.023$ ), educational status ( $\chi^2=12.84$ ), occupation ( $\chi^2=0.47$ ), family monthly income ( $\chi^2=0.42$ ), type of family ( $\chi^2=0.047$ ), religion ( $\chi^2=0.1059$ ), residence ( $\chi^2=0.37$ ), and family history of mental illness( $\chi^2=0.23$ ).

The demographic variable education was associated with knowledge of mothers (table 9). The reason might be that education helped them to gain more knowledge about selected postpartum psychiatric illness. Other demographic variables (age, occupation, family monthly income, type of family, religion, residence and history of mental illness) had no association with knowledge regarding selected postpartum psychiatric illness. Therefore, there was no significant association between knowledge and demographic variables except

education. This findings are consistent with the findings of Rajamani, S., (2008) stated that there was a significant association between educational status of the postnatal mothers with postnatal blues in the experimental group.

**Objective 7: Determine association between posttest Attitude scores regarding selected postpartum psychiatric illness with their selected demographic variables among primi mothers.**

Chi-square values were calculated to find out the association (table 10) between post test attitude scores of primi mothers with their age ( $\chi^2=2.1$ ), education ( $\chi^2=0.377$ ), occupation ( $\chi^2=0.26$ ), family monthly income ( $\chi^2=2.47$ ), type of family ( $\chi^2=0.27$ ), religion ( $\chi^2=1.205$ ), residence ( $\chi^2=0.03$ ), and family history of mental illness ( $\chi^2=0.21$ ). There was no association between attitude and demographic variables.

The study findings are consistent with the study findings of Radhabai and Prabhu, T., (2002) stated that there was no association between education of postnatal mothers with postpartum psychiatric illness.

The findings are consistent with the study findings of Rajamani,S., (2008) stated that there was no association between the postnatal blues score and type of family of the post natal mothers in the experimental group.

## CHAPTER – VI

### SUMMARY, CONCLUSION, IMPLICATIONS, RECOMMENDATIONS AND LIMITATIONS

#### **SUMMARY OF THE STUDY**

The study was done to assess the effectiveness of structured teaching programme on knowledge and attitude regarding selected postpartum psychiatric illness among primi mothers. The research design used for the study was one group pretest posttest design. The research approach used for the study was an evaluative approach which was conducted in Kasturba memorial Hospital. The conceptual frame work based on Wiedenbach's Helping art and clinical Nursing theory (1969). A sample of 50 primi mothers who met the inclusion criteria were selected for the study, using purposive sampling method.

#### **MAJOR FINDINGS OF THE STUDY**

Most of the primi mothers (54%) were in the age group of 21-25 years.

Most of the primi mothers (36%) were studied upto secondary education.

Most of the primi mothers (70%) were house wives.

Highest percentage (62%) of the primi mothers family monthly income is around Rs.1001 – Rs.2,000.

Highest percentage (72%) of the mothers belongs to joint family.

Most of the primi mothers (84%) were Hindus.

Majority (40%) of the primi mothers were from rural area.

Highest (98%) of primi mothers had no family history of mental illness.

During pretest most (68%) of the primi mothers had inadequate knowledge and (32%) of the primi mothers had moderately adequate knowledge where as in posttest (60%) of the mothers had adequate knowledge and (40%) of the primi mothers had moderately adequate knowledge regarding selected postpartum psychiatric illness.

During pretest most (70%) of the mothers had unfavourable attitude and (30%) of the primi mothers had moderately favourable attitude. Where as in posttest most (50%) of the primi mothers had favourable attitudes and (42%) of the mothers had moderately favourable attitudes and ( 8%) had unfavourable attitude regarding selected postpartum psychiatric illness.

Highly significant difference was found between pretest and posttest knowledge and attitude scores at ( $p < 0.05$ ) level.

Significant association was found between posttest knowledge scores of primi mother with education.

No Significant association was found between post test attitude scores of primi mothers with their selected demographic variables.

The study findings revealed that the knowledge and attitude scores regarding selected postpartum psychiatric illness was highly significant after administration of structured teaching programme. Findings showed that the structured teaching programme was effective in increasing the knowledge and attitude among primi mothers regarding selected postpartum psychiatric illness. Thus structured teaching programme played an important role in improving the knowledge and attitude of primi mothers.

## **CONCLUSION**

Based on the findings of the study the following conclusions were drawn. The study revealed that the knowledge and attitude scores regarding selected postpartum psychiatric illness was highly significant after administration of structured teaching programme. Findings showed that the structured teaching programme was effective in increasing the knowledge and attitude among primi mothers regarding selected postpartum psychiatric illness. Thus structured teaching programme played an important role in improving the knowledge and attitude of primi mothers.

## **IMPLICATIONS FOR NURSING**

### **Nursing Service**

1. Mental Health promotion is a vital function of the nurse and psychiatry nurse can organize for mass education in the hospital regarding selected postpartum psychiatric illness using different AV aids.
2. Teaching programme regarding selected postpartum psychiatric illness services must be organized in maternal, mental health hospitals and community.

3. The structured teaching programme can be used by the health team workers to implement the services to the hospital and community effectively.

### **Nursing Education**

1. Plan for field visit to the maternity and mental health hospitals for the students to gain more knowledge regarding selected postpartum psychiatric illness.
2. Psychiatry nurses can utilize this structured teaching programme for educating the postnatal mothers in the mental health hospital.

### **Nursing Administration**

1. Nurse administrators can organize in - service education programmes in prevention of postpartum psychiatric illness in various health sectors.

### **Nursing Research**

1. This study can be effectively utilized by the emerging researchers.
2. This study can be baseline for further studies to build upon.

## RECOMMENDATIONS

- ❖ This study can be done among antenatal mothers.
- ❖ This study can be done by using various teaching aids..
- ❖ This similar study can be replicated on large sample there by findings can be generalized for a large population.

## LIMITATIONS

1. It was more time consuming to explain about selected postpartum psychiatric illness among primi mothers because of deference in their understanding.

## BIBLIOGRAPHY

### BOOK REFERENCE :-

1. Deborah, A., (2003) "**Psychiatric nursing**", (4<sup>th</sup> ed). Philadelphia: W.B Saunders company, 786-790.
2. Elizabeth,M.,(1996)"**Mental health nursing**",(3<sup>rd</sup>ed). Philadelphia: W.B sounders company, 786-790
3. Fortinash, P., et.al., (1996) "**Psychiatric mental health nursing**", (1<sup>st</sup> ed). Philadelphia: Mosby publication, 201-205.
4. Haber,S., (1997) "**Comprehensive psychiatric nursing**", (5<sup>th</sup> ed). St.Louis Missouri: Mosby Publishers, 623-628.
5. Johnson Murray, T.,(1996) "**women's health care handbook**",(1<sup>st</sup> ed). New Delhi: Jaypee Brothers publishers, 449-452.
6. Kaplan, P., (2007) "**synopsis of psychiatric behavioral science and clinical psychiatry**", (10<sup>th</sup> ed). USA : Lippincott Publisher, 865-869
7. Keltzner,L., (2003) "**Psychiatric nursing**", (4<sup>th</sup> ed). USA: Mosby publishers, 341-345.
8. Lynna,Y., (2005) "**Maternity nursing care**", (1<sup>st</sup> ed). Haryana: Sonat printers, 674-679.
9. Leifer Gloria, P., (2005) "**Maternity nursing**", (1<sup>st</sup> ed). St Louis Missouri: Elsevier, 199-201.

10. Mary Ann Boyd, D., (2008) "**Psychiatric nursing**", (4<sup>th</sup> ed). New Delhi: Lippincott publishers, 266-270.
11. Myles, D., (2003) "**Text book of midwives**", (7<sup>th</sup> ed). USA: Library of congress publishers, 661-665.
12. Niraj Ahuja, K.P, (2002) "**A short text book of psychiatry**", (5<sup>th</sup> ed). New Delhi: Jaypee Brothers Publication, 12-14.
13. Noreen Careen, F., (2007) "**Psychiatric nursing**", (1<sup>st</sup> ed). Haryana: Sonat Publishers, 226-230.
14. Reeder Martin, P., (1997) "**Maternity nursing, Family, Newborn and Women's health care,**", (18<sup>th</sup> ed). USA: Lippincott publishers, 1048-1052.
15. Stuart, W., (2005) "**Principles and practice of psychiatric nursing,**" (8<sup>th</sup> ed). St.Louis Missouri: Mosby Publishers, 334-339.
16. Wanda, K., (2006) "**Psychiatric mental Health Nursing**", (6<sup>th</sup> ed). USA: Lippincott Publishers, 588-592.
17. William and Beck, R., (1992)"**Mental health psychiatric nursing**" (3<sup>rd</sup> ed). Philadelphia : Mosby publication, 276-282.

## **JOURNAL REFERENCE :-**

18. Andrews, J., (2006) "Postpartum depression treatment rates for at risk women" **Journal of nursing research**, Apr: 55(2), 23.
19. Ahokas, P., (2001) "Positive treatment effect of Estradiol in postpartum psychosis" **Obstetrical and gynecological survey**, Jan: 56 (1) ,7-8
20. Agoub, M., (2005) "Prevalence of postpartum depression in a Moro sample" **Journal archives of women's mental health** , May: 8(1) , 37-43.
21. Azidah, AK.,(2006) "Postnatal depression and socio cultural practices among postnatal mothers in Kota Bahru Malaysia", **Medical Journal of Malaysia**, Mar :61(1), 76-83.
22. Anuchitra, S., (2009) "Depression among postnatal mothers", **Nightingale Nursing Times**, Jun: 5(3), 18-20.
23. Boyce, M.,(2001) "Obstetric risk factors for postnatal depression in urban and rural community samples " **Australian and New Zealand journal of psychiatry**, Feb :35(1), 69-74.
24. Bloch, M.,(2005) "Risk factors associated with the development of postpartum mood disorders" **Journal of affective disorders**,Jul: 88(1), 9-18.

25. Belmonte, P.,(2009) "Genome wide linkage and follow up association study of postpartum mood symptoms " **The American Journal of psychiatry** , Nov: 166(11), 1201-1204.
26. Claudia Klier, M.,(2001) "Interpersonal psychotherapy adapted for the group setting in the treatment of postpartum depression " **Journal of psychotherapy practice** , Apr :10(11), 124-131.
27. Chabrol, H.,(2002) "Prevention and treatment of postpartum depression - a controlled randomized study on women at risk " **Journal of psychological medicine** , Apr: 32(6), 1039-1047.
28. Chandra, S., (2008) "Prevalence and correlates of suicidality among Indian women with postpartum psychosis in inpatient setting" **Journal of psychiatry**, Nov: 42(2), 976-980.
29. Chaudran, L.H., (2001)"Predictors prodromes and incidence of postpartum depression" **Journal of psychosomatic obstetric and gynecology**, Jan : Mar 122(1),, 103-112
30. Dwenda, G., "The effectiveness of various postpartum depression treatments and the impact of antidepressant drugs on nursing infants" **The journal of the American board of family practice**, Jul:16( 5), 372-382.
31. Dominic Lee, T.S., (2004) "Ethno epidemiology of postnatal depression" **The British journal of psychiatry**, Jun: 184, 34-40.

