

**“A COMPARATIVE STUDY TO ASSESS THE  
KNOWLEDGE REGARDING PREMENOPAUSAL  
SYMPTOMS AND ITS MANAGEMENT AMONG  
WOMEN AGED BETWEEN 40-50 YEARS IN SELECTED  
URBAN AND RURAL AREAS OF NAMAKKAL  
DISTRICT.”**

**By**

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**A COMPARATIVE STUDY TO ASSESS THE KNOWLEDGE REGARDING PREMENOPAUSAL SYMPTOMS AND ITS MANAGEMENT AMONG WOMEN AGED BETWEEN 40-50 YEARS IN SELECTED URBAN AND RURAL AREAS OF NAMAKKAL DISTRICT.”**

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*Submitted in partial fulfillment of the requirement for the*

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*The Tamil Nadu Dr. M. G. R. Medical University, Chennai-32*

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## **CERTIFICATE**

This is to certify that this thesis, titled “**A COMPARATIVE STUDY TO ASSESS THE KNOWLEDGE REGARDING PREMENOPAUSAL SYMPTOMS AND ITS MANAGEMENT AMONG WOMEN AGED BETWEEN 40-50 YEARS IN SELECTED URBAN AND RURAL AREAS OF NAMAKKAL DISTRICT.**” submitted by **Mrs. SAJEERA S, M,Sc Nursing, (2010-2012)** Vivekanandha College of Nursing in partial fulfillment of the requirement of the degree of Master Science (Nursing) from the Tamil Nadu Dr. M. G. R. Medical University is her original work carried out under our guidance.

This thesis or any part of it has not been previously submitted for any other Degree or Diploma.

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**SPONSORED BY**  
**ANGAMMAL EDUCATIONAL TRUST, ELAYAMPALAYAM.**

## **DECLARATION**

I hereby declare that this thesis entitled “**A COMPARATIVE STUDY TO ASSESS THE KNOWLEDGE REGARDING PREMENOPAUSAL SYMPTOMS AND ITS MANAGEMENT AMONG WOMEN AGED BETWEEN 40-50 YEARS IN SELECTED URBAN AND RURAL AREAS OF NAMAKKAL DISTRICT**” is the outcome of the original work undertaken and carried out by me under the guidance and direct supervision of **PROF.R.KANAKAVALLI, M.Sc.(N), Ph.D**, and specialty guide **Mrs.SUJAATHA. A, M.Sc.,(N)**, Department of Maternity Nursing, Vivekanandha College of Nursing (sponsored by Angammal Education Trust), Elayampalayam, Tiruchengode, Namakkal District.

I also declare that the material of this thesis has not formed in any way the basis for award of any other degree, diploma or associate fellowship previously of the Tamil Nadu Dr. M.G.R. Medical University.

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Date:

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## **ABSTRACT**

**“A COMPARATIVE STUDY TO ASSESS THE KNOWLEDGE REGARDING PREMENOPAUSAL SYMPTOMS AND ITS MANAGEMENT AMONG WOMEN AGED BETWEEN 40-50 YEARS IN SELECTED URBAN AND RURAL AREAS OF NAMAKKAL DISTRICT”**, was conducted by Mrs. SAJEERA.S in partial fulfillment of the requirement for the Degree of Master of Science (Nursing) during the year 2010-2012.

### **OBJECTIVES OF THE STUDY ARE**

1. To assess the knowledge regarding premenopausal symptoms and its management among women residing at selected urban areas of Namakkal district.
2. To assess the knowledge regarding premenopausal symptoms and its management among women residing at selected rural areas of Namakkal district.
3. To compare the knowledge scores of women in urban and rural areas.
4. To determine the relationship between the knowledge with selected socio demographic variables such as age, marital status, religion, education, occupation, family income and previous knowledge.



5. To prepare a health education pamphlet on premenopausal symptoms and its management.

The conceptual framework adopted for the study was based on Rosenstock's Health Belief model.

The research approach for the study was non experimental (descriptive design in nature. 60 women aged between 40-50 years were selected through simple random sampling method from selected urban and rural area. Data collected by semi structured interview schedule.

Content validity of the tool was obtained from seven experts and reliability of the tool was found 0.94. The collected data were analyzed by using descriptive and inferential statistics in terms of frequencies, percentage, mean, standard deviation and chi square analysis.

## **SUMMARY OF MAJOR FINDINGS**

### **Findings related to selected socio demographic variable:**

- Out of 30 mothers each from the rural area and urban area 83.33% and 56.67% were in the age group 40-45 years in the urban and rural area respectively.
- About 86.67% from the rural area and 90% from the urban area were Hindus.
- Majority 96.6% of the women were married from each area.

- A large section of the population, 43.33% from the urban area and 60% from the rural area were illiterate.
- In rural area about 63.33% of the women were housewives and 23.33% were coolie. And in urban area 33.33% were coolie and 30% were house wives.
- Among the study subjects 40% of the family from the urban area and 63.33% from the rural area were earning a monthly income below Rs.3000/-.
- The majority of the sample (50%) from the urban and 63.33% from the rural area got previous information from the friends or relatives who had the premenopausal symptoms.

**Findings related to knowledge score of urban women on premenopausal symptoms and its management:**

Level of knowledge was divided into three categories for easy understanding and interpretation.

Inadequate - <50%

Moderate - 50-75%

Adequate - >75%

Result of the study revealed that 83.33% of the urban women were belongs to inadequate knowledge level and only 16.67% of the women

had moderate knowledge regarding premenopausal symptoms and its management. No one in the area had adequate knowledge.

The overall knowledge score of urban women was 40.72%.

**Findings related to knowledge score of rural women on premenopausal symptoms and its management:**

The study on the rural women showed that 90% of the women were belongs to inadequate knowledge and only 10% of the women were possessed moderate knowledge. And no one in the rural area had adequate knowledge regarding the premenopausal symptoms and its management.

The overall knowledge score of rural women was 33.67%.

The knowledge score of rural women on general information on menopause and premenopausal period was 42.83% and of urban women was 53.8%. The knowledge score of urban and rural women on physiological symptoms related to premenopause was 36.40% and 31.22% respectively. The knowledge score on psychological symptoms of premenopausal women was 42.11% and 34.07% for urban and rural women respectively

**Comparison of knowledge score of urban and rural women**

The overall knowledge score of the urban women was 40.72% and of the rural women was 33.67%. When compared to rural women

knowledge score, the knowledge score of urban women was high. So the knowledge of the urban women was more than that of rural women. The 't' test analysis of the knowledge of the urban and rural women  $t=15.4$  was significant.

### **Findings related to relationship of knowledge and selected demographic variables**

The chi square test was used to find out the association between the demographic variables such as age, religion, marital status, education, occupation, and the source of information.

Chi square analysis was found that there was an association between knowledge and educational status of the women in both rural and urban areas. Marital status and family monthly income also shows significant relationship with the knowledge of urban women. Occupational status shows significant relationship with the knowledge level of rural women. The remaining socio demographic variables such as age, religion, source of information is not significantly associated with the knowledge of women regarding the premenopausal symptoms and its management.

**BASED ON THE PRESENT STUDY FOLLOWING  
RECOMMENDATIONS ARE MADE**

- The present study can be replicated by using a large sample so that findings can be generalized.
- A study can be conducted to identify the attitude of the women on premenopausal symptoms and problems faced by the women in the age of 40-50 years.
- A quasi experimental study can be conducted to evaluate the effectiveness of planned teaching program on premenopausal symptoms and its management.
- A comparative study can be administered between premenopausal and menopausal women regarding the management of premenopausal symptoms
- The study can be conducted to compare the knowledge of illiterate and literate women.
- A study can be conducted to identify the attitude of women regarding hormone replacement therapy in relieving the premenopausal symptoms.
- A comparative study can be administered in rural and urban women to identify the difference in lifestyle modification associated with menopause.
- A study can be conducted to identify the age related problems in pre and post menopausal women among the women of age group 45-55 years.

## TABLE OF CONTENTS

<b>CHAPTER NO</b>	<b>CONTENTS</b>	<b>PAGE NO</b>
1	INTRODUCTION Need for the study Statement of the problem Objectives of the study Operational definitions Assumptions Limitations of the study Conceptual framework	1-9 9 14 14 15 15 16 16
II	<b>REVIEWE OF LITERATURE</b>	21-39
III	<b>METHODOLOGY</b>	40-48
	Research approach Research design Study setting Target population Sample and sampling technique Criteria for sample selection Selection and development of tool Description of the tool Content validity Reliability of the tool Pilot study Data collection procedure Plan for data analysis	40 41 43 43 44 44 44 45 46 46 47 47 47
IV	<b>DATA ANALYSIS, INTERPRATATION AND DISCUSSION</b>	49-82

V	<b>SUMMARY, FINDINGS, CONCLUSION, IMPLICATIONS AND RECOMENDATION</b>	83-92
	Summary	83
	Major findings of the study	85
	Conclusion	88
	Implication	88
	Recommendations	91
	<b>REFERANCES</b>	93-100
	<b>APPENDICES</b>	101-138

## LIST OF TABLES

<b>SL. NO</b>	<b>TITLE</b>	<b>PAGE NO</b>
4.1.1	Distribution of women according to their age	52
4.1.2	Distribution of women according to their religion	53
4.1.3	Distribution of women according to their marital status	54
4.1.4	Distribution of women according to their educational status	55
4.1.5	Distribution of women according to their occupational status	57
4.1.6	Distribution of women according to their family's monthly income	59
4.1.7	Distribution of women according to their previous knowledge	61
4.2.1	Knowledge level of urban women on premenopausal symptoms and its management	63
4.2.2	Knowledge score of urban women on premenopausal symptoms and its management	64
4.2.3	Knowledge score of urban women on premenopausal symptoms and its management over different aspects	65



4.2.4	Knowledge level of rural women on premenopausal symptoms and its management	66
4.2.5	Knowledge score of rural women on premenopausal symptoms and its management	67
4.2.6	Knowledge score of urban women on premenopausal symptoms and its management over different aspects	68
4.3.1	Comparison of knowledge level of urban and rural women	69
4.3.2	Comparison of knowledge score of urban and rural women	71
4.3.3	Comparison of knowledge score of urban and rural women over different aspects	72
4.4.1	Association between knowledge and socio demographic variables of urban women	74
4.4.2	Association between knowledge and socio demographic variables of rural women	76

## LIST OF FIGURES

SL. NO	TITLE	PAGE NO
1.1	Conceptual framework	19
3.1	Schematic representation of research design	42
4.1.1	Distribution of women according to their age	52
4.1.2	Distribution of women according to their religion	53
4.1.3	Distribution of women according to their marital status	54
4.1.4	Distribution of women according to their educational status	55
4.1.5	Distribution of women according to their occupational status	57
4.1.6	Distribution of women according to their family's monthly income	59
4.1.7	Distribution of women according to their previous knowledge	61
4.3.1	Comparison of knowledge level of urban and rural women	70
4.3.2	Comparison of knowledge score of urban and rural women	71
4.3.3	Comparison of knowledge score of urban and rural women over different aspects	73

## LIST OF APPENDICES

<b>SL. NO</b>	<b>TITLE</b>	<b>PAGE NO</b>
A	Letter seeking permission to conduct the study	101
B	Letter granting permission to conduct the study	103
C	Letter seeking consent from the participants	104
D	Letter requesting the experts to complete the content validity of the tool	105
E	Semi structured interview schedule	107
F	Evaluation criteria checklist for validation of the tool	127
G	Certificate of Validation	128
H	Health Education Pamphlet	129

# CHAPTER I

## INTRODUCTION

**“A women’s health is her total wellbeing, not determined solely by biological factors and reproduction, but also by effects of work load, nutrition, stress, war and migration, among others”**

**[Vander Kwak]**

The slogan – “healthy women, healthy nation, healthy world” denotes that as the custodian of family health women demonstrates an inevitable role in providing promoting and maintaining the health of their communities. In fact the health of the families and communities strongly depends on the health of the women. Sickness or disability or death of the women reflects serious effects for the health of their children, family and community.

A normal healthy woman’s reproductive phase is usually known by the terms such as menarche which means the age of first menstruation, menstruation denotes the periodic and cyclical shedding of endometrium, puberty is the period of increased general body growth and development of secondary sexual characters and sex organs and girls become capable of reproduction, and menopause is the cessation of menstruation due to rapid decrease in the production of female sex hormones by the ovaries at the age of about 45-55 years. (Rashid Latif, 2006)

The term “women’s health is very important in understanding the health issues of the women. The American Academy of Nursing’s 1996 expert panel on women health reported that women’s health includes their entire life span and involves health promotion, maintenance and restoration. The term women health recognizes that the health of the women is related to the biological, social and cultural dimensions of women’s lives. Moreover, women’s normal life events or rites of passage such as menstruation, child birth and menopause are considered as part of normal female development rather than disease or syndrome. This broad emphasis on women’s health is in contrast to the view of women solely in terms of their reproductive health or their role in parenting children.