32. Ellwood, D.,(2004) "Postnatal mental health of women giving birth in Australia" **Australian Journal of psychiatry**, Jan : 42(1) 66-7
33. Freeman, MP.,(2005) "Postnatal depression assessments at well baby visit " **Journal of women's health**, Dec : 14(10) 929-935.
34. Glory, D., (2009) "Postnatal depression among mothers" **Nightingale nursing times**, Jun :5(3) 51-53.
35. Gausia, K.,(2008) "Magnitude and contributory factors of Postnatal depression-a community based cohort study from a rural sub district of Bangladesh" **Journal of psychological medicine**, Aug :39(3) 999-1007.
36. Heh, S., (2004) "Effectiveness of a discharge education programme in reducing the severity of postpartum depression" **Indian obstetrics and gynecology" No: 77(1), 68-71.**
37. Heron J, (2002)., "Antenatal anxiety predicts child behavioral and emotional problems independently of postnatal depression" **Journal of American academy child adolescence psychiatry, Dec: 41 (12), 1470-1477.**
38. Ingram, JC., (2003) "Hormonal predictors of postnatal depression at 6 months in breast feeding women" **Journal of reproductive and infant psychology**, Feb: 21(1) , 61-68.

39. Joseffson, A., (2000) "Prevalence of depressive symptoms in late pregnancy and postpartum" **Journal of psychosomatic obstetrics and gynecology** Jun: 21(2) , 93-97.
40. Klainin, P., (2008) "Postpartum depression in Asian culture-A literature review" **International journal of nursing studies**, Jul: 46(10), 1355-1373.
41. Kauppi, A.,(2008) "Maternal depression and filicide - case study of ten mothers" **Journal of women's mental health**, Jul : 11(3), 201-203.
42. Lee, D., (2009) "A prevalence of antenatal depression among Chinese women" **Journal of affective disorders**, Jan: 82(1), 93-99.
43. Manichandran, P., (2002) "Postpartum depression in a cohort of women from a rural area of Tamil Nadu, India" **British Journal of psychiatry**, April - June: 181(2) , 499-504.
44. Max, W., (2006) "Postnatal depressive symptoms among Pacific mothers in Auckland- prevalence and risk factors" **Australian and New Zealand Journal of psychiatry**, Jan :40(3) , 230-238.
45. Mayumi, W., (2008) "Maternity blues as predictors of Postnatal depression- A prospective cohort study among Japanese

- women" **Journal of psychosomatic obstetrics and gynecology**,  
Feb : 29(3), 211-217.
46. Michael Hara, W.,(2000)"Efficacy of interpersonal psychotherapy for postpartum depression" **Journal of general psychiatry**, Dec: 57(1), 1039-1045.
  47. Ozdemier, H.,(2005) "Postnatal depressive mood in Turkish women" "**Psychology health and medicine**, Feb : 10(1), 96-107.
  48. Parvin, B., (2008) "A meta analysis on studies about obstetric risk factors of postpartum depression in Iran" **Journal of nursing and midwifery research**, Jan: 13(4) , 47 - 50.
  49. Pedro, M., (2007) "Impact of defense style on brief psychotherapy of postpartum depression" **The Journal of nervous and mental disease**, Oct: 195(10) , 870-873.
  50. Park, YJ., (2004) "The predictors of postpartum depression" **Korean journal**, Aug: 34(5) , 722-728.
  51. Rahabai and Prabhu, T., (2002) "Postpartum psychiatric illness, Government hospital for women and children at Egmore, Chennai" **The journal of obstetrics and gynecology of India**, Aug: 46(373), 53
  52. Rajamani, S., (2009) "Research study on postnatal blues" **Nightingale nursing time**, Aug:5( 2),12-15

53. Robertson, E.,(2009) "Antenatal risk factors for postpartum depression - a synthesis of recent literature " **The journal of science direct**, Jul :26( 4),289-295
54. Sreevani, R., (2006) "Psychosocial and mental health aspects of women", **Nightingale nursing times**, Jun: 10(1), 45-48.
55. Tadaharu, O., (1998) "Effectiveness of antenatal education about postnatal depression- A comparison of groups of Japanese mothers" **Journal of mental health**, Jul: 7(2), 191-198.
56. Tashakori, A., (2009) "Assessment of some potential risk factors of postpartum depression" **Pakistan Journal of medical science**, Jun: 25(2), 261-264
57. Theresa Laurie, A., (2005) "A double blind randomized placebo controlled trial of postnatal norethisterone enanthate: the effect on postnatal depression and serum hormones" **An international Journal of obstetrics and gynecology**, Aug: 105(10), 1082-1090
58. Vik, K., (2006) "Video interaction guidance offered to mothers with postnatal depression" **Norway journal of psychiatry**, Nov 60(3), 234-238
59. Vikram, P., (2002) "Gender, poverty and postnatal depression, A study of" **Indian Pediatrics**, Sep : 26(9), 888 - 93.

60. Wan, E. Y., (2008)" Postpartum depression and traditional postpartum care in china" **International Journal of obstetrics and gynecology**, Sep : 26(9), 888 - 93.

**NET REFERENCE :-**

61. [www.pubmed.com](http://www.pubmed.com) - Postnatal depression, baby blues and postpartum psychosis.
62. [www.Google.com](http://www.Google.com) - Postnatal depression help line
63. [www.Yahoo.com](http://www.Yahoo.com) - Baby blues and its management
64. [www.health.sci.com](http://www.health.sci.com) - Postnatal depression and its management

## APPENDIX – F

### STRUCTURED TEACHING PROGRAMME ON SELECTED POSTPARTUM PSYCHIATRIC ILLNESS

Topic	:	Selected Post Partum Psychiatric Illness
Number of Audience	:	50
Teaching Method	:	Lecture Cum Discussion
Audiovisual aids	:	Compact disc with lap top.
Date	:	
Time	:	
Place	:	Kasturba Memorial Hospital
Name of the Researcher	:	W. Sampooram

#### **CENTRAL OBJECTIVE**

The audience will acquire knowledge regarding Selected Postpartum Psychiatric Illness and develop positive attitude and skill in managing selected postpartum psychiatric illness.

## **SPECIFIC OBJECTIVES**

At the need of structured teaching programme audience will be able to

- explain the normal response to child birth
- describe risk factors of postpartum psychiatric illness
- enumerate the etiology of postpartum blues
- enumerate the clinical features of postpartum blues
- explain the treatment of postpartum blues
- list down the causes of postpartum depression
- explain the clinical features of postpartum depression
- describe the impact of postpartum depression in children
- explain the treatment of postpartum depression
- describe the coping with postpartum depression
- describe the causes of postpartum psychosis
- list down the signs and symptoms of postpartum psychosis
- explain the treatment of postpartum psychosis
- describe the complications of postpartum psychosis

Time	Specific Objectives	Content	AV Aids	Teacher Activity
		<p><b>INTRODUCTION</b></p> <p>Pregnancy and puerperium are highly stressful periods in a woman's life. The person is threatened by physical change, psychological changes occurring in one's body. Reorganization of psyche in accordance with the new 'mother role'. Body image changes and unconscious intra psychic conflict relating to pregnancy, child birth and mother hood become activated. The risk of becoming mentally ill during the puerperium is greater than at other times in the women's reproductive life. Common puerperal mental disorders are postnatal blues, postnatal depression and post partum psychosis.</p>		

Time	Specific objectives	Content	AV Aids	Teacher Activity
	explain the normal response to child birth	<p><b>NORMAL RESPONSE OF THE MOTHER TOWARDS CHILD BIRTH</b></p> <p><b>PSYCHOLOGICAL CHANGES OF THE POST PARTAL PERIOD</b></p> <p>The postpartum period is a time of transition during which the couple gives up concepts such as ‘childless’ or ‘parents of one’ and moves to the new beginning of parenthood.</p> <p><b>Taking In phase :-</b></p> <p>The taking in phase, the first phase experienced is a time of reflection for a woman. During this period, the woman is largely passive. As a part of thinking and wondering about the new role, a woman usually wants to talk about her Pregnancy especially about her labor and birth. She holds the child with a sense of wonder.</p>		Lecture cum discussion

Time	Specific objective	Content	AV aids	Teachers activity
		<p><b>Taking Hold Phase :-</b></p> <p>After the time of passive dependence, a woman begins to initiate action. She performs to get her own wash cloth and make her own decisions. Women who give birth without any aesthesia may reach this second phase in a matter of hours after birth. During the taking in period, a woman may have expressed little interest in caring for her child. Now she begins to take a strong interest.</p> <p><b>Taking Go phase :-</b></p> <p>She gives up the fantasized image of her child and accepts the real one; she gives up her old role of being childless or the mother of only one or two.</p>	 	

Time	Specific Objectives	Content	AV Aids	Teacher Activity
	describe risk factors of post partum psychiatric illness	<p>Post partum psychiatric illness is typically divided into three categories.</p> <ol style="list-style-type: none"> <li>1) Post partum blues</li> <li>2) Post partum depression</li> <li>3) Post partum psychosis</li> </ol> <p><b>RISK FACTORS OF POST PARTUM PSYCHIATRIC ILLNESS</b></p> <p><b>Biological Factor :-</b></p> <ul style="list-style-type: none"> <li>➤ Women who have a family history of non pregnancy related depression are also more likely to suffer from post partum depression.</li> <li>➤ Health concerns or problems with the new baby can increase the risk.</li> <li>➤ Women who have a family history of psychosis, bipolar disorder or schizophrenia have a great chance of developing the disorder.</li> </ul>		Lecture cum discussion

Time	Specific Objectives	Content	AV Aids	Teacher Activity
		<p><b>Psychological Factor :-</b></p> <ul style="list-style-type: none"> <li>➤ Post partum depression or significant baby blues during earlier pregnancy can increase the risk for post partum depression</li> <li>➤ Woman who have a personal history of non pregnancy related depression are also more likely to suffer from post partum depression</li> <li>➤ Woman with a personal history of psychosis bipolar disorder or schizophrenia an increased risk of developing post partum psychosis</li> <li>➤ Women with previous history of post partum psychosis are more likely to develop in future pregnancy</li> <li>➤ Depression during pregnancy and other life stressors</li> </ul>		

Time	Specific Objectives	Content	AV Aids	Teacher Activity
		<p><b>Social Factor :-</b></p> <ul style="list-style-type: none"> <li>➤ Woman who have an unsupportive spouse or poor social network</li> <li>➤ Women who experience marital problems such as fighting separation or divorce.</li> <li>➤ Problems with older children, having babies very close together</li> </ul> <p><b>Economical Factor :-</b></p> <ul style="list-style-type: none"> <li>➤ Financial difficulties are one of the risk of post partum depression.</li> </ul> <p style="text-align: center;"><b>POSTPARTUM BLUES</b></p> <p>The postnatal blues is a transient self limiting condition with no known serious after effect. Most women recover from the blues within a day or two. It occurs at any time between the third and tenth postnatal day.</p>	 	

Time	Specific Objectives	Content	AV Aids	Teacher Activity
		<p>It is considered a normal reaction to child birth and affects about 70% to 80% of all postnatal mothers. These are more common in primi gravida.</p> <p><b>Etiology :-</b></p> <ul style="list-style-type: none"> <li>➤ Hormonal influences e.g. changes in estrogen, progesterone and prolactin levels, seems to be implicated as the period of increased emotionality appears to coincide with the production of milk in the breast.</li> <li>➤ Lack of social support</li> </ul> <p><b>Clinical Features :-</b></p> <ul style="list-style-type: none"> <li>➤ Feelings of sadness</li> <li>➤ Crying</li> <li>➤ Irritability</li> <li>➤ Mild depression and poor concentration</li> <li>➤ Anxiety and insomnia</li> </ul>		

Time	Specific Objectives	Content	AV Aids	Teacher Activity
	<p>explain the treatment of post partum blues</p>	<p><b>TREATMENT</b></p> <ul style="list-style-type: none"> <li>➤ These blues pass of within a few days. The support given to mother in the postnatal period may help them to cope with their feelings and have significant contributions to their emotional well being and adaptation to motherhood.</li> <li>➤ Since emotional instability of all kinds can be committed to sleep deprivation, ask the partner, family and friends to take care of the baby for short period to allow the mother to nap. Take time to relax in the bath or have a cup of tea.</li> <li>➤ Most importantly, don't be ashamed to share the feelings with the partner</li> <li>➤ Usually the baby blues does not require any kind of formal intervention. However, if the symptoms persist for larger than a couple of weeks, women may have post partum depression, which should not be ignored.</li> </ul>		<p>Lecture cum discussion</p>

Time	Specific Objectives	Content	AV Aids	Teacher Activity
		<p><b>POSTPARTUM DEPRESSION</b></p> <p>Post natal depression is the most frequent disorder during postnatal period. It occurs in 10% to 15% of women. Onset is usually within the first post partum month usually between day 3 and day 14.</p> <p><b>CAUSES OF POSTPARTUM DEPRESSION</b></p> <ul style="list-style-type: none"> <li>➤ A rapid shift is the hormonal level after delivery such as estrogen and progesterone concentrations fall dramatically.</li> <li>➤ Regulations of mood, hormonal shifts in the emergence of postpartum affective illness.</li> <li>➤ Marital dissatisfaction</li> <li>➤ Inadequate social support</li> <li>➤ Stressful life events</li> </ul>	  	

Time	Specific Objectives	Content	AV Aids	Teacher Activity
	explain the signs and symptoms of post partum depression	<p><b>SIGNS AND SYMPTOMS OF POSTPARTUM DEPRESSION</b></p> <ul style="list-style-type: none"> <li>➤ Poor concentration</li> <li>➤ Feeling of guilt and worthlessness</li> <li>➤ Lacks energy and motivation</li> <li>➤ Lacks of interest in usual activities</li> <li>➤ Social withdrawal</li> <li>➤ Feeling tired</li> <li>➤ Inability to cope</li> <li>➤ Irritating</li> <li>➤ Anxiety</li> <li>➤ Sleep disturbances (sleeping less than usual)</li> <li>➤ Changes in appetite or weight</li> <li>➤ Recurrent thoughts of death or suicide</li> <li>➤ Negative feelings towards baby</li> <li>➤ Loss of pleasure</li> </ul>	 	Lecture cum discussion

Time	Specific Objectives	Content	AV Aids	Teacher Activity
	describe the impact of post partum depression in children	<p><b>IMPACT OF POSTPARTUM DEPRESSION IN CHILDREN</b></p> <p><b>Behavioral problems :-</b>  Children of depressed mother are more likely to develop behavioral problems down the line, including sleep problems, temper tantrums, aggression and hyperactivity.</p> <p><b>Delays in cognition development :-</b>  Development is often delayed in babies and children who have depressed mothers. They may learn to walk and talk later. They may also have many other learning difficulties, including problems with school.</p> <p><b>Social Problems :-</b>  Children of depressed mothers have difficulty establishing secure relationships. They may find it hard to make friends in school.</p>		Lecture cum discussion

Time	Specific Objectives	Content	AV Aids	Teacher Activity
	explain the treatment of post partum depression	<p>They may be socially withdrawn, or they may act in destructive ways.</p> <p><b>Emotional Problems :-</b></p> <p>Children of depressed mothers have lower self esteem are more anxious and fearful more passive and less independent.</p> <p><b>Depression :-</b></p> <p>The risk for developing major depression early in life is particularly high for the children of mothers with post partum depression.</p> <p><b>TREATMENT</b></p> <p><b>Psychotherapy :-</b></p> <p>Individual therapy or group therapy can be very effective in the treatment of postpartum depression. Psychotherapy is often the treatment of choice because of concerns over taking medication while breastfeeding.</p>		Lecture cum discussion

Time	Specific Objectives	Content	AV Aids	Teacher Activity
		<p>Interpersonal psychotherapy which Focus on interpersonal relationships and issues, is believed to be particularly effective for post partum depression. Cognitive behavior therapy is also used in which there is significant improvement in the quality.</p> <p><b>Cognitive Therapy (CT) :-</b></p> <p>Cognitive therapy aims to challenge and dispel negative thoughts about the self or the life that can lead to depression. The therapist will give the techniques for challenging these thoughts as they arise and stopping the depression before it begins. Cognitive therapy sessions usually take place once a week over several months.</p> <p><b>Cognitive Behavioral Therapy (CBT) :-</b></p> <p>Cognitive behavioral therapy combines behavioral therapy and cognitive therapy. The therapist will try to identify the thoughts and behavioral patterns which are</p>		

Time	Specific Objectives	Content	AV Aids	Teacher Activity
		<p>negatively affecting everyday life. Once the women and the therapist have established the problems he or she will then draw up a treatment plan. It usually involves home work such as recording the emotions from day to day and implementing the techniques will learn for coping with stressful situations. Sessions generally last for about one hour once a week for several weeks or even months.</p> <p><b>Psychodynamic psychotherapy :-</b>  This similar to psycho analysis is that the therapist will encourage women to talk freely, without fear of judgment. The idea is that bringing the true feelings up from the subconscious and into the open will help the mother understand and tackle the depression.</p>		

Time	Specific Objectives	Content	AV Aids	Teacher Activity
		<p><b>POSTPARTUM DEPRESSION COUNSELING</b></p> <p>Other forms of counseling are available.</p> <p><b>Problem solving therapy :-</b></p> <p>Is a structured technique whereby the therapists help to identify, the specific problems in the life and together will draw up a list of small, practical steps for resolving them. Women then select and implement the solutions which work best for her.</p> <p><b>Interpersonal therapy :-</b></p> <p>It is based on the concept that many problems leading to depression are caused by communication flows in once relationship with others. This form of therapy tackles the depression by helping the mother relate more effectively to the people around her.</p>	 	

Times	Specific Objectives	Content	AV Aids	Teacher Activity
		<p><b>Hormone therapy :-</b></p> <p>Estrogen replacement therapy sometimes helps with post partum depression. Estrogen is often used in combination with anti depressants.</p> <p><b>Marriage counseling :-</b></p> <p>In case of experiencing martial difficulties or are feeling unsupported at home, marriage counseling could be very beneficial.</p> <p><b>Antidepressants :-</b></p> <p>For severe cases of post partum depression where the mother is unable to care for herself or her baby, antidepressants may be option. However medication use should be accompanied by therapy, as well as close monitoring by a physician. Anti depressants like amitriptyline and tetracyclic drugs are used.</p>	 	

Time	Specific Objectives	Content	AV Aids	Teacher Activity
	describe the coping with post partum depression	<p><b>Breast feeding during Antidepressants :-</b></p> <p>It is important to know that the medication can be passed to the baby through breast milk. Hence breast feeding should be avoided during antidepressant medications.</p> <p><b>COPING WITH POST PARTUM DEPRESSION</b></p> <ul style="list-style-type: none"> <li>➤ Focus on short term, rather than long term goals</li> <li>➤ Look for free or inexpensive activities, check with the local library or plan of worship</li> <li>➤ Spend time with the partner or close friend</li> <li>➤ Share the feelings and ask for help consult the doctor and look for a local support group</li> </ul>		Lecture cum discussion

Time	Specific Objectives	Content	AV Aids	Teacher Activity
		<p><b>Keep stress to a minimum :-</b></p> <p>A stressor is anything that puts a demand on you and so de- stressing such as getting into a support group, taking care of self, rating healthy will relieve stress.</p> <p><b>Don't suffer in silence :-</b></p> <p>Many women don't discuss post partum depression especially if they have thoughts of hearing themselves or their children shared talk about what the women feeling to the doctor, husband and friends.</p> <p><b>Encourage yourself :-</b></p> <p>Always encourage self. Try leaving self a voice message on the telephone.</p>		

Time	Specific Objectives	Content	AV Aids	Teacher Activity
		<p><b>Make sure your partner is supportive :-</b></p> <p>Make sure the mate is empathetic and sensitive to the needs of the women.</p> <p><b>Don't blame yourself :-</b></p> <p>Understand that mother can't be blamed for feelings of despair or depression. If she starts feeling excessive or inappropriate guilt, recognize that she didn't choose this disorder.</p> <p><b>Consult a physician :-</b></p> <p>Are for help and treatment with a physician.</p> <p><b>SELF HELP FOR POST PARTUM DEPRESSION</b></p> <ul style="list-style-type: none"> <li>➤ Find someone to talk about the feelings</li> <li>➤ Find people who can help with child care, house work</li> </ul>		

Time	Specific Objectives	Content	AV Aids	Teacher Activity
		<ul style="list-style-type: none"> <li>➤ Make time for self every day, even if its only for 15 minute</li> <li>➤ Do something relaxing</li> <li>➤ Keep a daily dairy of emotions and thought</li> <li>➤ Give self credit for the things which could be to accomplished</li> <li>➤ Be honest about how much she can do and ask others for help</li> <li>➤ Join a support group</li> </ul> <p><b>POSTPARTUM PSYCHOSIS</b></p> <p>Postpartum psychosis is a very serious mental condition that requires immediate medical attention. Usually described as a period when a woman losses touch with reality, the disorder occurs in women who have recently given birth.</p>	  	

Time	Specific Objectives	Content	AV Aids	Teacher Activity
		<p>It should be considered a medical emergency because of the high risk for suicide or infanticide hospitalization is usually required. Typically the onset of symptoms occurs 3-7 days after delivery.</p> <p><b>CAUSES OF POST PARTUM PSYCHOSIS</b></p> <p><b>Psychosocial factors :-</b></p> <p>Epidemiologic studies have intermittently faced same association, between psychosocial factors such as marital status, social support and obstetrical complications and the development of postpartum psychosis symptoms.</p> <p><b>Genetic factors :-</b></p> <p>Family histories of women with post partum psychotic disorders reveal a high incidence of mood disorders, consistent with the finding that the majority of postpartum psychosis represents episodes of mood disorders themselves.</p>	 	

Time	Specific Objectives	Content	AV Aids	Teacher Activity
		<p><b>Biological factors :-</b></p> <p>Sudden changes in hormone levels after child birth trigger the onset of psychiatric symptoms.</p> <p>Estrogen and progesterone reach normal serum levels immediately after delivery. Low estrogen levels post partum may precipitate psychosis through a super sensitization of central dopamine sector. Psychosis in association with estrogen withdrawal has been found not only after delivery but also at menstruation.</p> <p>Thyroid hormone has been suggested to be involved in post partum psychosis. The incidence of both hypothyroidism and hyperthyroidism is high in the post partum period. The factors involved in causation are biological change in endocrine status especially steroid withdrawal sleep disturbances, amine disturbances.</p>		