The illness prevention strategies for women is reflecting new emphasis on women’s health. The US preventive health strategies of women includes, regular physical examination including Pap’s test and mammography, regular physical activity, diet with less than 30% fat, limited cholesterol increase intake of high fiber foods, limit alcohol and tobacco use, hormone replacement therapy for perimenopausal and post menopausal women, family planning and contraceptive counseling, appropriate immunization and sexually transmitted disease prevention.

Unfortunately, millions of people, particularly women do not have access to have access to basic health related resources. In most of the countries women live longer than men but women are generally less

healthy. Women composed of half of the world population. The health of the women plays vital role in determining the health of their families. It is important to maintain and promote the health of the women for the wellbeing of the people in the society. (Marcia Stanhope, 2006)

Women's health primarily focuses on women's psychosocial and physiological well being, functional abilities, and experiences of symptoms and health problems. The major health issues of the women are heart disease, cancer, HIV, aging, depression and midlife. In order to address the women health problems all these factors to be noticed. The women's health has pivotal role in ensuring the family's and community's health. (Janette Lancaster, 2006)

A normal woman life cycle consists of pre pubertal stage, puberty, menstruation, premenopausal phase, menopause and post menopause. Female begins to develop secondary sexual characteristics at a wide range of ages. The average age for a girl to begin puberty is 11 years of age. Menstruation is cyclic shedding of the endometrial lining of the uterus. Menarche is the female's first menstruation and sign of puberty. Most girls begin to menstruate between 10 and 16 years of age.

The occurrence of cyclic menstruation and reproduction depends on maturation of hypothalamo pituitary ovarian uterine axis. Regular menstrual cycles indicates normal sex hormone production and the occurrence of ovulation. Ovulation occurs 14 days before the beginning

of the next menstrual cycle. Variation in the length of the menstrual cycle occur in response to variations in hormone levels.

The follicles in the ovary atrophy continuously during a woman's life. The progressive decline in the number of follicles that can produce estrogen in response to pituitary hormone causes the women usually between 40 and 50 years of age to begin noticing the physical changes in the body. Levels of estrogen and progesterone diminish gradually. This phase is the transition to menopause and is termed as premenopausal period. During this phase a woman has variation in menstrual and ovarian cycles. Ovulation often fails to occur. Finally the cessation of menstruation menopause occurs. The period of life after menopause is termed post menopause. ( Donna D Ignatavicius)

As the age advances the changes occurs in the normal reproductive cycle of the women. Changes in the ovary takes place according to advances in the age in the midlife women. Changes in the ovary results in a series of events that finally ends in menopause. Regression of follicles in the ovary starts from puberty and its rate increases after 35 years of age. (Lewis Heitkemper, 2004)

At the end of the fertility period, the ovarian responses to pituitary hormones is reduced, finally, the ovarian function ceases. Due to decreased ovarian function the menstrual cycles become gradually irregular and frequent and finally amenorrhea occurs. After the age of 40

years and before the onset of menopause, ovulation becomes irregular and infrequent, and anovulatory cycles are common. The reduced fertility is due to anovulatory cycles. (Brenda Bare, 2004)

As age advances only a few follicles remains responsive to follicle stimulating hormone. FSH normally stimulates the dominant follicle to secrete estrogen. When the follicles diminishes in responding to FSH, production of estrogen and progesterone decreases. As ovarian function diminishes, there are decreased level of estrogen, which in turn causes a gradual increase in FSH and LH as a result of the negative feedback process. There is increase in FSH ten to twenty times, by the time menopause occurs. The loss of estrogen causes significant age related changes in the midlife women.

The end of a women's reproductive phase is marked by a gradual stoppage of menstruation. At first it is evidenced by irregular menstruation and finally menstruation ceases. This period is known as climacteric. It is often associated with the physical symptoms and emotional symptoms such as hot flushes and mood swings and usually obesity also appears. By this time age related changes occurs as a result of fall in estrogen production level. [Diane M Fraser, 2004]

Premenopause proceeds menopause hinders the daily life of midlife women. The period of transition usually evidenced by a series of changes in the physical and mental status of women. The period of



transition affects the women's normal routine, but the majority of the women fails to report or seek health professional's advice.

Premenopause is the period of menopausal transition refers to 2-10 years before the menopause. This period is characterized by a group of symptoms which differs in frequency and intensity in each women. Premenopause accompanied by the most disturbing symptoms known as vasomotor symptoms of which hot flushes are the most interfering symptoms in women's daily activities.

Premenopausal can even starts at the age of 35 years and can lasts up to the age of 60 years. Reasons for the onset of menopause is varies, at the same time its symptoms also varies from woman to woman. These symptoms includes physiological symptoms and psychological symptoms. The common physiological symptoms include, Irregular menstruation, Hot flushes, Weight gain, Palpitation, Fatigue, Vaginal dryness and Urinary incontinence. The common psychological symptoms include, Anxiety, Depression, Panic disorders and Mood swings.

Menstrual irregularities (63%) may be the first signs of premenopause usually women noticed during this period of time. During this time due to hormonal fluctuation the menstruation becomes too frequent, in frequent and there may be the occurrence of missed periods also noticed. This changes menstruation can cause emotional disturbances

in the women that may later will leads to severe complications like depression.

Hot flushes (70-78%) are the most commonly depressing vasomotor symptoms affects the premenopausal women adversely. The hot flushes means sudden intense feeling of heat over face, neck an even all over the body it usually increase at night causing night sweats and sleep disturbances and this may precipitate fatigue in premenopausal women. The causes may be due to changes in the temperature regulatory center of hypothalamus as a result of changes in estrogen level.

As a women's ovaries produces less estrogen, women's body attempts to gain estrogen from other sources. Fat cells can produce estrogen, so the body converts calories into fat. As fat cells does not burn easily it will cause weight gain(17%) in premenopausal women.

As a women enters in premenopausal transition phase, the estrogen levels decreases that causes overstimulation of the sympathetic autonomic nervous system, that will cause palpitations (23%).

During menopausal transition, the vaginal secretion decreases as a result of diminished estrogen level. This change in the pH level of vagina leads to vaginal dryness (38.8%) and causes infection and affects sexual function because of dyspareunia.

Urinary incontinence (26%) in women in premenopausal period caused mainly from decreased estrogen. As the menopause reaches, the bladder control and muscle strength diminishes because of less estrogen level.

Fatigue (70%) is also most commonly reporting premenopausal symptoms that can cause severe disturbances in the daily activities. Fatigue may be results from the night sweats and hot flushes and sleep disturbances.

Anxiety (63%) is the most commonly seen psychological symptoms during the premenopausal period. Changes in the estrogen level directly affects the mood and emotion and the physiological discomforts associated with premenopause also can produce anxiety in the women. Anxiety more than a psychological symptoms it produces physical symptoms and also panic attacks.

Women in the menopausal transition experience a range of mood changes including elevation of mood and also depression (38%). The primarily this is due to hormonal fluctuation. The bodily changes also can leads to mood swings in women.

When the anxiety in premenopausal transition left unattended this may leads upto panic attacks (13%). The panic disorders in the premenopause also depicts the hormonal causes. Panic attacks may cause long term effects on women's mental status.

Diminished levels of estrogen can cause loss of control over brain function that may leads to changes in the mood and emotion. The depression is also results from physical symptoms and mental symptoms such as hot flushes and anxiety. Depression may also leads to behavioral changes in the premenopausal women.

## **NEED FOR THE STUDY**

*“Women can control their quality of aging process by making wise lifestyle choices early on”*

*[Adele Pillitteri, 2007]*

**“Well being of the women is a charity, dedicated to improve the health of the women and children to make differences in everybody’s lives today and tomorrow”.**

Healthy women during their reproductive period will menstruates cyclically and regularly with normal flow and duration of bleeding. As the age approaches the women notices changes in the menstrual cycle, such as changes in the frequency, duration and flow of bleeding . These irregularities in the menstrual cycle signals the onset of menopause in the midlife women. The onset of menopause denotes the gradual decline of fertile period in the women. The onset natural menopause is signed by the changes in hormonal levels mainly depletion in the estrogen.

Healthy women responds normally to follicular stimulating hormone and produces estrogen and maintains normal menstrual cycle. As age advances, ovaries becomes unresponsive to FSH and produce less estrogen, that will leads to menstrual irregularities and finally cessation of menstruation occurs. The menopause is conformed only when women had no periods for 12 consecutive months. During the menopausal transition phases the women go through a sequence of physiological and psychological symptoms. The premenopausal symptoms arises mainly because of hormonal fluctuations especially because of estrogen depletion.

Premenopausal symptoms may occur with vasomotor symptoms and psychological symptoms which includes hot flushes and in some women depression may be seen. Vasomotor symptoms such as hot flushes can leads to other problems including sleep disturbances, night sweats and fatigue which in turn causes depression in some women. A number of women in premenopausal phase may be misdiagnosed as being depressed because the hormonal variations can disturb the mood, emotion and attention span. Other problems include memory impairment vaginal dryness and weight gain. The menopausal transition is the period in which women suffer from a variety of symptoms that adversely affects their quality of life and most of the times all these symptoms require medical attention or advice such as hormone replacement therapy.

The prevalence of menopausal symptom varies in geographical region and ethnicity of the population. Only limited studies are conducted among Asian women to analyze the severity of menopausal symptoms . According to The Study of women's health Across Nation (SWAN), studies report shows that Japanese and Chinese women manifested less symptoms than Caucasian women.

According to the reports provided by Pan Asian Menopause society (PAM) study, the menopausal symptoms prevalence varies with ethnicity of population. According to PAM, the Asian women were more likely to get menopause related body aches and is about (76-93%) and the western women are more prone to get vasomotor symptoms.

According to Stacy B German in the United States about 1.3 million women attain menopause per year. Majority of the women in the menopausal transition experience some psychological disturbances. The 20% of the women passing through this phase diagnosed with depression. According to the report of the investigators of Harvard Study the onset of depression is seen at the beginning of menopause among women aged between 36-44 years of age. With the advancement in modern medicine, life expectancy also increased. So the population of women in the perimenopausal phase is increases year by year. The women population increasing among aged over 60 years may increase by 4.7 millions per year.

In a study conducted in a selected urban area in India by Sudha Sharma has found that with age advances the nature and prevalence of premenopausal symptoms also varies. The vasomotor symptoms (35%) and psychological disturbances (38%) increases with increase in age. The occurrence in frequency and severity of symptoms varies among individuals, population and different cultures of the world. The symptoms of menopause varies with biological change, psychological factors, socio cultural factors and environmental influences. According to various studies conducted to measure quality of life of menopausal women from different socio cultural background reveals that perception of quality and menopause status influences the quality of life.

According to various studies conducted in various parts of the world, among the incidence of premenopausal symptoms, most commonly seen are hot flushes, menstrual irregularity, fatigue, vaginal dryness, urinary incontinence, mood disturbances, depression and anxiety. Among which most commonly occurring and hindering the daily life of women are hot flushes (55.80%) and depression (37.30%).

The occurrence of premenopausal symptoms due to the reduction in the levels of estrogen and progesterone is very high. Maintaining optimum level of estrogen by replacing it will reduces the incidence of complication relating to hormone depletion. Some women can correct the problems related to premenopause by changing their diets, lifestyle and

medication. Almost a major part of the urban and rural women are not knowledgeable about premenopausal symptoms and its management such as hormone replacement therapy. Many of the health care providers point out that the premenopausal period is the appropriate time for hormone replacement therapy to relieve the menopausal symptoms.

Worldwide, the education of the women is the single most important factor in the improvement of the health of women and their families. As women are educated, their socio economic status improves and mortality rates decline. Because women's financial stability is closely linked to health outcomes, it is essential to promote and support advancement of women (Stanhope, 2004)

In the light of above ideas and the investigator's study experience, the investigator interested in identifying the Premenopausal symptoms and its interference with daily life of middle age women. From the experience of the investigator these are quite disturbing problems and Public health administration has given less consideration to this aspect. Only limited studies are conducted in rural and urban areas of developing countries such as India and also very limited data are available about the menopause related problems in Asian women.

With all these observation the investigator felt that it is essential to identify the premenopausal symptoms and management among the rural



and urban women, so that they can overcome the stress during this period of life and can seek medical advice for such irritating symptoms.

### **STATEMENT OF THE PROBLEM**

A comparative study to assess the knowledge regarding premenopausal symptoms and its management among women aged between 40-50 years in selected urban and rural areas of Namakkal district.

### **OBJECTIVES OF THE STUDY**

6. To assess the knowledge regarding premenopausal symptoms and its management among women residing at selected urban areas.
7. To assess the knowledge regarding premenopausal symptoms and its management among women residing at selected rural areas.
8. To compare the knowledge scores of women in urban and rural areas.
9. To determine the relationship between the knowledge with selected socio demographic variables such as age, religion, marital status, education, occupation, family income and previous knowledge.
10. To prepare a health education pamphlet on premenopausal symptoms and its management.