Time	Specific Objectives	Content	AV Aids	Teacher Activity
	list the signs and symptoms of post partum psychosis	<p><b>SIGNS AND SYMPTOMS</b></p> <ul style="list-style-type: none"> <li>➤ Usually affective in nature, either manic or depressive but with liability and mixed mood status are common</li> <li>➤ Delirium like presentation</li> <li>➤ Hallucination (hearing voices) to kill the baby</li> <li>➤ Delusions (paranoid, persecution)</li> <li>➤ Extreme agitation and anxiety</li> <li>➤ Confusion and disorientation</li> <li>➤ Rapid mood swings</li> <li>➤ Bizarre behavior</li> <li>➤ Inability or refusal to eat or sleep</li> <li>➤ Suicidal thought</li> <li>➤ Thoughts of harming or killing the baby</li> </ul>	 	Lecture cum discussion

Time	Specific Objectives	Content	AV Aids	Teacher Activity
	explain the treatment of post partum psychosis	<p><b>TREATMENT</b></p> <p>Postpartum psychosis is a medical emergency requiring the mother hospitalization for her protection and that of the infant.</p> <ul style="list-style-type: none"> <li>➤ Most women with this condition are too ill to breast feed their infants. A positive consequence; however is that the atypical antipsychotic may be used without worrying about a nursing infant's ingestion of them. These medications offer advantage over conventional agents.</li> <li>➤ When oral administration is not possible because of agitation, high potency anti psychotic such as haloperidol initially administered parentally and there withdrawn when the patient can take the oral medication</li> </ul>		Lecture cum discussion

Time	Specific Objectives	Content	AV Aids	Teacher Activity
		<p><b>Breast feeding on mood stabilizing mediation :-</b></p> <p>Lithium is water soluble and therefore the concentration in breast milk in the mothers system. Avoid breast feeding if on lithium.</p> <ul style="list-style-type: none"> <li>➤ Electro convulsive therapy is indicated for acute agitation when the woman is at high risk for suicide or infanticide and when she has refused or not responded to medications.</li> </ul> <p>Insomnia should be a target symptom for treatment so providing for a bed time dose of medication has therapeutic importance.</p> <ul style="list-style-type: none"> <li>➤ Insomnia should be a target symptom for treatment so providing for a bed time dose of medication has therapeutic importance.</li> <li>➤ After the psychotic symptoms have resolved psychosocial intervention is crucial for reestablishing the patient in her role as mother.</li> </ul>		

Time	Specific Objectives	Content	AV Aids	Teacher Activity
	describe the complications of post partum psychosis	<p><b>COMPLICATIONS OF PASTPARTUM PSYCHOSIS</b></p> <p><b>Suicide :-</b>            Post partum psychiatric admission serves as a major services as a marker for increased suicide risk. Post partum women who committed suicide tended to use violent methods (self incineration, jumping from a height, jumping in front of a train).</p> <p><b>Infanticide :-</b>            Infanticide summarizes some of the psychiatric legal and treatment issues pertaining to this tragic complication of mental illness. Post partum psychosis is a risk factor for infanticide.</p>		Lecture cum discussion

Time	Specific Objectives	Content	Aids	Teacher Activity
		<p><b>SUMMARY</b></p> <p>So far we have seen the normal response to child birth, etiology of post partum blues, clinical feature, treatment, risk factors post partum depression, clinical feature, impact of post partum depression on children, treatment, coping, risk factors of post partum psychosis, causes, signs and symptoms, treatment and complication.</p> <p><b>CONCLUSION</b></p> <p>For every woman having a baby is a challenging time, both physically and emotionally. It is natural for many new mothers to have mood swings after delivery, feeling joyful one minute and depressed the next.</p>		

tiuaWf;fg;gl;l eyf;fy;tpj; jpl;lk;

QuâûW°:

I'U ùTi|u Yôr° p I'U'Ut| "ûX Um Ĵ'kûR ùĴsmúTôÔm, ùTt|  
 °u×m Es/ LôXLhPeLs I Qd/V'Uô/RôĴm. ùTi|u EP-p HtTÔm  
 Uôt|eLPm, U/Ĵ'Vô/ Uôt|eLPm TV'jûR HtTÔjÔm. I'U ùTi|u  
 Ut| I'U'jûR° P Ĵ'kûR ùĴsmúTôÔm, ùTt|°u×m U/"ûX TôSs×Ls  
 HtTÔm Yôn'×Ls Ĵ'IL UôL Es/Ô. °túĴô LôXjSp ùTi|u U/ûR  
 NôckR ùTôÔYô/ °WfNú/Ls - U/fúNôc U, U/ Ĵ'jRm Utsom  
 LÔu U'Vô/ U/dúLô[ôfúTou\ûY BĴm.

°túĴô LôXjSp ùTi|tĴ HtTôP dâY V'Uú/ô° Vp Uôt|eLs:

°túĴô LôXjSp Ĵ'kûR«u U úTou| I'YúXúV' U\kÔ I'U  
 ×S V'YôrdûL«p ùTtú|ôc Gu| Ĵ'kRyStĴ'Vô/|ôcLs.

YôrdûL«u Y/ofL TŸLs:

Ry/m dùL Um, U/ûR VÔm ùTi|u YôrdûL«u Y/ofL TŸLs  
 BĴm. TkRLôXdLhPjSp ùTi KnúYÔSĴúRúV'° Um×|ôc.  
 Rênú UúV' Ĵ'PkR ùTi RuâûPV' Uôf° VúTUm, Ry Ĵ'kûR«u  
 °VúTUm Gi| °V'kÔ Ĵ'kRySt± T'kÔ ùLôcYúRúV'° Um×|ôc. Rên  
 Ry Ĵ'kûRúV' Ĵ'xR Uô/RôL Gi| °Vd|ôc.

Ru² Pjû R R dLû Yj Rp:

° tú JfLô Xj Sp Ruâ PV° Kn Û Lô Xjû R Oyj Ô ù Lôi Ô  
Ruâ PV° LPû U Lû / Rê / ô Lú Y N- YW° ù Nn V° Ô Yē Ĵ \ ô s.  
Ruâ PV° Ĵ Zkû Rgu ù Up A S L L Y / jû R Um AdLû \ Um ù N Uj R  
Ô Yē Ĵ \ ô s.

Yer° p A Oj R Lh Pm:

Rên Ruâ PV° G So Tocl x Lû / ° h Ô ° h Ô Ruâ PV° Ĵ Zkû R dLô ú Y  
Ruû / At T, dL Ô Yē Ĵ \ ô s. ù Ti Ruâ PV° Ĵ Zkû Rgu ù U Gu \  
.. ù X « - U k Ô ° Ó Th Ô Rên ù U Guâm x S V° .. ù X ù V° A ù P \ ô s.

° tú JfLô Xj Sp Ht P P dâ y V° U / A S V° ] ° W f Nû / Lû / z Yû L V° L  
° - dL Xôm

1. ° tú JfLô Xj Sp Ht T Ô m U / fû Nôo Û
2. ° ± ú JfLô Xj Sp Ht T Ô m U / A Yj Rm
3. ° tú JfLô Xj Sp Ht T Ô m L Ô ù U V° ] U / d ù L ô / ô s

° tú JfLô Xj Sp Ht P P dâ y V° U ù / ° Vp Uôt \ e Lû / Ht T Ô j Ô m  
Lô W ° | Ls:

(1) E P p A S V° / Uôt \ e Lû / Ht T Ô j Ô m Lô W ° | Ls:

- ❖ àTi|u ĴÖmTjSp ĞYú\ám LÚjR\_dL TVXôuU«u  
LôW<sup>Q</sup>UôL HtĴÖm U] ĀYjRm.
- ❖ °\kRĴZkûRu ĒPp DXd Ĵû\Ü
- ❖ àTi|u ĴÖmTjSp ĞYUđúLám LÔuUV<sup>o</sup>] U]đúLô[ôß  
U<sub>t</sub>f<sub>o</sub>m U]fLúRÜúTou\ LôW<sup>o</sup> Ls

(2) U]ĀSV<sup>o</sup>]LôW<sup>o</sup> Ls:

- ❖ ĞRtĴ Öu UdúĴßLôXjSp HtThP U]fúNôo Ü ĀpXÖ  
U] ĀYjRm.
- ❖ àTi|tĴ HtL]úY U<sub>X</sub>nÖjRuúU ĞUkRRu  
LôW<sup>Q</sup>UôL HtThY U<sub>k</sub>R U]ĀYjR<sup>Q</sup>Öm °\úĴßLôXjSp  
HtĴPđáyV U]ĀYjRjStĴLôW<sup>Q</sup>UôL ĀúUVXôm.
- ❖ àTi|tĴ HtL]úY LÔuUV<sup>o</sup>] U]đúLô[ôß U<sub>t</sub>f<sub>o</sub>m  
U]fúNôo Ü HtThY U<sub>k</sub>Rêp °túĴßLôXjSp HtĴPđáyV  
LÔuUV<sup>o</sup>] U]đúLô[ôßđĴLôW<sup>Q</sup>UôL ĀúUVXôm.
- ❖ L<sub>o</sub>ĴLôXjSp HtĴPđáyV U]ĀYjRm.
- ❖ Yêr<sup>o</sup>p HtĴÖm àYßx.

(3) NêL LôW<sup>o</sup> Ls:

- ❖ àTi|u Yêr<sup>o</sup> u úRúYLPđĴj Öu ĞpXôR LĞYam ĀúR  
NôokR NêLm.

- ❖ àTì|u S U U Q Yèr<sup>®</sup>p HtThP LN]Tè] AaTyeLs.  
ERêW<sup>®</sup>QUôL: °YôLWjô
- ❖ AôjRôjô jZkâRûTtYRêp

àTèU|ôRêW<sup>®</sup>LôW<sup>®</sup>Ls:

TQL WfNû/Ls °túTtLôXjSp HtTôm U]AaYjRStj  
LW<sup>®</sup>QUôL AaU\ô.

°túTtLôXjStj<sup>®</sup> u HtTôm U]fúNôo Ü:

°túTtLôXjSp HtTôm U]fúNôoYô]ô U]dLhÔ]TchY]êp  
Rê]ôLúY N-VôL ayVô. àTUmTôXê] RênUôoLs Ju±-Ukô  
TW<sup>®</sup>ô SchLPdJ's U]fúNôo<sup>®</sup>p T U kô °ÔTôYôoLs. °túTtLôXjSp  
3 ÔR<sub>p</sub> 10 SchLPdJ's GkR LôXLhPjS Um U]fúNôo Ü HtTôm  
Yênl\*s]ô. °túTtLôXjSp 70% ÔR<sub>p</sub> 80% YûWVô] RênUôoLPdJ'  
U]fúNôo Ü HtTt Yênl\*s]ô. RûX<sup>®</sup>W<sup>®</sup>NayjSp U]fúNôo Ü HtTt  
ASL Yênl\*s]ô.

LôW<sup>®</sup>Ls:

- ❖ aôou Uôep HtTôm UôT\ôLs. ERêW<sup>®</sup>Qm : DvhúW<sup>®</sup>\_u,  
xûW<sup>®</sup>\_vhW<sup>®</sup>ou UôTsm xûW<sup>®</sup>XôdYu jû\Yô] A]p N<sup>®</sup>UdJm  
LW<sup>®</sup>QjRêp U]fúNôo Ü HtTô\ô.
- ❖ NêL BRW<sup>®</sup> uû U.

$\mathbb{A} \pm \mathbb{J} \pm \mathbb{L} s:$

- ❖  $U/dL \mathbb{Y} \hat{u} X \hat{u} L \hat{o} s P R_p$
- ❖  $\mathbb{A} \mathbb{Y} R_p$
- ❖  $G_{-f} N \hat{X} \hat{o} / U / \hat{u} X$
- ❖  $\hat{u} X N \hat{o} / U / \mathbb{A} \mathbb{Y} j R_m$
- ❖  $U / T R_t \setminus m$
- ❖  $cdL \hat{u} \hat{u} U$
- ❖  $L \mathbb{Y} / m \hat{u} N \hat{u} j R \text{ } \mathbb{C} V \hat{X} \hat{o} \hat{u} U$

$\mathbb{L} / \hat{u} N \hat{O} \hat{u} \setminus L s:$

- ❖  $U / \hat{u} N \hat{o} \hat{u} \mathbb{L} \pm \hat{O} \text{ } \mathbb{S} \hat{o} h L P \hat{s} \hat{J} \text{ } \setminus \hat{J} R \hat{o} / \hat{o} L \hat{u} \mathbb{Y} \text{ } \hat{u} \hat{e} i \text{ } \hat{O} / \hat{O}.$   
 $U L \hat{u} \mathbb{T} \hat{s} L \hat{o} X j \mathbb{S} p R \hat{e} \ll u \hat{A} \hat{O} L \hat{o} h P \mathbb{T} \hat{O} m \hat{A} u \times m \hat{A} \hat{u} N - s \times m$   
 $\hat{A} k R \hat{u} \hat{T} i \setminus u R \hat{e} n \hat{u} U \mathbb{T} \hat{u} \mathbb{Y} \hat{u} R \hat{u} m \hat{A} R \setminus \hat{o} p \mathbb{H} \hat{t} \hat{O} m$   
 $\hat{O} W \hat{f} N \hat{u} / L \hat{u} / \hat{u} m \mathbb{G} \mathbb{S} \hat{o} j \hat{O} N \hat{u} \hat{o} \cdot d \hat{J} m U / \mathbb{S} P \hat{u} R$   
 $\mathbb{H} \hat{t} \hat{O} j \hat{O} / \hat{O}.$
- ❖  $\mathbb{L} \mathbb{C} \hat{o} f \mathbb{L} \mathbb{Y} N \hat{T} h P \hat{u} X V \hat{o} \hat{u} m R \hat{O} U \hat{o} t \setminus j \mathbb{S} / \hat{o} \hat{u} m$   
 $cdL \hat{u} \hat{u} U V \hat{o} p, \hat{J} Z k \hat{u} R \hat{u} V L \mathbb{C} \mathbb{Y} \hat{u} W \hat{o}, \hat{J} \hat{O} m \mathbb{T} j \mathbb{S} / \hat{u} W \hat{o}$   
 $\hat{A} p X \hat{O} \mathbb{S} i \mathbb{T} \hat{o} L \hat{u} / \hat{o}, \mathbb{L} \pm \hat{O} \hat{u} \mathbb{S} W m R \hat{e} n K_n \hat{u} \mathbb{G} \hat{O} d \hat{J} m \mathbb{Y} \hat{u} W$   
 $L \mathbb{Y} j \hat{O} d \hat{u} L \hat{o} s / \hat{u} \mathbb{Y} \hat{u} \mathbb{C} U d / \hat{O}.$
- ❖  $\hat{O} R_p \hat{J} Z k \hat{u} R_p P_m \hat{A} \mathbb{S} L \hat{u} \mathbb{S} W m \hat{u} N X \mathbb{Y} \cdot j R_p.$



$L^{\circ}W^{\circ}_i L_s$ :

- ❖  $^{\circ}W^{\circ}N^{\circ}Y_j St^{\circ}j^{\circ} u^{\circ} \times \mathbb{E}P_{-p} \mathbb{E}s / a^{\circ}ou^{\circ} U^{\circ}ou^{\circ} L^{\circ} u^{\circ} (D^{\circ}v^{\circ}h^{\circ}u^{\circ} W^{\circ}_u U^{\circ}t^{\circ}f^{\circ}o^{\circ}m$   
 $\times u^{\circ} W^{\circ}_v h^{\circ} W^{\circ}_ou)$   $\mathbb{A} / \ddot{U} \quad j^{\circ}u^{\circ} \backslash k^{\circ} \ddot{O} \quad ^{\circ}O^{\circ}y^{\circ}R^{\circ}e^{\circ}p \quad U / \mathbb{A}^{\circ}y^{\circ}j^{\circ}R^{\circ}_m$   
 $\mathbb{H}t^{\circ}T^{\circ}O^{\circ} / \ddot{O}.$   $\mathbb{S}W^{\circ}_m^{\circ} V^{\circ}_p U^{\circ}ot^{\circ} \backslash e^{\circ}L_s \mathbb{H}t^{\circ}T^{\circ}P^{\circ} y^{\circ}en^{\circ} \times s / \ddot{O}.$
- ❖  $U^{\circ} Q^{\circ}y^{\circ}e^{\circ}r^{\circ} p^{\circ} \mathbb{H}t^{\circ}T^{\circ}O^{\circ}_m \mathbb{A}^{\circ} \mathbb{S} U^{\circ} \mathbb{S}.$
- ❖  $N^{\circ}e^{\circ}L^{\circ} B^{\circ}R^{\circ}W^{\circ} u^{\circ} u^{\circ} U^{\circ}$
- ❖  $y^{\circ}e^{\circ}r^{\circ} p^{\circ} \mathbb{S}P^{\circ}k^{\circ}R^{\circ}L^{\circ}N^{\circ}T^{\circ}e^{\circ} / \mathbb{A}^{\circ}a^{\circ}T^{\circ}y^{\circ}e^{\circ}L_s$

$\mathbb{A}^{\circ}j^{\circ} \pm L_s$ :

- ❖  $L^{\circ}y^{\circ} / d^{\circ}j^{\circ}u^{\circ} \backslash \ddot{U}$
- ❖  $j^{\circ}t^{\circ} \backslash \mathbb{E}^{\circ}Q^{\circ}e^{\circ}f^{\circ}L^{\circ} U^{\circ}t^{\circ}f^{\circ}o^{\circ}m \quad R^{\circ}j^{\circ}S^{\circ} \ll u^{\circ} u^{\circ} U^{\circ} \mathbb{E}^{\circ}Q^{\circ}e^{\circ}f^{\circ}L^{\circ}$
- ❖  $N^{\circ}j^{\circ}S^{\circ} \ll u^{\circ} u^{\circ} U^{\circ} U^{\circ}m, \quad \text{ci}^{\circ} O^{\circ}R^{\circ} - u^{\circ} u^{\circ} U^{\circ} U^{\circ}m$
- ❖  $N^{\circ}e^{\circ}R^{\circ}e^{\circ}W^{\circ} Q^{\circ}u^{\circ}y^{\circ}u^{\circ}X^{\circ}L^{\circ} p^{\circ} \mathbb{S}ch^{\circ}P^{\circ} u^{\circ} u^{\circ} U^{\circ}$
- ❖  $N^{\circ}e^{\circ}L^{\circ}j^{\circ}S^{\circ} p^{\circ} \mathbb{T}^{\circ}U^{\circ}k^{\circ} \ddot{O} \quad R^{\circ}u^{\circ} U^{\circ}u^{\circ} V^{\circ} \mathbb{S}o^{\circ}O^{\circ}R^{\circ}_p$
- ❖  $u^{\circ} N^{\circ}e^{\circ}y^{\circ}e^{\circ} / \mathbb{E}^{\circ}Q^{\circ} \ddot{U}$
- ❖  $R^{\circ}u^{\circ} / m^{\circ} d^{\circ}u^{\circ}L^{\circ} \ll u^{\circ} u^{\circ} U^{\circ}$
- ❖  $G^{\circ} - f^{\circ}N^{\circ}_p \mathbb{A}^{\circ}u^{\circ}P^{\circ}k^{\circ}R^{\circ} \ddot{u}^{\circ} X$
- ❖  $U^{\circ} / \mathbb{T}^{\circ}R^{\circ}t^{\circ} \backslash m$
- ❖  $cd^{\circ}L^{\circ} u^{\circ} u^{\circ} U^{\circ}$
- ❖  $\mathbb{T}^{\circ}L^{\circ} \ll u^{\circ} u^{\circ} U^{\circ} U^{\circ}t^{\circ}f^{\circ}o^{\circ}m \quad G^{\circ}u^{\circ}P^{\circ}d^{\circ}j^{\circ}u^{\circ} \backslash \ddot{U}$
- ❖  $R^{\circ}t^{\circ}u^{\circ}L^{\circ}e^{\circ}u^{\circ}X^{\circ} \mathbb{L}^{\circ}k^{\circ}R^{\circ}u^{\circ} /$



U]AyiRiSti 3/40 ULoOm BuxoNu/Qu\Ls:

❖ °WfNu/di 3/40 ULoOm LifuNQu\:

UkR LifuNêXm U]AyiRm HtThPRu Qd/V°LoW°QjûR  
LiP±kô ARtiN-V°L 3/40 ULoQTO\O.

❖ aôú Uôu LifuN:

DvhuW°\_u Uôts LifuNêX UôL U]AyiRjûR Jû\dLXôm.

❖ RmTS«]UdJ'Uú]°Vp BuxoNu]:

TôL Qyu Uú]°di's HtTôm NiûPfNfN°W°ULPdi  
3/40 Y°LoOm BuxoNu/Qu\V°Jm.

❖ UÚjÔy LifuNQu\Ls:

➤ UÚjÔy\_u A±UúW°Ty UÚkÔLú/ Ry°Up  
EhuLôs[úyîOm.

UÚjÔy LifuN L°XjSp U]AyiRiStLôL UÚkÔLú/  
EhuLôsPm úTôÔ JZkûRdJ RênTep ùLôÔdLXêUô?

RênTep ùLôÔTjRy êXm Rên FhùLôsPm UÙkSu TdL  
°û/[ÙLs jZkùRû V°TôSdIm.

➤ U]AÿjRjûR G.SojÔ N°Uê· dIm Y- Ôû\Ls:

❖ èXLjStjûNus \*jRLeLû/[TÿjRy

❖ Tû\Y- Tchyp DÔTôjSd ùLôsPjRy

❖ LQÿW°Ô ApXÔ SiToLú/ôÔ úSWjûR  
ùNX°ÔRy

❖ UÙjÔY-Pm BúXôNú]ùTjRy.

❖ U]AÿjRjûR N°VdLhÔTchytjS ùÿjRy

❖ ùU[]jûR R°ojRy

❖ LQÿ-PjS Um, UÙjÔY-PjS Um, SiToL°PjS Um  
U/m°hÔ FQ UÙLú/TickÔ ùLôs/úÿiÔm.