## **OPERATIONAL DEFINITION**

### **Knowledge**

The women's understanding and awareness about premenopausal symptoms and its management.

### **Women**

The women refers to females aged between 40-50 years.

### **Premenopausal symptoms**

The physical and psychological changes in women such as hot flushes, menstrual irregularity, weight gain, palpitation, urinary incontinence, vaginal dryness, fatigue, anxiety, mood swings, depression and panic disorders experienced by the women in the period just before the menopause.

### **Management**

The measures available and applicable to overcome the difficulties during the premenopausal period.

## **ASSUMPTIONS**

- Women may have inadequate knowledge regarding premenopausal symptoms and its management.
- Urban mothers may have better knowledge regarding premenopausal symptoms and its management.

- The adequate knowledge on premenopausal symptoms will help the women practice adequately to overcome the premenopausal symptoms.

## **LIMITATIONS**

- The subjects are limited to those women aged between 40-50 years and not attained menopause.
- The sample size was limited to only 60 subjects, 30 women from rural area and 30 women from urban area so that the findings cannot be generalized.

## **CONCEPTUAL FRAMEWORK**

The frame work provides the prospective from which the investigator views the problem and is not merely “restatement of previous research but as integration of the existing theoretical traditions and knowledge about the topic”(Polit and Beck, 2010)

Conceptual framework consists of concepts and propositions about how these concepts are related. The framework serves three important functions.

It clarifies the concepts on which the study is built, It identifies and states the assumptions, hypothesis underlying study and It specifies relationship among concepts.

The present study was based on the model “health belief model” was developed to provide a framework to explain why some people take specific actions to avoid illness while others fail to protect themselves.

This model was designed by Hochbaum (1958) modified and used by Kegeles (1965) Rosenstock (1974). This model addresses the relationship between person’s belief and behavior.

This model comprises of four components, that is

- Individual perceptions
- Modifying factors
- Cues to action
- Likelihood of action

Health belief model explains the relationship between person’s belief and their behavior. It explains about understanding about an individual in terms of the perceptions about the disease and its consequences. Perception about the severity of premenopausal symptoms and the problems and the women’s personal behavior provides the women a way of understanding and will comply with health therapies.

Women’s personal belief and behavior can be influenced by demographic variables such as age, education, occupation, socio economic status etc. The variables such as education status and family

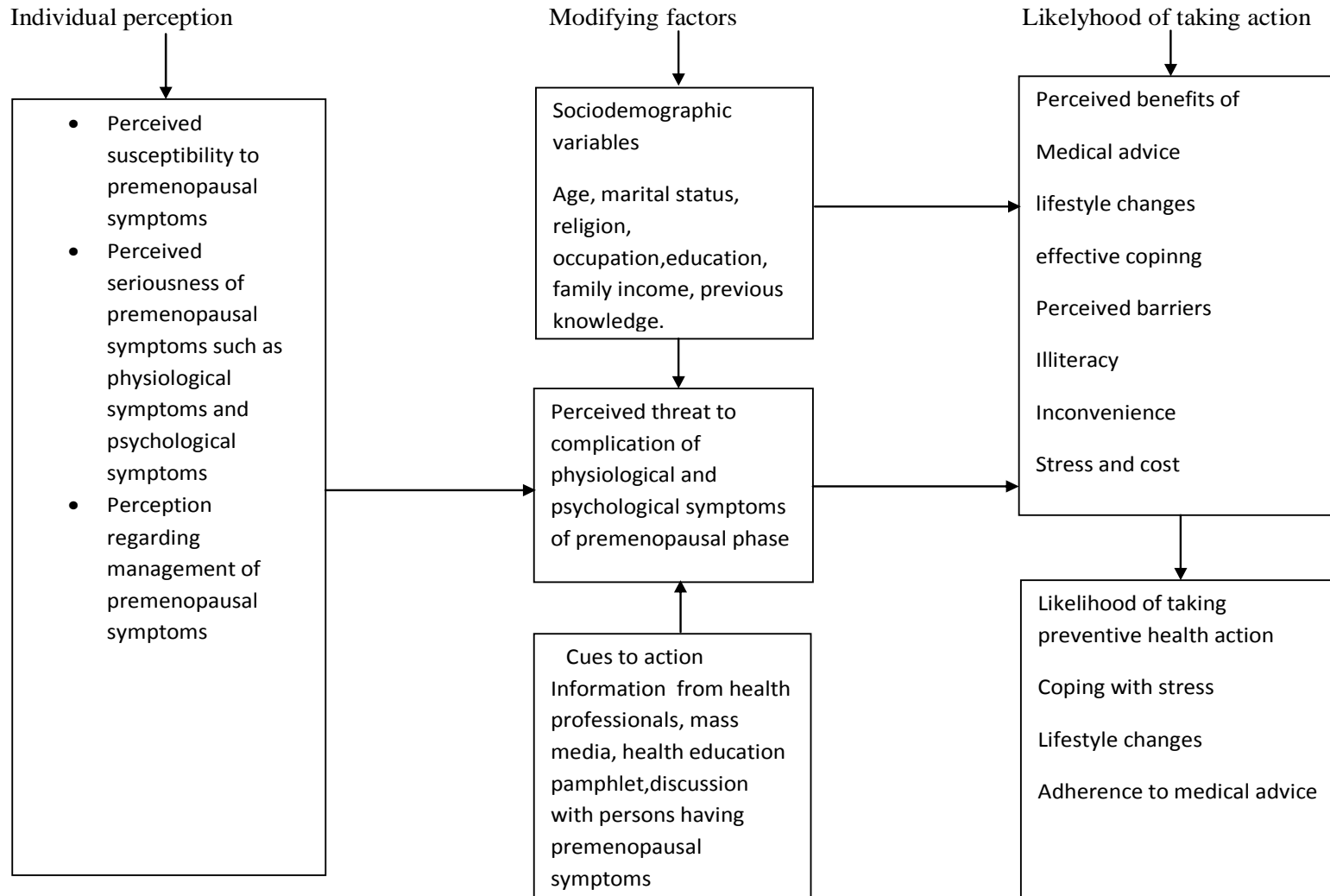
income may influence the knowledge regarding premenopausal symptoms and its management.

The women may receive information from the family members, mass media, health professionals and from neighbor's previous experience. The women may receive information about premenopausal symptoms and its management from health providers, mass media, and may also from the friends or relatives who have experienced the premenopausal symptoms.

The women can identify the severity of the disease and take proper action to solve the problem. Thus the women will perceive properly the benefits of actions against the barriers, and the women can adhere to lifestyle changes, medical or other alternative therapies to manage the premenopausal symptoms.

This model is useful in organizing information about women's knowledge regarding premenopausal symptoms and its management and their attitude towards the treatment methods. Health education pamphlet can be prepared based on the data gathered from the use of health belief model.

**Fig.1.1 CONCEPTUAL FRAMEWORK BASED ON HEALTH BELIEF MODEL**



## **CONCLUSION**

This chapter includes the introduction, need for the study, operational definition, assumptions, limitations and conceptual framework.

## **CHAPTER II**

### **REVIEW OF LITERATURE**

“A thorough literature review provides foundation on which to base new evidence and usually is collected well before any data are collected. Researchers usually undertake a thorough literature review to familiarize themselves with that knowledge base.” (Polit and Beck, 2010)

It’s hard enough to generate one’s own ideas without the rich detainment provided by the literature in the same field.

The investigator organized the reviewed literature for the present study under the following sections.

- Literature related to premenopausal symptoms and its management
- Studies related to premenopausal symptoms and its management

#### **LITERATURE RELATED TO PREMENOPAUSAL SYMPTOMS AND ITS MANAGEMENT**

The word menopause means the cessation of menstruation, but is commonly used instead of “climacteric, a wider term for events leading up to and following the menopause, the pre-peri and post-menopause. Menstruation may gradually decrease, suddenly cease or become irregular. Estrogen levels fall over the 5 years preceding ovarian failure, which occurs usually between 45 and 55 years of age, with an average around 50years. Signs and symptoms are related to changes in circulating



estrogen levels, and subjective symptoms may occur some years before menstruation ceases, while physical changes are more long term. (David Mckay, 2000)

Menopause simply means “the end of menstruation”. The entire process, frequently called the change of life, is correctly termed as climacteric. The women’s reproductive function falls during the climacteric, from about 45 to 50years of age as the ovarian hormones decline and then cease. Premenopause refers to the early part of the climacteric, before the menstruation ceases but after the women experiences some of the climacteric symptoms such as irregular menses. During the premenopausal period ovulation is sporadic and menstrual periods are irregular. With progressive aging, the ovaries become even to high levels of gonadotropins, and ovulation, menstruation and the secretion of ovarian hormones (estrogen and progesterone) cease. (Emily S Mckinney,2005)

Menopause refers to the cessation of regular menstrual cycles. It is the end of menstruation and childbearing capacity. The average age of natural menopause-defined as 1 year without a menstrual period- is 51years old. (Alexander et al, 2004)

Menopause signals the end of an era for many women. It concludes their ability to reproduce, and some women find advancing age, altered

roles, and these physiologic changes to be overwhelming events that may precipitate depression and anxiety. (Kessenich, 2004)

Menopause is the cessation of menstrual cycles .The age range at which menopause occurs is wide, between approximately 40 and 55 years. Women need health teaching to learn the normal parameters of menopause so that they can continue to monitor their own health during this time. (Adele pillitteri,2007)

Perimenopausal is a term used to denote the period during which menopausal changes are occurring. (Ceders,2003)

Menopause is the last menstrual period and marks the end of the reproductive phase of a woman. Woman may experience symptoms such as bleeding irregularities, hot flushes, tiredness, aches and pains, mood swings, urinary incontinence and vaginal dryness. A woman is said to have attained menopause only when she has not had her menstrual periods for twelve months. Menopausal transition: the period of time which begins with a variation in menstrual length, in a women with raised follicular stimulating hormone and ends with her final menstrual period. Perimenopause or climacteric: literally means “around or about the menopause”. It begins with menopausal transition and ends one year after the last menstrual period. The climacteric is the phase from the decline of the reproductive capacity. This is signified by a decrease in the number of

ovarian follicles about 37.5 years of age, about 10 years before menopause. (Shirish S Seth)

As women age, many experience transitions that present challenges and require adaptation such as changing health, work or marital status. Menopause refers to the complete cessation of menses and is a single physiologic event said to occur when women have not had menstrual flow or spotting for 1 year. Perimenopause is the period that encompasses the transition from normal ovulatory cycles to cessation of menses and is marked by irregular menstrual cycles. The average age for the onset of perimenopausal transition is 46 years, 95% of women experience the onset between ages 39 and 51. (Lowdermilk, 2007)

As menopause approaches, more and more of the menstrual cycles become anovulatory. This period of time usually 2 to 8 years before cessation of menstruation is termed perimenopause. Hot flashes are an early and acute sign of estrogen deficiency. These hot flashes can be mild or extreme and can last from 2 to 30 minutes. (Shoupe, 2002)

Menopause transition begins with changes in menstrual cycle and variations in the duration of menstruation. In the mid-to-late 40s menopausal transition starts and lasts about 4 years and menopause occurs at an average age of 51 years. (Deborah Grady, 2006)

The premenopausal period manifests each woman differently. In some woman it may lasts for few months and in some women it may lasts up to years. Some women may be seriously affected with hot flushes and heavy periods and some women may be free of these troublesome periods. A few women presents the cessation of menstruation may be gradual and other few presents' stoppage of menstruation suddenly. As the knowledge about the reproductive aging advances treatment options are available to attend these troubles. (Lancet Oncol, 2008)

Vasomotor symptoms such as hot flushes, night sweats and palpitations are features of declining estrogen levels. Every women should be aware of the changes that can occur with menopause and be informed about the benefits of HRT. Presently HRT is widely advocated for a women who is experiencing peri menopausal symptoms such as vasomotor symptoms and urogenital atrophy. (Shirish S Seth,2005)

Over the course of her premenopausal life there is a steady decrease in the number of immature ova. The hypothalamic -pituitary - ovarian axis begins to breakdown long before is there is any sign that menopause is imminent. In peri menopause , the ovary begins to sputter, producing irregular and missed periods and an occasional hot flashes. Hot flushes and night sweats are the classic sign of estrogen deficiency and the predominant complaint of perimenopausal women. There are many

options for treating hot flashes. although the gold standard in the treatment of hot flashes is estrogen. (Susan Scott, 2007)