❖ R/dj Rêú/LôW°Qm Gus Gi\ YÙkRd úPôÔ

❖ RtuTôYÔ HtThy-dIm A/AÿjRm Rêú] úRyd ùLôiPÔ  
ApX GuTûR FQW°úÿiÔm.

°túTj LêXjSp HtTP áyV U] AÿjRjS]ep jZkùRsu U]Sp  
HtTôm RêdLm.

Su SPjûR úLô/êS Ls:

U]AyiRiDu LoWQuôL İZkûRdİ çdL'uû U, A[Udİ  
A±V°NβNβs, üYβs Utβm úLôTm LXkRùY±, BIVûYHtJP  
Yênl\*s/Ö.

A±Uß\zp HtTm İü\TôLs:

İZkûR úTNÜm, SPdLÜm RdlTÜYüR °P ASL  
LôXjüR GÖjÖdùLôs\Ö. İZkûRqu Ltİm İ\ü İü\V°Yênl\*s/Ö.

NêLAsV°]°WfNü/Ls:

İZkûRLs °\~PjSp úTNÜm, TLLÜm, Shx\ÜùLôs\Üm  
ùT-Öm RVDLm ùLôsPYôLs.

EYü ÜéóYUé]°WfNü/Ls:

İZkûRLPdİ Rêr Ü U]Touû U, U]TRt\m, TVm Utβm  
°\ûW°NöckÖ YôYm İü\Ls HtJPYênl\*s/Ö.

U]AyiRm:

İZkûRY[WY[WU]AyiRm HtJPYênl\*s/Ö.

°túJfLôXjSp HtPPdáyV°LÓúUV°] U]dúLô[ôß:

°túJfLôXjSp HtPPdáyV° LÓúUV°] U]dúLô[ôßdJ  
EP]yV°L UÚjÖY-u ER°úV° SôP úYiÓm. JÚ ùTi RúàùPV°  
TVpTô] SPYyduLsp TÚkÖ UôßTÓYôs. TkR°úX«p ùTi|tJ  
EP]y UÚjÖY ER°Ls úRúYTO/ü\Ö. Húù/ü\ôp ÁkRú ùTi Rú  
JZkúRú V°úLôpXúYô RtuLôúXúNÖ ùLôs[úYô Yóns×Ls Es[Ö.  
JZkúRú ùTt\ °ux 3 ÖRp 7 SôhLPdJ's LÓúUV°] U]dúLô[ô±u  
A±J±Ls LóQTO/ü\Ö.

LôW°|Ls:

U]ÁSV°]TôS|×Lú[HtTÓjÖm NêL LóW°|Ls:

LQYu Uú] TàPúV° HtTÓm °WfNú/Ls, NêL ER°«uú U  
Utbm ULLúJfLôXjSp ùTiLPdJ' HtTÓm EdLpLs B|VúY  
LôW°QUôL Áú U\Ö.

UW°Vp LóW°|Ls:

JÓmJjSp GYUduLám U]dúLô[ôß TÚkRú LóW°QUôL  
LÓúUV°] U]dúLô[ôß HtPP Tóns×s[Ö.

EPp Aš V°/Lô W<sup>o</sup> Ls:

İü\kR Dvñú W°\_u A[<sup>o</sup>]öp LÔü UV°] U]dúLô[öp HtJP  
Y<sup>en</sup>\*s/Ö.

A±İ±Ls:

- ❖ U] AýjR<sub>m</sub> ApXÖ U]di/of£
- ❖ İjR<sup>o</sup> W<sup>o</sup> mü U
- ❖ HüRê İU İp Ry İZküRü V<sup>o</sup> ùLöpXf ùNöpYÖüTöp  
ùRêufsm<sup>o</sup> W<sup>o</sup> mü U.
- ❖ U° V<sup>o</sup> ùX (NküRİjR<sub>p</sub> Ut<sub>sm</sub> ùYRü] TÖR<sub>p</sub>)
- ❖ Aeİm Geİm AùX R<sub>p</sub> Ut<sub>sm</sub> U]İTR<sub>t</sub>\m
- ❖ °ú/öRùNV<sub>p</sub>Ls
- ❖ çdL<sup>o</sup> uü U
- ❖ Nól P U<sub>sj</sub>R<sub>p</sub>
- ❖ RtùLôüX ùNn Um Gi GeLs

İifü NÖü\Ls

°túİbLôXjİp HtJPdüy V<sup>o</sup>LÔü UV°] U]dúLô[ö±]öp  
TôİdLİThP<sup>o</sup>Yü W<sup>o</sup>EP]y V°L U<sup>o</sup>üjÖ<sup>o</sup>YUü]«p ùNöjÖ İifü N<sup>o</sup>A<sup>o</sup> dL  
ùYiÖm.

U Új Öy -u BúXôNú]Tý U Úk ÖLú [G Ój Öd ùLôs [
úYi Óm. U]dúLô [ô±u Ryú UdÍ HtT U Új Öy Wöp TX ° R Uô]
U Úk ÖLs ùLô ÓdLSTÓ /u \].

U Új Öy Lifü N LôXjSp U]dúLô [ôsdLôL U Úk ÖLú [ EhúLôsPm
úTô Ö RênTôp ùLô ÓdLXô Uô?

RênTôp ùLô ÓST Ry êXm Rên EhúLôsPm U ÚkSu
TúL ° ú [ÚLs ÍZkRú V TôSdÍm. RênTôp ùLô ÓdÍm úTô Ö ÍZkú RđÍ
HtTóm TôSúT R °tL U ÚkúR TWiÓ úYú /VôL ° -j Ö ùLô ÓdL
TÓ / Ö.

U]úR WödÍm Qú \ep ÍZkú RđÍ RênTôp ùLô ÓdLXô Uô?

RênTôp ùLô ÓSTúR R °odL úYi Óm.

U]dúLô [ô±u LÓú UVô] RêdLjS]ép RtuLôúXdÍ
ÖVúLSTYLPđÍ 'u ÁSoÜ LifüN Qú \ TXu Á dLô Ö.
TôSdLSThPy. U Úk ÖLú [ EhúLôs [ôUp T ÚkRêp 'u ÁSoÜ
LifüN Á dLSTóm. U Új Öy Qú \Lú [LY] UôL ° uTt \ úYi Óm.

LÔû U V°] U]dúLô[ô±]ép GtTóm LdLpLs

1. RtuLôûX Ø VtL
2. L NuLôûX Ø VtL

ùRêÏs×ûW°

TÔyûW° ULúTtLôXjSu úTôÖ ùTi|tÏ ùTôÖyôL  
 HtTpdáyV° Ubú]ô°Vp Ubôt|eLs, °túTt LôXjSp ùTôÖyôL  
 HtTpdáyV° Ubú]ô°Vp Ubôt|eLs, U]fúNôo Ü, LôW°Ls, A±Ï±Ls,  
 LifûN°Ôû\Ls, U] AÿjRm, LôW°Ls, A±Ï±Ls, LifûN°Ôû\Ls,  
 LÔû U V°] U]dúLô[ô±], LôW°Ls, A±Ï±Ls, LifûN°Ôû\Ls It±  
 LiúPôm.

ØyûW°

Lquyô U ùTi|tÏm ÏZkûRúT-u ùTôÖ EPp A°S V°L Üm  
 U]A°S V°L Üm HtTóm °WfNu]Lú[G S°jÖ N°Uô° dL  
 úyiy« Ubd)\Ö.

**APPENDIX-G  
PART - I  
STRUCTURED INTERVIEW SCHEDULE**

**DEMOGRAPHIC DATA**

1. Age

a) Below 20 Years

b) 21 - 25 Years

c) 26 - 30 Years

d) 31 - 35 Years

2. Educational qualification

a) No formal education

b) Primary education

c) Secondary education

d) Higher Secondary education

e) Graduate

3. Occupation

a) House wife

b) Private Employee

c) Government employee

d) Self employee

4. Type of family

a) Joint Family

b) Nuclear family

5. Family monthly income

a) Below Rs. 1000

b) Rs. 1001 - 2000

c) Rs. 2001 - 3000

d) Above 3000

6. Religion

a) Hindu

b) Christian

c) Muslim

d) Others

7. Residence

a) Urban

b) Semi urban

c) Rural

8. Family history of mental illness

a) Yes

b) No

**PART - II**  
**STRUCTURED INTERVIEW SCHEDULE**  
**KNOWLEDGE QUESTIONNAIRE**

1. Which one of the following is the normal psychological behavior during postnatal period?
  - a. Anxiety
  - b. Anger
  - c. Depression
  - d. Affectionate
  
2. Which one of following is the sign of normal psychological behavior during postpartum period?
  - a. Mother begins to take care of child
  - b. Mother concentrates on self alone
  - c. Mother less interested in caring the child
  - d. Mother less interested in activities of daily living
  
3. Which one of the following is a risk factor of postpartum Psychiatric illness?
  - a. Mental retardation
  - b. Family history of mental illness
  - c. Smoking during pregnancy
  - d. Alcoholism during pregnancy
  
4. Which one of the following is a Social risk factor of postpartum psychiatric illness?
  - a. Lack of friends
  - b. No formal education
  - c. Poor family support
  - d. Unemployed

## POSTPARTUM BLUES

5. What do you mean by postpartum blues?
- a. A permanent mental illness with depression
  - b. A permanent mental illness with unnecessary fear
  - c. A temporary self limiting condition with depression
  - d. A temporary self limiting condition with Panic attack
6. What is the etiology of postpartum blues?
- a. Hormonal influences
  - b. Tumor in the brain
  - c. Injury to the brain
  - d. Infection to the brain
7. What is the onset of postpartum blues?
- a. Between 1 and 2 months after delivery
  - b. Between 3 and 10 days after delivery
  - c. Between 2and 3 months after delivery
  - d. Between 20 and 30 days after delivery
8. Which one of the following is the sign and symptom of postpartum blues?
- a) Agitation
  - b) Negativism
  - c) Distractibility
  - d) Irritability
9. What is the treatment for postpartum blues?
- a) Family support
  - b) Medical therapy
  - c) Psychotherapy
  - d) Diet therapy

**POSTPARTUM DEPRESSION:-**

10. What do you mean by postpartum depression?
- a) The depression which occurs within 30 days after delivery
  - b) The depression which occurs 2 months after delivery
  - c) The depression which occurs 6 months after delivery
  - d) The depression which occurs within 3-14<sup>th</sup> day after delivery.
11. What is the cause of postpartum depression?
- a) Inadequate social support
  - b) Inadequate support from friends
  - c) Inadequate spiritual support
  - d) Inadequate health team
12. Which one of the following is the sign and symptom of postpartum depression?
- a) Feeling of shame
  - b) Feeling of anger
  - c) Feeling of worthlessness
  - d) Feeling of aggression
13. What is the treatment for postpartum depression?
- a) Counseling for 1 week
  - b) Only guidance for 1 week
  - c) Only counseling for 2 weeks
  - d) Counseling for weeks to months
14. What hormonal therapy is given for postpartum depression?
- a) Estrogen
  - b) Progesterone
  - c) Oxytocin
  - d) Prolactin

15. What is the coping strategy for post partum depression?
- a) Watching television
  - b) Share your feelings
  - c) Blaming others
  - d) Comparing with others
16. What is the self help for postpartum depression?
- a) Relaxation
  - b) Taking care of the baby
  - c) Engaging in house hold works
  - d) Comparing the past and present events
17. What is the impact of women with postpartum depression on their Children?
- a) Conduct problems
  - b) Emotional problems
  - c) Distractibility
  - d) Neurological problems

### **POSTPARTUM PSYCHOSIS**

18. What do you mean by postpartum psychosis?
- a) Self limiting disorder
  - b) Personality disorder
  - c) Serious mental illness
  - d) Psychosomatic disorder
19. What is the genetic factor of postpartum psychosis?
- a) Consanguinity
  - b) Family history
  - c) Chromosomal abnormalities
  - d) Congenital anomalies

20. What is the onset of postpartum psychosis?
- a) 1-3 days after delivery
  - b) 7-10 days after delivery
  - c) 3-7 days after delivery
  - d) 7-15 days after delivery
21. What is the sign and symptom of postpartum psychosis?
- a) Inability to concentrate
  - b) False belief
  - c) Unnecessary fear
  - d) Panic attacks
22. What type of hallucination is seen in postpartum psychosis?
- a) Visual hallucination
  - b) Tactile hallucination
  - c) Olfactory hallucination
  - d) Auditory hallucination
23. What type of insomnia is seen in postpartum psychosis?
- a) Early morning awakening
  - b) Delayed initiation of sleep
  - c) Awakening in-between the sleep
  - d) Awakening at mid night of sleep
24. What is the treatment of postpartum psychosis?
- a) Only electro convulsive therapy
  - b) Only medication
  - c) Hospitalization and medication
  - d) Hospitalization and psychosurgery

25. Which one of the following is the complication of postpartum psychosis?

a) Homicide

b) Infanticide

c) Somatoform disorder

d) Neurological disorder

## PART - III

### ATTITUDE FIVE POINT LIKERT SCALE

S. No	Items	Strongly disagree 1	Disagree 2	Uncertain 3	Agree 4	Strongly agree 5
1.	Psychological changes occurs after delivery					
2.	*Mother with postpartum illness is due to evil possession					
3.	Postpartum blues passes of within few days.					
4.	Postpartum period is a stressful period in women					
5.	*Treating by spiritual person prevents mental illness					
6.	Mothers with postpartum depression will have an impact on children.					
7.	*Breast feeding is given to the baby by mothers with postpartum depression.					
8.	Spending time with the patient is one of the coping strategy					
9.	*Postpartum psychosis is a					

	social stigma					
10.	Mother with postpartum psychiatric illness should not be isolated					
11.	Postpartum psychosis is a serious emergency condition					
12.	Hospitalization is necessary for postpartum psychosis.					
13.	*Women with postpartum psychosis should take medication life long					
14.	Postpartum psychiatric illness can be treated easily					
15.	Regular follow up is necessary for postpartum psychiatric illness					

\*Negative statements

# tiuaWf;fg;gl;l Neh;fhzy; ml;ltiz

## பகுதி I

### சுய விவரங்கள்

#### 1. வயது

- அ) 20 வயதிற்குள்
- ஆ) 21-25 வயதுவரை
- இ) 26-30 வயதுவரை
- ஈ) 31-35 வயதுவரை

#### 2. கல்வித்தகுதி

- அ) அடிப்படை கல்வித் தகுதி இல்லை
- ஆ) ஆரம்பப் பள்ளி
- இ) உயர்நிலைப் பள்ளி
- ஈ) பட்டப்படிப்பு

#### 3. வேலை

- அ) குடும்பத்தலைவி
- ஆ) தனியார் நிறுவனத்தில் பணிபுரிபவர்
- இ) அரசாங்கத்தில் பணிபுரிபவர்
- ஈ) சுய தொழில் செய்பவர்

#### 4. குடும்ப வகை

- அ) கூட்டுக் குடும்பம்
- ஆ) தனிக்குடும்பம்

#### 5. குடும்பத்தின் மாத வருமானம்

- அ) ரூ.1000க்குள்
- ஆ) ரூ.1001-2000வரை
- இ) ரூ. 2001-3000வரை
- ஈ) ரூ. 3000க்குமேல்

6. மதம்

அ) இந்து

ஆ) கிறிஸ்தவம்

இ) முஸ்லிம்

ஈ) பிற மதங்கள்

7. வசிப்பிடம்

அ) நகரம்

ஆ) சிறு நகரம்

இ) கிராமம்

8. குடும்பத்தில் எவருக்கேனும் மனநல பாதிப்புகள் இருந்தது உண்டா?

அ) ஆம்

ஆ) இல்லை

## பகுதி II

பிற்பேறுகாலத்தில் ஏற்படக்கூடிய குறிப்பிட்ட மனோவியல் பாதிப்புகள் பற்றிய திறனாய்வுக் கேள்விகள்

1. கீழ்க்கண்டவற்றில் பிற்பேறுகாலத்தில் பொதுவாக ஏற்படக்கூடிய மனோவியல் மாற்றம் எது?

அ) மனப்பதற்றம்

ஆ) கோபம்

இ) மன அழுத்தம்

ஈ) அன்பு காண்பித்தல்

2. கீழ்க்கண்டவற்றுள் பிற்பேறுகாலத்தில் ஏற்படக்கூடிய பொதுவான மனோவியல் மாற்றங்களின் அறிகுறி எது?

அ) தாய் தன் குழந்தையிடம் அக்கரை காட்டத் துவங்குகிறாள்

ஆ) தாய் தனக்குத்தானே அக்கரை காட்டுகிறாள்

இ) தாய் தன் குழந்தையிடத்தில் சரிவர கவனம் கொள்ளாமை

ஈ) தாய் தன் அன்றாட வேலைகளில் கவனம் செலுத்தாமை

3. பிற்பேறுகாலத்தில் மனோவியல் பாதிப்புகளை ஏற்படுத்தும் காரணம் எது?

அ) மூளை வளர்ச்சி குன்றிய நிலை

ஆ) குடும்பத்தில் எவருக்கேனும் மனோவியல் பாதிப்புகள்

இ) கர்ப்ப காலத்தில் புகைபிடித்தல்

ஈ) கர்ப்ப காலத்தில் மது அருந்துதல்

4. பிற்பேறுகாலத்தில் ஏற்படும் மனோவியல் மாற்றங்களுக்கான சமூக காரணி எது?

அ) நட்பின்மை

ஆ) அடிப்படை கல்வி இன்மை

இ) குடும்ப உதவியின்மை

ஈ) வேலையின்மை

## பிற்பேறுகாலத்தில் ஏற்படும் மனச்சோர்வு

- 5) பிற்பேறுகாலத்தில் ஏற்படும் மனச்சோர்வு என்றால் என்ன?
- அ) நிலையான மனோவியல் பாதிப்பு மற்றும் மன அழுத்தம்  
ஆ) நிலையான மனோவியல் பாதிப்பு மற்றும் தேவையற்ற பயம்  
இ) தானாக சரியாகக்கூடிய தற்காலிகமான மன அழுத்தம்  
ஈ) தானாக சரியாகக்கூடிய தற்காலிகமான திடீர் பயம்
6. பிற்பேறுகாலத்தில் ஏற்படும் மனச்சோர்வின் காரணி எது?
- அ) ஹார்மோனின் மாற்றங்கள்  
ஆ) மூளையில் கட்டி  
இ) காயம் காரணமாக மூளையில் ஏற்படும் பாதிப்பு  
ஈ) நோய்க்கிருமி தாக்கத்தால் மூளையில் ஏற்படும் பாதிப்பு
7. மகப்பேறுகாலத்திற்குப்பிறகு எவ்வளவு நாட்களுக்குள் மனச்சோர்வு வர வாய்ப்புள்ளது?
- அ) 1 மாதம் முதல் 2 மாதங்கள் வரை  
ஆ) 2 நாட்கள் முதல் 10 நாட்கள் வரை  
இ) 2 மாதங்கள் முதல் 3 மாதங்கள் வரை  
ஈ) 20 நாட்கள் முதல் 30 நாட்கள் வரை
8. பிற்பேறுகாலத்தில் ஏற்படும் மனச்சோர்வின் அறிகுறி எது?
- அ) மனப்பதற்றம் கலந்த அமைதியற்ற நிலை  
ஆ) எதிர்மறையான மனநிலை  
இ) குறைவான கவனம் செலுத்தும் மனநிலை  
ஈ) எரிச்சல் கொள்ளும் மனநிலை
9. பிற்பேறுகாலத்தில் ஏற்படக்கூடிய மனச்சோர்விற்கு எவ்வாறு சிகிச்சை அளிக்கலாம்?
- அ) குடும்பத்தாரின் ஆதரவு  
ஆ) மருத்துவ சிகிச்சை முறைகள்  
இ) மனோவியல் சிகிச்சை  
ஈ) உணவுக் கட்டுப்பாடு

**பிற்பேறுகாலத்தில் ஏற்படும் மன அழுத்தம்**

10. பிற்பேறுகாலத்தில் ஏற்படும் மன அழுத்தம் என்றால் என்ன?
- அ) பிரசவத்திற்குப்பிறகு 30 நாட்களுக்குள் ஏற்படும் மன அழுத்தம்  
ஆ) பிரசவத்திற்குப்பிறகு 2 மாதத்திற்குள் ஏற்படும் மன அழுத்தம்  
இ) பிரசவத்திற்குப்பிறகு 6 மாதத்திற்குள் ஏற்படும் மன அழுத்தம்  
ஈ) பிரசவத்திற்குப்பிறகு 3 முதல் 14 நாட்களுக்குள் ஏற்படும் மன அழுத்தம்
11. பிற்பேறுகாலத்தில் ஏற்படும் மன அழுத்தத்தின் காரணி எது?
- அ) போதுமற்ற சமூகம் சார்ந்த துணை  
ஆ) நண்பர்களின் போதுமற்ற துணை  
இ) போதுமற்ற ஆன்மீகத் துணை  
ஈ) போதுமற்ற சுகாதார குழு
12. கீழ்க்கண்டவற்றுள் பிற்பேறுகாலத்தில் ஏற்படும் மன அழுத்தத்தின் அறிகுறி எது?
- அ) அவமான உணர்வு  
ஆ) கோப உணர்வு  
இ) தகுதியின்மை உணர்வு  
ஈ) அளவுக்கு மீறிய கோப உணர்வு
13. பிற்பேறுகாலத்தில் ஏற்படும் மன அழுத்தத்திற்கு எவ்வாறு சிகிச்சை அளிக்கலாம்?
- அ) 1 வாரத்திற்கு மனோவியல் ஆலோசனை அளித்தல்  
ஆ) மனநீதியான வழிகாட்டல் 1 வாரத்திற்குமட்டும் அளித்தல்  
இ) 2 வாரங்களுக்கு மட்டும் மனோவியல் ஆலோசனை அளித்தல்  
ஈ) 1 வாரத்திலிருந்து 1 மாதம்வரை மனோவியல் ஆலோசனை அளித்தல்