The classical and the most common symptoms of climacteric are the vasomotor symptoms of hot flashes, palpitations, night sweats with insomnia and headaches which all respond well to estrogen therapy. There are many patients in their forties with severe recurrent depression, sometimes cyclical, who will respond well to transdermal estrogens. Hormone therapy is also prescribed to perimenopausal women in the transition phase before the periods have ceased if they have appropriate symptoms. The symptoms may be due to the vasomotor instability of hot flashes and sweats with insomnia and tiredness or pelvic atrophy with vaginal dryness, dyspareunia, sexual dysfunction and urethral syndrome. Loss of energy and loss of libido in association with climacteric symptoms are distressing for the couple and should be indication for estrogen, sometimes with the addition of testosterone. (John stud, 2008)

Management of menopause is not simply hormone replacement therapy but a holistic approach to health where medicines along with social and psychological support, physical exercise and appropriate lifestyle are important. (Pankaj Desai, 2005)

Women usually identifies the premenopausal phase as change of life, because it cause the end of their child bearing capacity and the beginning of another phase of life. The low estrogen level and role

changes produce stress in the woman, and also hot flashes or osteoporosis. (Nachtigall, 2004)

For women in western cultures, the experience of menopause and the incidence of symptoms differ considerably from women in Asian cultures. Approximately 50% of the premenopausal American women stated that menopause would be unpleasant and disagreeable. (Ritchers,2000)

Studies of mood disorders during menopause have generally revealed that an increased risk of depression during premenopause and decrease in incidence during post menopausal days. (Stacy B German,2011)

The change in hormone levels of during perimenopause and menopause, particularly the diminished estrogen level can cause, acute menopausal symptoms, that is 30-70% of the women in western countries will experience vasomotor symptoms such as hot flashes and night sweats. (Freeman, 2007)

Some premenopausal women exhibits vaginal dryness, tiredness and psychological symptoms including sleep disturbances, mood swings, forgetfulness and loss of libido. (Melby, 2005)

Premenopausal women experiences a number of symptoms like vasomotor symptoms including hot flashes and night sweats, vaginal symptoms, urinary incontinence, trouble sleeping, sexual dysfunction,

depression, anxiety, fatigue, headache and weight gain. (Deborah Grady, 2006)

Hot flushes is the spontaneous feeling of warmth usually perspiration also associates. Night sweats are hot flushes occurring at night especially during sleep, other symptoms such as vaginal dryness, sleep disturbance, mood symptoms, cognitive disturbances, somatic complaints, urinary complaints, uterine bleeding problems, sexual dysfunction, and reduced quality of life are noticed during premenopausal period. (Nelson H D, 2001)

The women experiences menopausal symptoms before actual menopause occurs. Some women may experience this as disturbing as menopause. One of the most common symptoms that occurs during the premenopausal period is hot flush, Women experience physical symptoms and emotional symptoms such as mood disturbances and fatigue There are so many ways to treat these symptoms. (Marcia, 2011)

Average age for menopause (permanent cessation of menstruation) is 51 years. The perimenopause is the transitional phase that starts with changes in menstrual cycles. The permenopause is the time with tremendous hormonal fluctuation. Menopausal transition begins with variation in menstrual cycle length and associated decrease in follicle stimulating hormone and it ends with stoppage of menstruation, then

followed by 12 consecutive months of amenorrhea and the median age for menopause is 51.4 years. (STRAW, 2001)

The most frequently used management for climacteric symptoms are the hormone replacement therapy. This includes estrogen alone therapy or combination therapy with progesterone. Hormone replacement therapy is administered for menopausal symptoms in a short term basis in United Kingdom. (MHRA, 2007)

## **STUDIES RELATED TO PREMENOPAUSAL SYMPTOMS AND ITS MANAGEMENT**

**Sadhana U Adhyapak** (2005) conducted a quasi experimental study on menopause among working women. The objectives of the study was to assess the knowledge regarding menopause in working women. The sample size was 60 working women from selected institutions of Pune city. The result shows that the working women had highest knowledge in the area of meaning (54%) and physiology (60%), less knowledge regarding signs and symptoms (44.41%) and changes during menopause. The study concluded that the post test knowledge was higher than pretest knowledge.

**Sharadha Ramesh** (2009) conducted a quantitative survey on social support system in menopause. The objectives of the study was to assess the social support system among postmenopausal women. The sample size was 125 postmenopausal women. The setting of the study



was Mugalivakkam a rural area at the outskirts of Chennai. The result showed that 25% got good support, 57% got frequent support, 30% got occasional support only and 7% had no support system. They concluded that there is significant relationship with knowledge level and economic dependency and relationship with husband, in-laws, relatives and children.

**Shahedur Rahman et al** (2010) conducted descriptive study on menopausal symptoms. The purpose of the study was to identify the menopause related symptoms . Sample size was 509 women aged 40-70 years. The study setting was Kushtia, Bangalore. The results showed that the average age for menopause was 51.14 years. The most common symptoms noticed were, feeling tired (92.90%), headache (88.80%), joint and muscular discomfort (76.20%), physical and mental exhaustion (60.90%), and sleeplessness (54.40%), depressive mood (37.30%), irritability (36%), hot flushes and sweating (35.80%), anxiety (34.42%), sexual problem (31.20%), cardiac discomfort (19.10%) and bladder problem (12.80%). They have concluded that the prevalence of hot flashes and sweating in premenopausal women.

**Dona D Baird** (2005) conducted a longitudinal study on prevalence of premenopausal symptoms in middle age women. The objective of the study was to monitor the premenopausal women for the changes in symptoms and attitude towards treatment. The sample size

was 1,500 women aged between 35 -49 years. The study setting was United States. They found that symptoms change due to hormone changes from puberty to menopause. They have concluded that both hormones estrogen and progesterone are responsible for the changes in premenopausal women

**Kim Dowat** (2009) conducted a comparative study on menopause symptoms and management among premenopausal women. The objective of the study was to examine the symptoms of premenopausal women experiencing hot flushes as compared to women who did not experience hot flushes. The study sample size was 4,426 women of age 35-47 years. The result showed that the women with hot flushes are more prone to get menstrual irregularities, anxiety and sleep disturbances than the women without hot flushes. They have concluded that the health personnel should aware that the changes associated with premenopausal period due to changes in hormonal level.

**Nancy E Avis et al** (2001) conducted a cross sectional study about menopausal symptoms and their variation across ethnic groups. The objectives of the study was to assess the diversity of menopause experience in women of age 40-55 years. The sample size was 14906 women from different parts of United States. The result showed racial/ethnic difference present in symptoms. They concluded that

Perimenopausal women, reported significantly more vasomotor symptoms than other women in the same age group.

**Sudha Sharman** (2007) conducted a cross sectional study on menopausal symptoms in urban women. The objective of the study to evaluate menopausal symptoms in women above the age of 40 years belonging to the middle socio economic class. The study sample was 117 women. The study setting was Jammu. The result showed that the average age for menopause was 47.35 years. The study concluded that there is changes in severity of symptoms with age and vasomotor symptoms more likely to increase with age.

**S Hakimi et al** (2009) et al conducted a cross sectional study on climacteric symptoms in perimenopausal women. The objectives of the study was to describe the symptoms. The sample of the study was 200 women of aged 45-55 years from Iran. The result showed that premenopausal women reported more (29.34%) than post menopausal women (28.0%). They have concluded that premenopausal women showed more sleep disturbances due to vasomotor symptoms.

**Lubna Paul et al** (2008) conducted a cross sectional study on vasomotor symptoms in premenopausal women. The objective of the study was to identify the occurrence of premenopausal symptoms in middle age women. The sample size was 82 premenopausal women. The result of the study showed that the incidence of vasomotor symptoms

may starts from the age of 34 years and women with vasomotor symptoms exhibits sleep disturbances, They have concluded that in a premenopausal women, more vasomotor symptoms and associated sleep disturbances noticed.

**Rahman et al** (2009) conducted a study on menopausal symptoms among middle age women. The objective of the study was to examine the more prevalent symptoms of menopause in middle age. The sample size was 356 Sarawakian women aged 40-65 years. The result showed that the average age of menopause was 51.3 years. The findings of the study listed symptoms of hot flushes and sweating (41.6%); irritability (37.9%); dryness of vagina (37.9%); anxiety (36.5%); depressive mood (32.6%), sexual problem (30.9%); bladder problem (13.8%) and heart discomfort (18.3%). They have concluded that the prevalence of classical menopausal symptoms of hot flushes, sweating was noticed in the middle age group.

**B Jayabharathi** (2011) conducted a descriptive survey on perception of physical and psychological symptoms of perimenopause. The objectives of the study was to assess the level of perception of physical and psychological symptoms of perimenopause among women . The participants was 30 perimenopausal women of age between 45-53 years from selected villages include Singaperumal koil and kattankulathur block. The result showed that maximum of women 12(40%) had

moderate symptoms, 10(33%) of women had mild symptoms and 8(27%) of women had severe symptoms. No statistical association was found between the level of perception of physical and psychological symptoms of perimenopause.

**Tchernof et al** (1998) conducted a cross sectional study on effects of menopause on weight gain. The aim of the study was to examine the relationship body's weight gain and menopausal transition. The sample size was 125 middle age women. The result showed that there is increase in body mass index and body's total weight. They have concluded that the body's fat deposition and central adiposity is not related to age but it accelerates in premenopausal phase. The menopause transition accelerated the increase in central adiposity.

**Sibil L Crawford et al** (2000) conducted a longitudinal study on assessment of weight and menopause transition. The objective of the study was to assess the relationship between menopause transition and weight base on the previous weight, age, and the behavioral factors of smoking, exercise, and alcohol consumption. The study sample was 418 women aged 50-60 years. The study setting was United States. The result showed that weight gain is strongly related to behavioural factors such as alcohol consumption and exercise. They have concluded that weight increases experienced by middle aged women in United States is more

strongly related to behavioral factors and is not associated with the use of hormone replacement therapy.

**Joyce T Bromberger et al** (2000) conducted a study on psychological disturbances during menopausal transition. The objective of the study was to identify the relationship between psychological distress and menopausal transition in various communities. The sample size was 16065 women aged 40 to 55 years. The result showed that psychological problems is increased in early perimenopause. Early perimenopausal women with or without vasomotor symptoms is more prone to get psychological problems and psychological disturbances is related to menstrual irregularity. They have concluded that the relation is due to socio cultural factors in middle age women.

**Suzane C Ho et al** (1999) conducted a survey on menopausal symptoms. The objectives of the study was to assess the occurrence of commonest symptoms in perimenopausal women. The study sample was perimenopausal women aged 44-55 years. The study setting was Hong Kong, China. The result was that hot flushes (10%), 5% of cold sweats. Five groups of symptoms reported such as psychological, musculoskeletal/gastrointestinal, non-specific somatic, respiratory, and vasomotor symptoms and Psychological, non-specific somatic and vasomotor symptoms were shows significant association with menopause

transition. They have concluded that perimenopausal women are more symptomatic during the study.

**Harvey Chim et al** (2001) conducted a survey on menopause symptoms and social factors. The objective of the study was to assess and severity of menopausal symptoms in middle age women in terms of social and lifestyle changes and the mean average for menopause. The sample size was 495 Singaporean women aged 40-60 years. The study setting was a local community in Singapore. The result shows that the average age of menopause was 49.1 years and hot flushes (17.6%), vaginal dryness (20.7%) and night sweats (8.9%) were noticed less than somatic symptoms. They have concluded that Perimenopausal women ( $n=124$ ) experienced a significantly higher prevalence of vasomotor, urogenital and psychological symptoms.

**Bairy L Adiga et al** (2009) conducted a descriptive study on menopausal symptoms and quality of life. The objective of the study was to report the average age of menopause and occurrence of its symptoms. The sample size was 252 post menopausal women. The study setting was the outpatient clinic of obstetrical and gynaecology department of a selected Hospital. The result showed that average age at menopause was 48.7 years. More commonest symptoms were aching in muscle and joints, feeling tired, poor memory, lower backache difficulty in sleeping and psychological problems than the vasomotor and sexual problems. They

have concluded that the age at onset of menopause in southern Karnataka (India) is 48.7 years which is four years more than the mean menopause age for Indian women may be due to socio cultural influence.

**Nusrat Nizar et al** (2007) conducted a population based survey on menopausal symptoms and the quality of life. The objectives of the study was to assess the severity of menopausal symptoms and relation with quality of life. The sample size was 3062 women aged 40-70 years. The study setting was rural Sindh, Pakistan. The results showed menopausal status were, post menopausal 1478(49.1%) of women, the pre and peri menopausal 641(21.3%) and 892(29.6%) respectively, while 51(1.6%) women did were not sure about their menopausal status. They have concluded that the menopausal symptoms are influenced by sociodemographic, cultural, economic and reproductive parameters

**Monica Flores et al** (1999) conducted a descriptive study depressive symptoms in a perimenopausal women. The sample size was 141 perimenopausal women aged 45-55 years old. The study setting was a clinic in Mexico City. The result showed that incidence of hot flushes prevalence was similar in depressed and non depressed women. They have concluded that in perimenopausal women hot flushes increase the severity of depressive episode.



**Seritan AL et al** (2006) conducted a retrospective study on symptoms in perimenopausal women. The objectives of the study was to examine the prevalence of vasomotor symptoms with anxiety and depressive symptoms in perimenopausal women. The study sample was 487 women of age 40-64 years. The study setting was a selected specialized midlife assessment center. The result showed that Thirty-one (53%) premenopausal, 131 (66%) perimenopausal, and 69 (50%) postmenopausal women reported anxiety and/or depressive symptoms. Perimenopausal and postmenopausal women reporting anxiety and/or depressive symptoms had more incidence of vasomotor symptoms. Perimenopausal women were significantly more likely to report anxiety and/or depressive symptoms than were postmenopausal women. They have concluded that of detection of anxiety and mood changes during perimenopause.

**Dennerstein et al** (2000) conducted a prospective study on menopausal symptoms. The objectives of the study was to assess the prevalence and during midlife and the relationships to menopausal status and hormone levels. The 438 Australian women was the sample for the study. The result showed that from early to late perimenopause increasing the women who reported five or more symptoms 14%. Hot flushes (27%), night sweats (17%), vaginal dryness (17%). Trouble sleeping increased by 6%. The major change to prevalence was from early to late

perimenopause excluding insomnia, which showed a gradual increase. They have concluded that in the middle aged women symptoms are related to hormonal changes of menopause transition are vasomotor symptoms. Insomnia is highly related to hot flushes and psycho social factors.

**Misty Richards et al** (2006) conducted a comparative study on perimenopausal depression. The objective of the study was to examine the role of hormone changes in perimenopausal depression. The study sample was 70 depressed perimenopausal women and 35 non depressed perimenopausal women who attending a selected menopause clinic. The result showed that 26% of the depressed and 9% of the women reported premenstrual symptoms. 31% of the depressed and 20% of the non depressed women hormone related menstrual irregularity. They have concluded that perimenopausal depressed women the symptom changes is caused by fluctuation in hormone level.

## **SUMMARY**

The literature review helped the investigator to become aware of the various methodologies used in menopause related studies. It helped the investigator to establish the need for the study, state the problem clearly, develop a conceptual framework, develop the tool and to achieve the objectives of the study.

## **CHAPTER III**

### **METHODOLOGY**

The methodology of research indicates the general pattern of organizing the procedure of gathering valid and reliable data for an investigation. (Polit, Hungler 2004)

This chapter deals with the description of steps undertaken by the investigator to assess the knowledge of the women on premenopausal symptoms and its management in selected rural and urban areas.

This chapter includes, Research approach, Research design, Setting of the study, Target population, Sample and sampling technique, Criteria for sample selection, Development of the tool, Description of the tool, Validation of the tool, Reliability, Pilot study, Data collection procedure and Plan for data analysis.

#### **RESEARCH APPROACH**

The research approach gives the researcher an idea about way to collect data, analyze data and the subjects from whom the data to be collected. Research approach gives the researcher to identify the most appropriate and efficient way in concluding the results.  
(B.T.Basavanthappa)

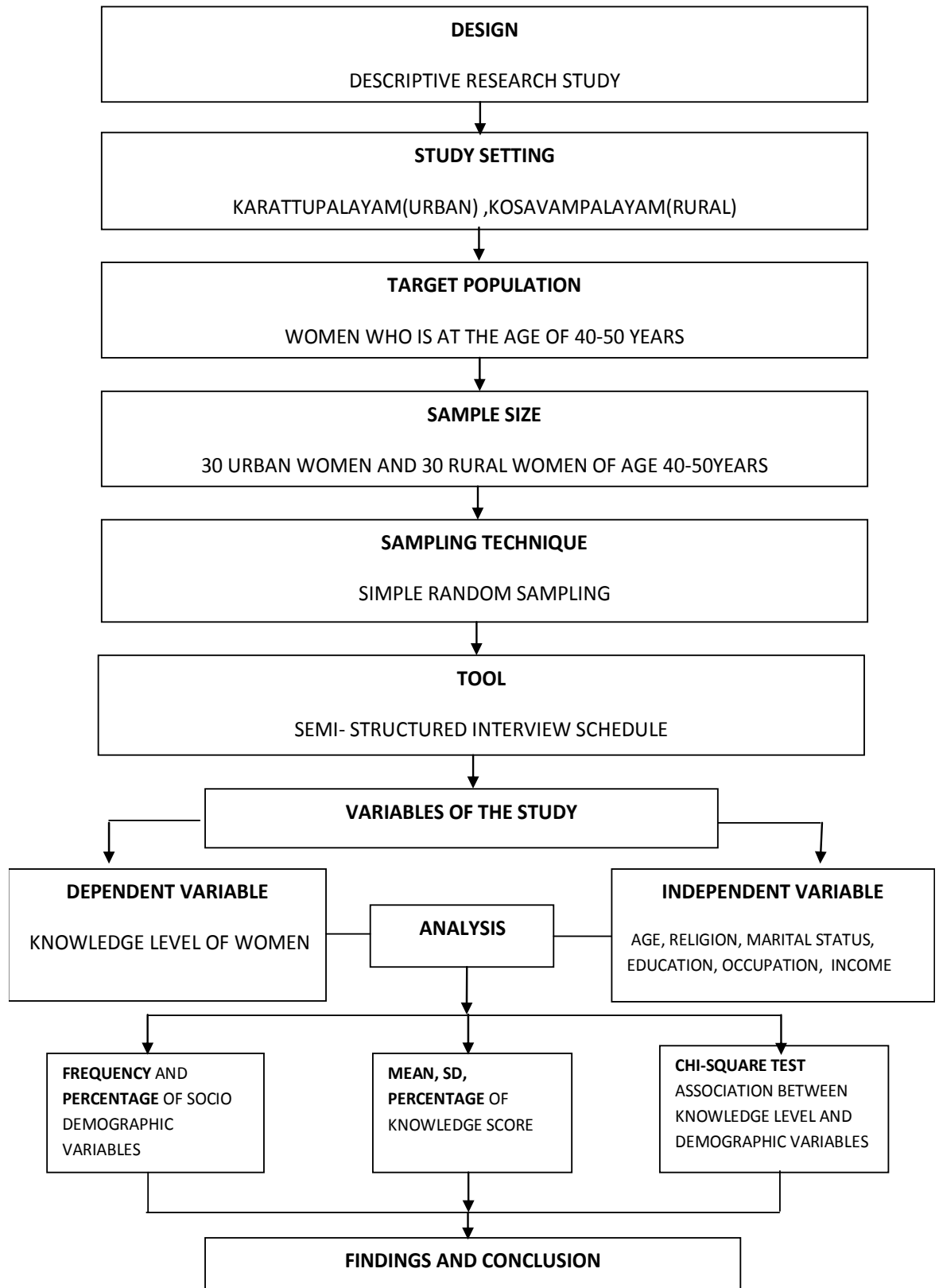
The research approach for this study is non experimental and the aim of the study is to compare the knowledge of urban and rural women regarding the premenopausal symptoms and management.

## **RESEARCH DESIGN**

The research design of a study is spells out the basic strategies that researcher adopt to develop evidence that is accurate and interpretable. It is important to understand design options when planning a research report. (Nancy Burns, 2004)

The research design of the present study is descriptive in nature with objective of comparing the knowledge of urban and rural women.

**FIG.3.1 SCHEMATIC REPESENTATION OF STUDY DESIGN**



## **STUDY SETTING**

Setting of the study is the place or geographical area where the data needed are collected. (Denise F Polit, 2004)

The study is conducted in the rural area of kosavampalayam and in the urban area of karattupalayam in Namakkal district. The selection of the study setting for the present study was on the basis of

- Availability of subjects.
- Feasibility of conducting the study.
- Economy of time and money.
- Proximity of geographical area.

The Kosavampalayam is coming under the Manickampalayam primary health center at Namakkal district. The main occupation of the people in the area were coolie.

The karattupalayam is one of the urban areas of Namakkal district. Karattupalayam is situated at Tiruchengode Taluk of namakkal district. The main occupation of the area is coolie.

## **TARGET POPULATION**

The population is defined as the entire set of individuals or objects having some common characteristics. (Polit and Beck, 2008)

Target population of the study was women between the age group of 40-50 years in selected areas i.e Karattupalayam and Kosavampalayam of Namakkal District.

### **SAMPLE AND SAMPLING TECHNIQUE**

A sample is the subset of population elements. Sampling is the process of selecting a portion of population to represent the entire population so that inferences about the population can be made. (B.T.Basavanthappa, 2008)

The sample size of the present study was 60 women aged between 40-50 years, 30 women each from rural and urban area. The samples were selected through simple random sampling method. The list of women between the age group 40-50 years are collected from higher authorities. From that 30 women from each area by simple random sampling (lottery method).

### **CRITERIA FOR SAMPLE SELECTION**

Women between the age group of 40-50 years.

### **DEVELOPMENT OF TOOL**

Tool is the device used to collect data. The investigator prepared a semi structured interview schedule based on the objectives of study,

## **STEPS IN CONSTRUCTION OF THE TOOL**

The following steps were taken for preparing the tool.

- Related literature were reviewed
- Consultation and advice from subjects experts and corrections were done accordingly
- Opinion from statistician were collected

## **DESCRIPTION OF THE TOOL**

The tool used to collect the data was a semi structured interview schedule to assess the knowledge of women regarding the premenopausal symptoms and its management, the tool comprised of 2 parts including 33 items.

### **PART I**

Part I includes 7 demographic variables such as age, religion, marital status, educational status, occupational status, monthly income of the family and source of previous knowledge regarding premenopausal symptoms and management.

### **PART II**

The part II consists of 33 questions about knowledge regarding premenopausal symptoms and its management and items were arranged in 3 sections.



## **SECTION A**

The section has 6 items related to knowledge regarding general information on menopause and premenopausal period.

## **SECTION B**

The section B has 16 items related to knowledge regarding physiological symptoms and its management.

## **SECTION C**

The section C has 11 items related to the knowledge on psychological symptoms in premenopausal period and its management.

## **CONTENT VALIDITY**

Content validity of the tool was obtained from 7 experts from the field of obstetrical nursing, community health nursing, mental health nursing and biostatistics. The item number 7 regarding the fertility potential of premenopausal women was deleted from the tool. Finally the questionnaire has 33 items including three aspects of premenopausal period.

## **RELIABILITY**

The reliability of the tool was checked with 10 women, that is 5 were selected from the rural area, and 5 women were taken from the urban area. The method used for reliability is split half method. The

correlation coefficient  $r=0.94$  was found and shows high degree of reliability of the tool.

### **PILOT STUDY**

A pilot study is termed as the small scale version of the main study. (Polit and Hungler, 2007)

The pilot study was conducted on September 2011 before the main study. The women for pilot study was selected from urban area and from the rural area. five women were selected from each area. The people were very co operative.

### **DATA COLLECTION PROCEDURE**

The data collection was conducted on October 2011 and the investigator has got permission from concerned higher authority. The data collection was done in both urban area, and rural area. The researcher personally visited each houses of both urban and rural area. The data collection procedure took 15 days.

### **PLAN FOR DATA ANALYSIS**

The data analysis was done in terms of the objectives of the study. The analysis was done using descriptive and inferential statistics. The plan for data analysis was as follows.

- The data were organized in a master sheet.
- Frequencies and percentages were used for the analysis of socio demographic variables.
- Mean, mean score percentage, standard deviation of the knowledge score of both urban and rural women.
- Inferential statistics, chi square test was done to find out the association between knowledge and selected demographic variables.

## **SUMMARY**

This chapter dealt with the methodology used for the study. It covers the research approach, research design, settings of the study, target population, sample and sampling technique, development and description of the tool, validity, reliability, pilot study, data collection methods and plan for data analysis.

# **CHAPTER IV**

## **DATA ANALYSIS, INTERPRETATION AND DISCUSSION**

Statistical analysis helps researchers make sense of quantitative information. Without statistics, quantitative data would be a chaotic mass of numbers. Statistical procedures enable researchers to summarize, organize, evaluate, interpret and communicate numeric information. (Denise F Polit, 2004)

This chapter deals with analysis and interpretation of collected data from sample of women aged between 40-50years residing at Karattupalayam and Kosavampalayam to assess the knowledge regarding premenopausal symptoms and its management.

The data collected through semi structured interview schedule were analyzed by descriptive and inferential statistics. The substantiate summaries of the findings are arranged in accordance with the specific objectives of the study.

### **OBJECTIVES OF THE STUDY**

- ❖ To assess the knowledge regarding premenopausal symptoms and its management among women residing at selected urban areas of Namakkal district.

- ❖ To assess the knowledge regarding premenopausal symptoms and its management among women residing at selected rural areas of Namakkal district.
- ❖ To compare the knowledge scores of women in urban and rural areas.
- ❖ To determine the association between the knowledge with selected demographic variables like age, religion, marital status, education, occupation, monthly income of the family and source of information.
- ❖ To prepare a health education pamphlet on premenopausal symptoms and its management.