14. பிற்பேறுகாலத்தில் ஏற்படும் மன அழுத்தத்திற்கு எவ்வகையான ஹார்மோன் சிகிச்சை கொடுக்கப்படுகிறது?
- அ) ஈஸட் ரோஜன்  
ஆ) புரொஜஸ்டீரான்  
இ) ஆக்சிடோசின்  
ஈ) புரொலாக்டின்
15. பிற்பேறுகாலத்தில் ஏற்படக்கூடிய மன அழுத்தத்தை எதிர்த்து சமாளிக்க திரம்படக் கையாளும் வழிமுறை எது?
- அ) தொலைக்கட்சிளைப் பார்த்தல்  
ஆ) உணர்வுகளைப் பகிர்ந்துகொள்ளுதல்  
இ) பிறர்மேல் பழி கூறுதல்  
ஈ) பிறரோடு ஒப்பிடுதல்
16. பிற்பேறுகாலத்தில் ஏற்படக்கூடிய மன அழுத்தத்திற்கு சுய உதவி எவ்வாறு தேவைப்படுகிறது?
- அ) மன அமைதியுடன் இருத்தல்  
ஆ) குழந்தையின்மேல் அக்கரை காட்டுதல்  
இ) வீட்டு வேலைகளில் ஈடுபடுதல்  
ஈ) நிகழ்வுகளையும், நடந்தவைகளையும் ஒப்பிட்டுப்பார்த்தல்
17. பிற்பேறுகாலத்தில் தாய்க்கு ஏற்படக்கூடிய மன அழுத்தத்தின் காரணமாக குழந்தைக்கு ஏற்படக்கூடிய விளைவு எது?
- அ) நன் நடத்தையின்மை  
ஆ) உணர்ச்சிபூர்வமான பிரச்சனைகள்  
இ) குறைவான கவனம் செலுத்தும் மனநிலை  
ஈ) நரம்பு சம்பந்தமான பிரச்சனைகள்

**பிற்பேறுகாலத்தில் ஏற்படும் கடுமையான மனக்கோளாறு**

18. பிற்பேறுகாலத்தில் ஏற்படக்கூடிய கடுமையான மனக் கோளாறு என்றால் என்ன?
- அ) தானாக சரியாகக்கூடிய பாதிப்பு  
ஆ) தனித்தன்மை பாதிப்பு  
இ) கடுமையான மனநிலை பாதிப்பு  
ஈ) மனநீதியாகவும் உடல்நீதியாகவும் ஏற்படும் பாதிப்புகள்
19. பிற்பேறுகாலத்தில் ஏற்படக்கூடிய கடுமையான மனக்கோளாறின் மரபியல் காரணி எது?
- அ) நெருங்கிய உறவினரைத் திருமணம் செய்துகொள்ளாதல்.  
ஆ) குடும்பத்தில் எவருக்கேனும் மனக்கோளாறு  
இ) மரபு அணுக்களில் ஏற்படும் மாற்றங்கள்  
ஈ) பிறவிக் குறைபாடுகள்
20. பிற்பேறுகாலத்திற்குப்பிறகு எவ்வளவு நாட்களுக்குள் கடுமையான மனக்கோளாறு வர வாய்ப்புள்ளது?
- அ) 1லிருந்து 3 நாட்கள் வரை  
ஆ) 7 நாட்களிலிருந்து 10 நாட்கள் வரை  
இ) 3 நாட்களிலிருந்து 7 நாட்கள் வரை  
ஈ) 7 நாட்களிலிருந்து 15 நாட்கள் வரை
21. பிற்பேறுகாலத்தில் ஏற்படக்கூடிய கடுமையான மனக்கோளாறின் அறிகுறி எது?
- அ) கவனம்செலுத்த இயலாமை  
ஆ) தவறான எண்ணங்கள்  
இ) தேவையற்ற பயம்  
ஈ) திடீர் பயம்
22. பிற்பேறுகாலத்தில் ஏற்படக்கூடிய கடுமையான மனக்கோளாறின் காரணமாக எந்த வகையான பிரம்மை ஏற்படுகின்றது?
- அ) தன் கண்முன் இல்லாதது இருப்பதுபோல் தோன்றுதல்  
ஆ) யாரும் தொடாமலேயே தொடுவதுபோன்ற உணர்வு  
இ) வாசனை இல்லாமலேயே இருப்பதுபோன்ற உணர்வு  
ஈ) சத்தமே இல்லாமல் சத்தத்தைக்கேட்பதுபோன்ற உணர்வு

23. பிற்பேறுகாலத்தில் ஏற்படக்கூடிய கடுமையான மனக்கோளாறு  
காரணமாக எவ்விதமான தூக்கமின்மை காணப்படுகிறது?

- அ) அதிகாலையிலேயே விழித்துக்கொள்ளுதல்
- ஆ) தூங்குவதற்கு வெகு நேரம் ஆகுதல்
- இ) பாதி தூக்கத்தில் விழித்துக்கொள்ளுதல்
- ஈ) நள்ளிரவில் விழித்துக்கொள்ளுதல்

24. பிற்பேறுகாலத்தில் ஏற்படக்கூடிய கடுமையான மனக்கோளாறுக்கு  
எவ்வாறு சிகிச்சை அளிக்கலாம்?

- அ) மின் அதிர்வு சிகிச்சை முறையில் மட்டும் குணப்படுத்தலாம்
- ஆ) மருந்துகள் மூலமாக மட்டும் குணப்படுத்தலாம்
- இ) மருத்துவமனையில் சேர்க்கப்பட்டு மருந்துகள் மூலமாக  
குணப்படுத்தலாம்
- ஈ) மருத்துவமனையில் சேர்க்கப்பட்டு மூளை சம்பந்தப்பட்ட அறுவை  
சிகிச்சை மூலமாக குணப்படுத்தலாம்

25. கீழ்க்கண்டவற்றுள் பிற்பேறுகாலத்தில் ஏற்படக்கூடிய கடுமையான  
மனக்கோளாறின் காரணிகளால் ஏற்படும் விளைவு எது?

- அ) பிறரைக் கொலை செய்தல்
- ஆ) குழந்தையைக் கொலை செய்தல்
- இ) உடல்ரீதியான பாதிப்புகள்
- ஈ) நரம்பு சம்பந்தப்பட்ட பாதிப்புகள்

பகுதி III

பிற்பேறுகாலத்தில் ஏற்படக்கூடிய குறிப்பிட்ட மனோவியல் பிரச்சனைகள் பற்றிய மனப்பான்மை திறனாய்வுக் கேள்விகள்

வரிசை எண்	பொருளடக்கம்	திட்ட வட்டமாக	மறுக்கிறேன்	மறுக்கிறேன்	நிச்சய மில்லை	ஒப்புக் கொள்கிறேன்	முழுமையாக ஒப்புக் கொள்கிறேன்
1.	பிற்பேறுகாலத்தில் மனோவியல் மாற்றங்கள் ஏற்படும்						
2	*பேய்பிடித்தல் காரணமாக தாய்க்கு பிற்பேறுகாலத்தில் மனோரீதியான பிரச்சனைகள் வருகிறது						
3	பிற்பேறுகாலத்தில் ஏற்படும் மனச்சோர்வு சிறிது நாட்களில் தானாக நீங்கிவிடும்						
4	பிற்பேறுகாலம் பெண்களுக்கு மிகவும் சோதனைக்குரிய காலமாகும்						
5	*மன நோயை குணப்படுத்த கோவிலுக்கு செல்லுதல் மற்றும் சாமியாரின் உதவியை நாடுதல் அவசியம்						
6	பிற்பேறுகாலத்தில் தாய்க்கு ஏற்படக்கூடிய மன அழுத்தத்தின் தாக்கமானது குழந்தையையும் பாதிக்கிறது						
7	*பிற்பேறுகாலத்தில் மன அழுத்தம் இருக்கும்போது தாய், தன் குழந்தைக்கு தாய்ப்பால் கொடுக்க வேண்டும்						

8	பிற்பேறுகாலத்தில் ஏற்படக்கூடிய மன அழுத்தத்தை நீக்க நோயாளியுடன் அதிகநேரம் செலவழித்தல் என்பது அவசியம் ஆகிறது					
9	*பிற்பேறுகாலத்தில் ஏற்படக்கூடிய கடுமையான மனக்கோளாறு சமூகத்தில் ஒரு தீண்டாமையாகக் கருதப்படுகிறது					
10	பிற்பேறுகாலத்தில் ஏற்படக்கூடிய மனோரீதியான பிரச்சனைகள் உள்ளவர்களைத் தனிமைப்படுத்தக்கூடாது					
11	பிற்பேறுகாலத்தில் ஏற்படக்கூடிய கடுமையான மனக்கோளாறு என்பது உடனடியாக மருத்துவ உதவி அளிக்கப்படவேண்டிய நிலையாகும்					
12	பிற்பேறுகாலத்தில் ஏற்படக்கூடிய கடுமையான மனக்கோளாறுக்கு உடனடியாக மருத்துவமனையில் சேர்க்கவேண்டும்					
13	*பிற்பேறுகாலத்தில் ஏற்படக்கூடிய கடுமையான மனக்கோளாறுக்கு வாழ்நாள் முழுவதும் மாத்திரைகளைத் தவறாமல் உட்கொள்ளவேண்டும்					
14	பிற்பேறுகாலத்தில் ஏற்படக்கூடிய மனோரீதியான பிரச்சனைகளுக்கு சிகிச்சை அளிப்பது எளிது					
15	பிற்பேறுகாலத்தில் ஏற்படக்கூடிய மனோரீதியான பிரச்சனைகளை உடையவர் மருத்துவமனையிலிருந்து சென்றபின்பு கவனமான சிகிச்சை முறையைப் பின்பற்ற வேண்டும்					

\* - எதிர்மறை வாக்கியங்கள்

**APPENDIX - H**

**ANSWER KEY**

**SCORES RELATED TO KNOWLEDGE REGARDING SELECTED  
POSTPARTUM PSYCHIATRIC ILLNESS**

<b>Sl. No.</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>
1	0	0	0	1
2	1	0	0	0
3	0	1	0	0
4	0	0	1	0
5	0	0	1	0
6	1	0	0	0
7	0	1	0	0
8	0	0	0	1
9	1	0	0	0
10	0	0	0	1
11	1	0	0	0
12	0	0	1	0
13	0	0	0	1
14	1	0	0	0
15	0	1	0	0
16	1	0	0	0
17	0	1	0	0
18	0	0	1	0
19	0	0	0	1
20	0	1	0	0
21	0	0	1	0
22	0	1	0	0
23	0	0	0	1
24	1	0	0	0
25	0	0	1	0

## ATTITUDE FIVE POINT LIKERT SCALE

### ANSWER KEY

<b>Sl. No.</b>	<b>Strongly disagree</b>	<b>Disagree</b>	<b>Uncertain</b>	<b>Agree</b>	<b>Strongly Agree</b>
1	1	2	3	4	5
2	5	4	3	2	1
3	1	2	3	4	5
4	1	2	3	4	5
5	5	4	3	2	1
6	1	2	3	4	5
7	5	4	3	2	1
8	1	2	3	4	5
9	5	4	3	2	1
10	1	2	3	4	5
11	1	2	3	4	5
12	1	2	3	4	5
13	5	4	3	2	1
14	1	2	3	4	5
15	1	2	3	4	5