## **PRESENTATION OF DATA**

The collected data are analyzed and presented in 4 sections.

### **SECTION I**

Description of socio-demographic variables using percentage analysis.

### **SECTION II**

Women's knowledge regarding premenopausal symptoms and its management were analyzed through the application of mean, standard deviation and mean score percentage.

### **SECTION III**

Comparison of knowledge of urban and rural women using 't' test.

### **SECTION IV**

Inferential statistics, chi-square test has used to determine the association of women's knowledge on premenopausal symptoms and its management with selected demographic variables such as age of the women, religion, marital status, educational status, occupational status, monthly income of the family and previous knowledge.

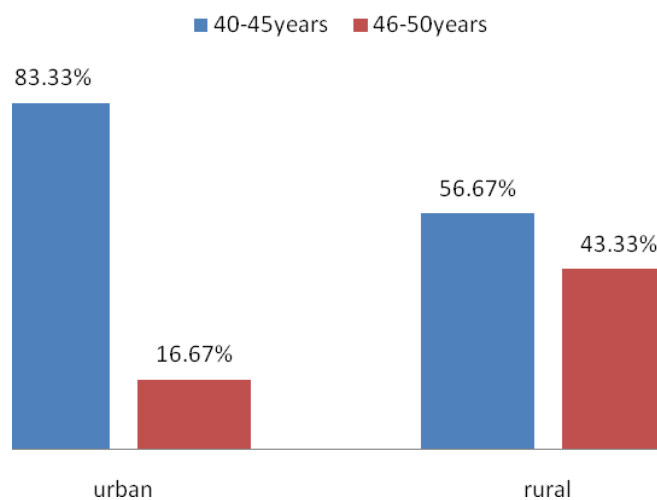
## SECTION I

### DESCRIPTION OF SOCIO DEMOGRAPHIC VARIABLES

**Table4.1.1 Distribution of respondents by age**

Sl No	Age (years)	Urban		Rural	
		No	Percentage (%)	No	Percentage (%)
1.	40-45	25	83.33	17	56.67
2.	46-50	5	16.67	13	43.33
	<b>Total</b>	<b>30</b>	<b>100</b>	<b>30</b>	<b>100</b>

**Figure 4.1.1 Distribution of women according to their age.**

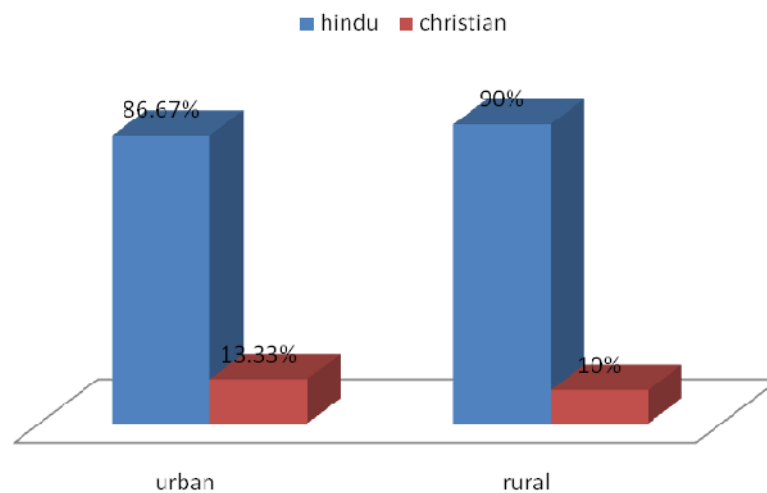


The majority of the subjects 25, 17 (83.33%, 56.67%) were found with 40-45years of age in rural and urban areas. Five and thirteen numbers (16.67%, 43.33%) of women were residing urban and rural area between age group of 46-50years.

**Table 4.1.2 Distribution of women according to their religion**

Sl no	Religion	Urban		Rural	
		No	Percentage (%)	No	Percentage (%)
1.	Hindu	26	86.67	27	90
2.	Christian	4	13.33	3	10
	Total	30	100	30	100

**Figure 4.1.2 Distribution of women according to their religion.**



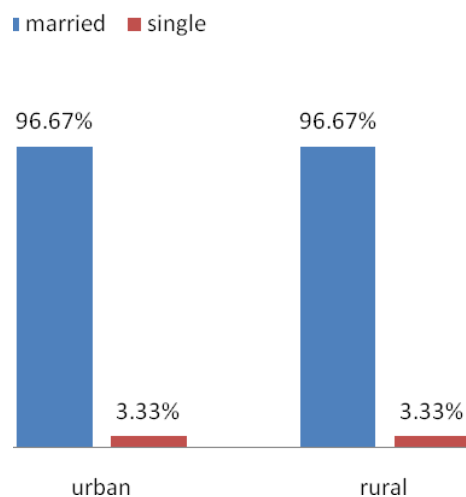
The table and figure (4.1.2) shows the proportion of subjects according to their religion in urban and rural areas. Majority of the urban and rural women 26, 27(86.67%, 90%) were belongs to Hindus and 4, 3 of the urban and rural women (10%, 13.33%) were belongs to Christian religion.



**Table 4.1.3 Distribution of women according to their marital status.**

Sl No	Marital status	Urban		Rural	
		No	Percentage(%)	No	Percentage(%)
1.	Married	29	96.67	29	96.67
2.	single	1	3.33	1	3.33
	<b>Total</b>	<b>30</b>	<b>100</b>	<b>30</b>	<b>100</b>

**Figure4.1.3 Distribution of women according to their marital status.**

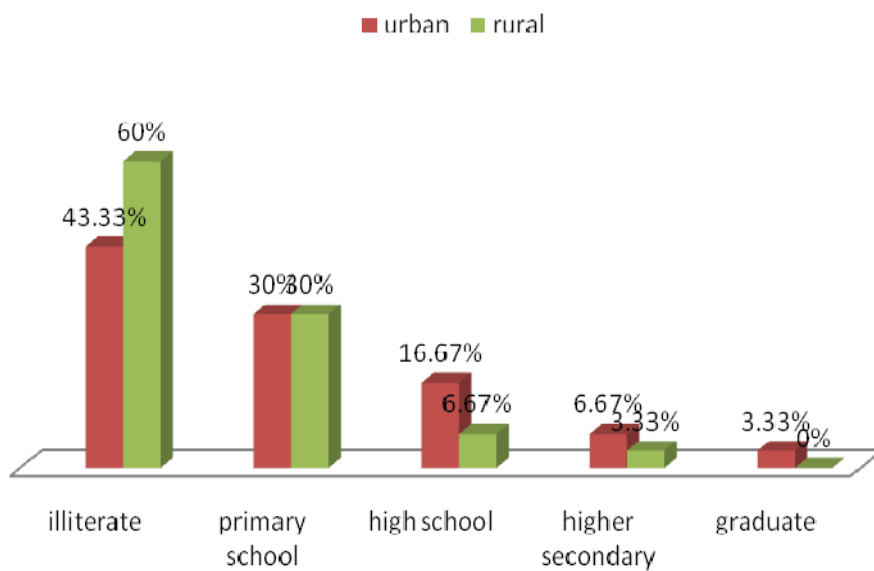


The table and figure shows the proportion of subjects according to their marital status in urban and rural areas. About 29, 29 (96.67%, 96.67%) of the women were married in both areas and only 1, 1 (3.33%, 3.33%) of the women were single in both urban and rural areas.

**Table 4.1.4 Distribution of women according to their educational status.**

SL No	Education	Urban		Rural	
		No	Percentage (%)	No	Percentage (%)
1.	Illiterate	13	43.33	18	60
2.	Primary school	9	30	9	30
3.	High school	5	16.67	2	6.67
4.	Higher Secondary	2	6.67	1	3.33
5.	Graduate	1	3.33	0	0
	Total	30	100	30	100

**Figure 4.1.4 Distribution of women according to their educational status.**

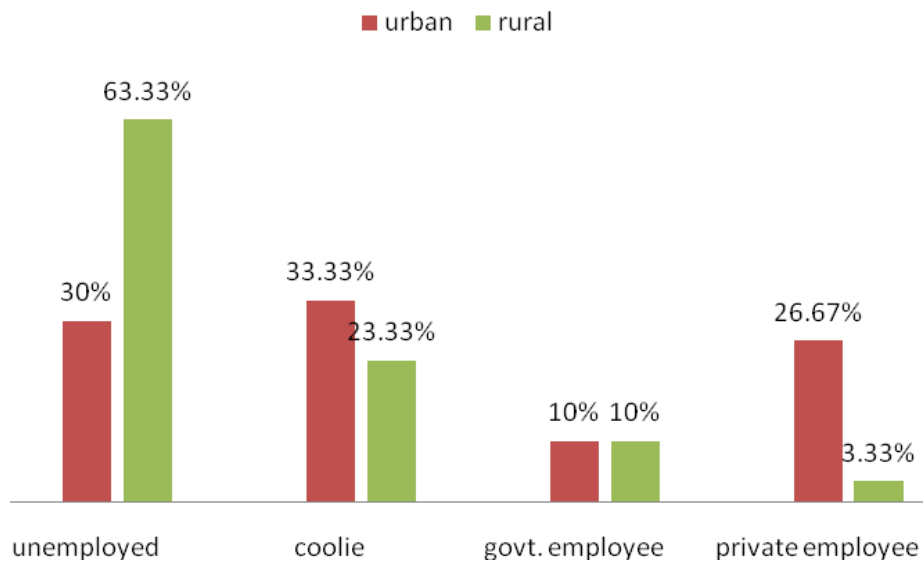


The table and figure reveals that 13, 18(43.33%, 60%) of the women are illiterate in urban and rural areas respectively. About 9, 9(30%, 30%) of the women finished primary education and 5,2(16.67%,6.67%) were completed high school education. And about 2, 1(6.675, 3.33%) had higher secondary education, only one (3.33%) of the women was a graduate in urban area and no graduate was there from rural area.

**Table4.1.5 Distribution of women according to their occupational status.**

Sl No	Occupation	Urban		Rural	
		No	Percentage (%)	No	Percentage (%)
1.	Unemployed	9	30	19	63.33
2.	Coolie	10	33.33	7	23.33
3.	Government employee	3	10	3	10
4.	Private employee	8	26.67	1	3.33
	Total	30	100	30	100

**Figure 4.1.5 Distribution of women according to the occupational status.**

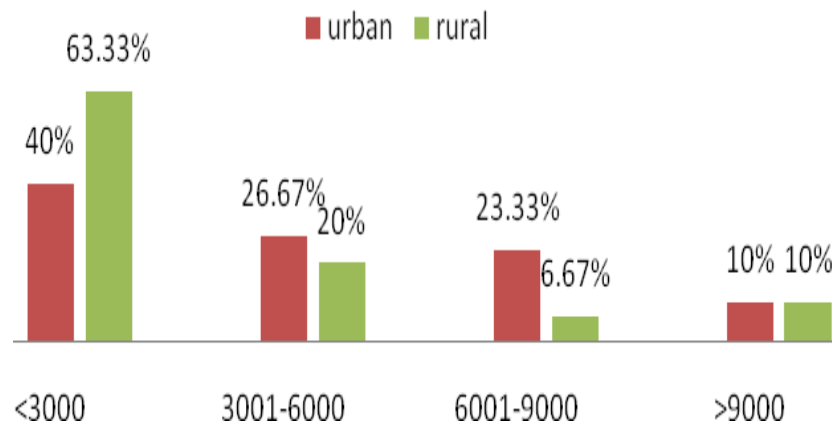


The table and figure shows 9, 19 (30%, 63.33%) of the women are housewives in urban and rural area respectively. About 10,7 (33.33%, 23.33%) of the women were coolie and about 3, 3 (10%,10%) were government employees in both urban and rural areas. But only 1(3.33%) was private employee in rural areas and in urban area 8 (26.67%) were private employees.

**Table 4.1.6 Distribution of women according to their family income per month.**

Sl No	Monthly income(rs)	Urban		Rural	
		No	Prcentage(%)	No	Percentage(%)
1.	Below 3000/	12	40	19	63.33
2.	3001-6000/	8	26.67	6	20
3.	6001-9000/	7	23.33	2	6.67
4.	Above 9001/	3	10	3	10
	Total	30	100	30	100

**Figure4.1.6 Distribution of women according to family income per month.**

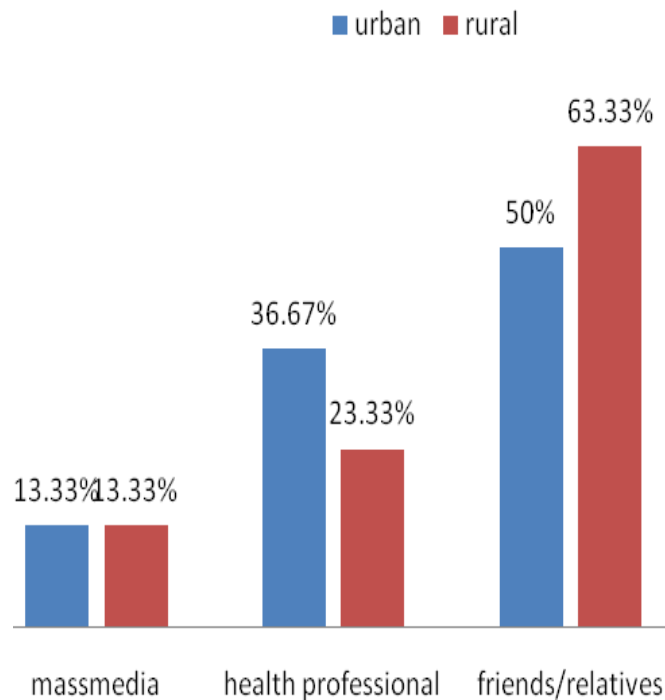


Both in urban and rural areas 3 (10%) families had the monthly income above 9001. Among the sample 12, 19 number (40%, 63.33%) of families had the monthly income below 3000 and 8, 6 number (26.67%, 20%) of the family's monthly income were between 3001-6000. Among the families 7, 2 number (23.33%, 6.67%) of the family had the monthly income between 6001-9000.

**Table 4.1.7 Distribution of women according to their previous knowledge on premenopause.**

Sl no	Previous knowledge	Urban		Rural	
		No	Percentage (%)	No	Percentage (%)
1.	Mass media	4	13.33	4	13.33
2.	Health professionals	11	36.67	7	23.33
3.	Friends/ relatives	15	50	19	63.33
4.	Others	0	0	0	0
	Total	30	100	30	100

**Figure4.1.7 Distribution of women according to their previous knowledge on premenopause**





The table and figure (4.1.7) depicts the frequency of distribution of women according to their previous knowledge on premenopause residing in urban and rural areas respectively.

In both urban and rural areas 4(13.33%) of the women got knowledge about premenopausal symptoms and its management from the mass medias. Among the subjects 11, 7 (36.67%, 23.33%) of the women got information from the health professionals previously. And the majority of the women 15, 19(50%, 63.33%) got information previously from friends or relatives have attained premenopausal symptoms.

## SECTION II

### ASSESSMENT OF KNOWLEDGE RELATED TO PREMENOPAUSAL SYMPTOMS AND ITS MANAGEMENT

**Table4.2.1 knowledge level of urban women on premenopausal symptoms and its management**

<b>Knowledge level</b>	<b>Number</b>	<b>Percentage</b>
Inadequate <50%	25	83.33
Adequate 50-75%	5	16.67
Adequate >75%	0	0
Combined	30	100

Table 4.2.1 shows the knowledge level of urban women aged between 40-50years on premenopausal symptoms and its management. It reveals that 83.33% of urban women had inadequate knowledge regarding premenopausal symptoms and its management.16.67% of the urban women had moderate knowledge and no one had the adequate knowledge regarding premenopausal symptoms and its management.

**Table 4.2.2 knowledge score of urban women on premenopausal symptoms and its management,**

<b>Max. Score</b>	<b>Range score</b>	<b>Respondent's knowledge</b>		
		<b>Mean</b>	<b>Mean %</b>	<b>SD</b>
60	16-36	24.43	40.72	5.49

Table 4.2.2 denotes the knowledge score of urban women on premenopausal symptoms and its management. The maximum score is 60, the lowest score is 16 and the highest score is 36. The mean knowledge score is 24.43, mean score percentage is 40.72 and standard deviation is 5.49.

**Table 4.2.3 Knowledge score of urban women on premenopausal symptoms and its management over different aspects.**

Aspects	Max. score	Range score	Respondent's knowledge		
			Mean	Mean %	SD
General information on menopause and premenopausal period	6	2-5	3.23	53.8	0.86
Physiological symptoms	27	6-15	9.83	36.40	2.49
Psychological symptoms	27	6-18	11.37	42.11	3.36
Combined	60	16-36	24.43	40.72	5.49

The table 4.2.3 reveals different aspects of knowledge on premenopausal symptoms and its management. There are mainly three aspects. That includes general information on menopause and premenopausal period, physiological symptoms and psychological symptoms of premenopause and its management. The maximum score for the general information, physiological symptoms, psychological symptoms of premenopause is 6, 27, 27 respectively. The range score for the three aspects 2-5, 6-15, 6-18 accordingly. The mean, mean%, SD for the general information is 3.23, 53.8, 0.86 respectively. For physiological symptoms these values were 9.83, 36.40, 2.49 and for psychological symptoms it was 11.37, 42.11, 3.36 respectively. The highest mean knowledge score found to be in the general information on menopause and premenopausal period.

**Table 4.2.4 knowledge level of rural women on premenopausal symptoms and its management.**

<b>Knowledge</b>	<b>Number</b>	<b>Percentage</b>
Inadequate <50%	27	90
Moderate 50-75%	3	10
Adequate >75%	0	0
Combined	30	100

Table 4.2.4 knowledge level of rural women of age between 40-50 years on premenopausal symptoms and its management. It reveals that 90% of the rural women had inadequate knowledge, and only 10% of the rural women had moderate knowledge. No one in the rural area had adequate knowledge regarding premenopausal symptoms and its management.

**Table-4.2.5 Knowledge score of rural women on premenopausal symptoms and its management.**

<b>Max.score</b>	<b>Range score</b>	<b>Respondent's knowledge</b>		
		<b>Mean</b>	<b>Mean %</b>	<b>SD</b>
60	12-34	20.2	33.67	5.69

The table 4.2.5 depicts the knowledge score of rural women on premenopausal symptoms and its management. The maximum score was 60. The range of score was 12-34. The mean, mean% and SD of the knowledge was 20.2, 33.67, 5.69 respectively.

**Table 4.2.6 knowledge score of rural women on premenopausal symptoms and its management over different aspects.**

Aspects	Max.score	Range score	Respondent's knowledge		
			Mean	Mean %	SD
General information on menopause and premenopausal period	6	1-5	2.57	42.83	0.95
Physiological symptoms	27	4-14	8.43	31.22	2.6
Psychological symptoms	27	5-18	9.2	34.07	3.17
Combined	60	12-34	20.2	33.67	5.69

The table 4.2.6 shows knowledge of rural women on different aspects regarding premenopausal symptoms and its management. The overall mean knowledge score of rural women was 33.67 with SD 5.69. The highest mean knowledge score (42.83) was found on general information regarding menopause and premenopausal period with SD as 0.95.

### SECTION III

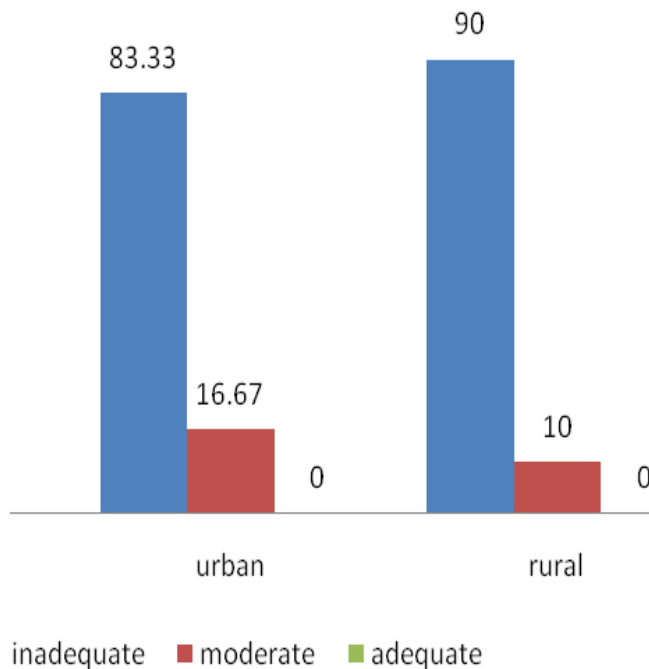
#### COMPARISON OF KNOWLEDGE SCORE OF RURAL AND URBAN WOMEN ON PREMENOPAUSAL SYMPTOMS AND ITS MANAGEMENT

**Table 4.3.1: Knowledge level of urban and rural women on premenopausal symptoms and its management.**

Aspects	Respondent's knowledge			
	Urban		Rural	
	Number	Percentage	Number	Percentage
Inadequate	25	83.33	27	90
Moderate	5	16.67	3	10
Adequate	0	0	0	0
Combined	30	100	30	100



**Figure 4.3.1: Knowledge level of urban and rural women on premenopausal symptoms and its management**

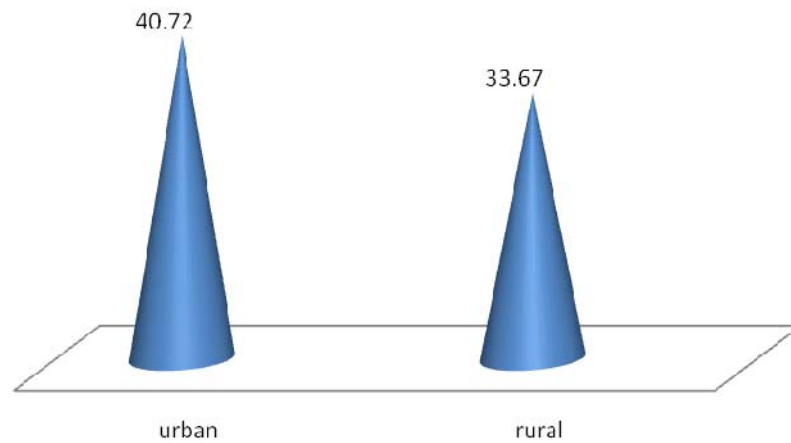


The comparison values of urban and rural knowledge level denotes in the table and figure 4.1. In rural areas 90% of the women had inadequate knowledge and in urban area it was about 83.33%. Only 105 of the women in rural area had moderate knowledge and in urban area 16.67% of the women had moderate knowledge. No one in both area possessed the adequate knowledge regarding premenopausal symptoms and its management.

**Table 4.3.2 Knowledge score of urban and rural women on premenopausal symptoms and its management.**

Aspects	Max. score	Range score	Respondent's knowledge			't' value
			Mean	Mean %	SD	
Urban	60	16-36	24.43	40.72	5.49	15.4*
Rural	60	12-34	20.2	33.67	5.69	
Difference	60	4-2	4.23	7.2	0.2	

**Figure 4.3.2 knowledge score of urban and rural women on premenopausal symptoms and its management.**

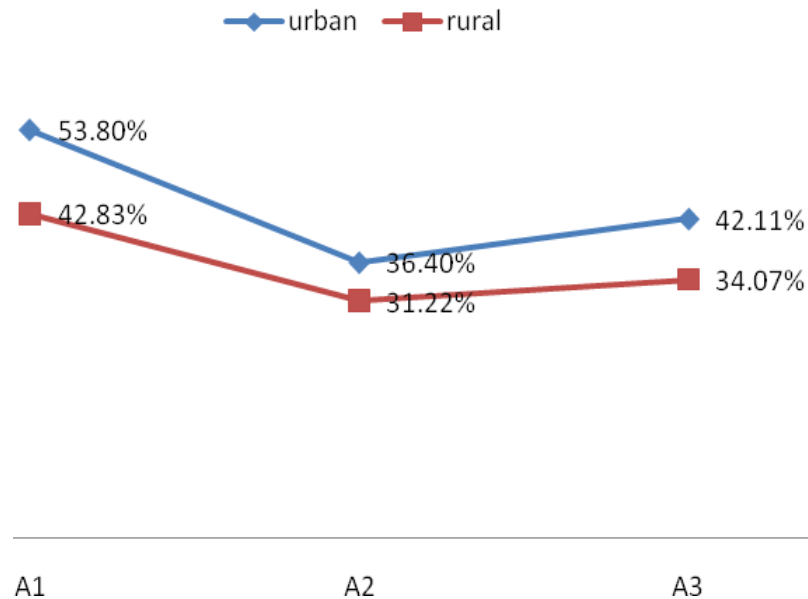


The table and figure 4.3.2 shows overall knowledge score of urban and rural women regarding premenopausal symptoms and its management. It indicates that the mean knowledge score of urban women was 40.72% and of rural women was 33.67%. When compared with rural women's knowledge score the urban women's knowledge score is high. Thus it shows urban women have more knowledge than rural women.

**Table 4.3.3 knowledge score of urban and rural women regarding premenopausal symptoms and its management over different aspects.**

SL No	Dimensions	Max. Mark	Urban		Rural		Difference		t value
			Mean %	SD	Mean %	SD	Mean %	SD	
A1	General information on menopause and premenopausal period	6	53.8	0.86	42.83	0.95	10.97	0.09	14.12*
A2.	Physiological symptoms and its management	27	36.40	2.49	31.22	2.6	5.18	0.11	17.59*
A3.	Psychological symptoms and its management	27	42.11	3.36	34.07	3.17	8.04	0.19	16.75*
	<b>Combined</b>	<b>60</b>	<b>40.72</b>	<b>5.49</b>	<b>33.67</b>	<b>5.69</b>	<b>7.2</b>	<b>0.2</b>	<b>15.4*</b>

**Figure 4.3.3 comparison of knowledge of urban and rural women regarding premenopausal symptoms and its management over different aspects.**



The table and figure 4.3 shows the different aspects of mean knowledge scores of urban and rural women. In the aspect related to general information on menopause and premenopausal period mean percentage of urban women is more than(53.8) that of rural women (42.83). Regarding the physiological symptoms and its management the mean percentage of knowledge of urban is higher ( 36.40 ) than that of rural women is (31.22). The mean knowledge percentage of rural women is less (34.07) than that of urban women (42.11).

## SECTION –IV

### ASSOCIATION BETWEEN KNOWLEDGE LEVEL OF WOMEN AND DEMOGRAPHIC VARIABLES

**Table 4.4.1 Association between knowledge and demographic variables of urban women.**

S. No	Variable	Category	Knowledge				Chi - square
			Inadequate		Moderate		
			No.(25)	%	No. (5)	%	
1	Age	40-45years	21	84	4	80	0.05
		46-50years	4	16	1	20	
2	Religion	Hindu	21	84	5	100	0.93
		Christian	4	16	0	0	
3	Marital status	Married	25	100	4	80	5.15*
		Single	0	0	1	20	
4	Education	Illiterate	13	52	0	0	4.59*
		Literate	12	48	5	100	
5	Occupation	Unemployed	8	32	1	20	0.28
		Employed	17	68	4	80	
6	Monthly income	<3000/-	12	48	0	0	4*
		>3000/-	13	52	5	100	
7	Previous knowledge	Mass media	4	16	0	0	0.93
		Others	21	84	5	100	

**\*significant at 5% level, (0.05, 1df) =3.84**

The table 4.4.1 displays the statistical analysis of “chi square value”, was used to find out the association between the demographic variables and knowledge of urban women regarding premenopausal symptoms and its management. It was concluded that marital status, education, and monthly income of the family was significant at 5% level and other variables such as age, religion, occupation, and source of information are not significant at 5% level.

**Table 4.4.2 association between knowledge and selected variables of rural women**

S. No	Variable	Category	Knowledge				Chi - square
			Inadequate		Moderate		
			No.(27)	%	No.(3)	%	
1	Age	40-45years	15	55.56	2	66.67	0.14 <sup>n</sup>
		46-50years	12	44.44	1	33.33	
2	Religion	Hindu	24	88.89	3	100	0.37
		Christian	3	11.11	0	0	
3	Marital status	Married	26	96.3	3	100	0.115
		Single	1	3.7	0	0	
4	Education	Illiterate	18	66.67	0	0	5*
		Literate	9	33.33	3	100	
5	Occupation	Unemployed	19	70.37	0	0	5.75*
		Employed	8	29.63	3	100	
6	Monthly income	<3000/-	18	66.67	1	33.33	1.29
		>3000/-	9	33.33	2	66.67	
7	Source of knowledge	Mass media	3	11.11	1	33.33	1.15
		Others	24	88.89	2	66.67	

The table 4.4.2 shows the analysis of “chi square” to find out the between knowledge and demographic variables of the rural women. It was found that the educational status and occupational status was significant at 5% level and other variables such as age, religion, marital status, monthly income of the family and source of knowledge was not significant at 5% level.



## **DISCUSSION**

The study was focused on assessing the knowledge regarding premenopausal symptoms and its management. The discussion was described under the following headings;

- ❖ Description of socio demographic variables of women.
- ❖ Knowledge of urban women regarding the premenopausal symptoms and its management.
- ❖ Knowledge of rural women regarding the premenopausal symptoms and its management.
- ❖ Comparison of knowledge of urban and rural women.
- ❖ Association of knowledge of the women with selected demographic variables such as age, religion, marital status, education, occupation, monthly income of the family.

### **SOCIO DEMOGRAPHIC VARIABLES OF THE WOMEN**

- Out of 30 mothers each from the rural area and urban area 83.33% and 56.67% were in the age group 40-45 years in the urban and rural area respectively.
- About 86.67% from the rural area and 90% from the urban area were Hindus.
- Majority 96.6% of the women were married from each area.

- A large section of the population, 43.33% from the urban area and 60% from the rural area were illiterate.
- In rural area about 63.33% of the women were housewives and 23.33% were coolie. And in urban area 33.33% were coolie and 30% were house wives.
- Among the study subjects 40% of the family from the urban area and 63.33% from the rural area were earning a monthly income below Rs.3000/-
- The majority of the study subjects 50% from the urban and 63.33% from the rural area got previous information from the friends or relatives who had the premenopausal symptoms.

## **KNOWLEDGE OF URBAN WOMEN REGARDING PREMENOPAUSAL SYMPTOMS AND ITS MANAGEMENT**

Level of knowledge was divided into three categories for easy understanding and interpretation.

Inadequate - <50%

Moderate - 50-75%

Adequate - >75%

Result of the study revealed that 83.33% of the urban women were belongs to inadequate knowledge level and only 16.67% of the women

had moderate knowledge regarding premenopausal symptoms and its management. No one in the area had adequate knowledge.

The overall knowledge score of urban women was 40.72%.

## **KNOWLEDGE OF RURAL WOMEN REGARDING PREMENOPAUSAL SYMPTOMS AND ITS MANAGEMENT**

The study on the rural women showed that 90% of the women were belongs to inadequate knowledge and only 10% of the women were possessed moderate knowledge. And no one in the rural area had adequate knowledge regarding the premenopausal symptoms and its management.

The overall knowledge score of women was 33.67%.

The knowledge score of rural women on general information on menopause and premenopausal period was 42.83% and of urban women was 53.8%. The knowledge score of urban and rural women on physiological symptoms related to premenopause was 36.40% and 31.22% respectively. The knowledge score on psychological symptoms of premenopausal women was 42.11% and 34.07% for urban and rural women respectively

## **COMPARISON OF KNOWLEDGE SCORE OF URBAN AND RURAL WOMEN**

The overall knowledge score of the urban women was 40.72% and of the rural women was 33.67%. When compared to rural women knowledge score, the knowledge score of urban women was high. So the knowledge of the urban women was more than that of rural women. The 't' test analysis of the knowledge of the urban and rural women  $t=15.4$  was significant.

## **ASSOCIATION OF SOCIO DEMOGRAPHIC VARIABLE WITH KNOWLEDGE OF THE WOMEN**

The chi square test was used to find out the association between the demographic variables such as age, religion, marital status, education, occupation, and the source of information.

Chi square analysis was found that there was an association between knowledge and educational status of the women in both rural and urban areas. Marital status and family monthly income also shows significant relationship with the knowledge of urban women. Occupational status shows significant relationship with the knowledge level of rural women. The remaining socio demographic variables such as age, religion, source of information is not significantly associated with

the knowledge of women regarding the premenopausal symptoms and its management.

## **CONCLUSION**

This chapter dealt with the analysis and interpretation of the data obtained from 30 women each from urban and rural area.

# **CHAPTER V**

## **SUMMARY, FINDINGS, CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS**

### **SUMMARY**

This chapter presents a brief account of the summary, major findings, implications and recommendations of the study.

The primary aim of the study was to compare the knowledge of rural women and urban women regarding the premenopausal symptoms and its management.

### **OBJECTIVES OF THE STUDY**

1. To assess the knowledge regarding premenopausal symptoms and its management among women residing at selected urban areas of Namakkal district.
2. To assess the knowledge regarding premenopausal symptoms and its management among women residing at selected rural areas of Namakkal district.
3. To compare the knowledge scores of women in urban and rural areas.
4. To determine the relationship between the knowledge with selected demographic variables.

5. To prepare a health education pamphlet on premenopausal symptoms and its management.

The literature and consultations from various subject experts made the researcher to develop the conceptual framework, methodology and plan of data analysis in an efficient and manner. The conceptual framework used for this study was health belief model.

The research approach adopted for the present study was non experimental in nature. The research design was descriptive design. The sample was totally 60 women from selected rural and urban area. The instrument used for the data collection was semi structured interview schedule. Sample selected for the study by using simple random sampling. The researcher developed the instrument according to the reviewed literature and consultation with subjects experts. The semi structured questionnaire consists of 2 parts. Part I consists of 7 items related to demographic variable and part II consists of 3 sections with 33 items related to knowledge regarding premenopausal symptoms and its management. The data collection was done with translated tool in tamil to maintain objectivity. The analysis of the data were done using descriptive and inferential statistics.

## **MAJOR FINDINGS OF THE STUDY**

The collected data were analyzed under mean, mean score, standard deviation and chi square analysis.

### **FINDINGS RELATED TO SOCIO DEMOGRAPHIC VARIABLES**

- Out of 30 mothers each from the rural area and urban area 83.33% and 56.67% were in the age group 40-45 years in the urban and rural area respectively.
- About 86.67% from the rural area and 90% from the urban area were Hindus.
- Majority 96.6% of the women were married from each area.
- A large section of the population, 43.33% from the urban area and 60% from the rural area were illiterate.
- In rural area about 63.33% of the women were housewives and 23.33% were coolie. And in urban area 33.33% were coolie and 30% were house wives.
- Among the study subjects 40% of the family from the urban area and 63.33% from the rural area were earning a monthly income below Rs.3000/-
- The majority of the sample (50%) from the urban and 63.33% from the rural area got previous information from the friends or relatives who had the premenopausal symptoms.



## **Knowledge of urban women regarding premenopausal symptoms and its management**

Level of knowledge was divided into three categories for easy understanding and interpretation.

Inadequate - <50%

Moderate - 50-75%

Adequate - >75%

Result of the study revealed that 83.33% of the urban women were belongs to inadequate knowledge level and only 16.67% of the women had moderate knowledge regarding premenopausal symptoms and its management. No one in the area had adequate knowledge.

The overall knowledge score of urban women was 40.72%.

## **Knowledge of rural women regarding premenopausal symptoms and its management**

The study on the rural women showed that 90% of the women were belongs to inadequate knowledge and only 10% of the women were possessed moderate knowledge. And no one in the rural area had adequate knowledge regarding the premenopausal symptoms and its management.

The overall knowledge score of women was 33.67%.

The knowledge score of rural women on general information on menopause and premenopausal period was 42.83% and of urban women was 53.8%. The knowledge score of urban and rural women on physiological symptoms related to premenopause was 36.40% and 31.22% respectively. The knowledge score on psychological symptoms of premenopausal women was 42.11% and 34.07% for urban and rural women respectively.

### **COMPARISON OF KNOWLEDGE SCORE OF URBAN AND RURAL WOMEN**

The overall knowledge score of the urban women was 40.72% and of the rural women was 33.67%. When compared to rural women knowledge score, the knowledge score of urban women was high. So the knowledge of the urban women was more than that of rural women. The 't' test analysis of the knowledge of the urban and rural women  $t=15.4$  was significant.

### **FINDINGS RELATED TO ASSOCIATION OF KNOWLEDGE AND SELECTED DEMOGRAPHIC VARIABLES**

The chi square test was used to find out the association between the demographic variables such as age, religion, marital status, education, occupation, and the source of information.

Chi square analysis was found that there was an association between knowledge and educational status of the women in both rural and urban areas. Marital status and family monthly income also shows significant relationship with the knowledge of urban women. Occupational status shows significant relationship with the knowledge level of rural women. The remaining socio demographic variables such as age, religion, source of information is not significantly associated with the knowledge of women regarding the premenopausal symptoms and its management.

## **CONCLUSION**

- The overall knowledge score of the urban women was more (40.72%) that of the rural women (33.67%).
- The study reveals that the knowledge of women regarding premenopausal symptoms and its management was significantly related with the educational status both in urban and rural women.

## **IMPLICATIONS OF THE STUDY**

The study findings have implications to different field of Nursing, that is nursing education, nursing practice, nursing administration and nursing research. While analyzing the knowledge of women regarding the premenopausal symptoms and its management it is clear that the

initiatives should be taken in all these fields to improve the knowledge of women.

## **NURSING EDUCATION**

The nursing education provides the basis for all other branches of nursing. Findings of the study can be used as an information guide to the educators to deliver the knowledge to the students of nursing. While preparing the curriculum, frequent community visits to both urban and rural area needs to be considered and to prepare students to deliver adequate knowledge regarding premenopausal symptoms and its management. The nursing institution should play an active role in conducting awareness programs, workshops on premenopausal symptoms and its management in the community setting to have better understanding of the needs of the women.

### **Nursing Practice:**

The care givers should educate the other health professionals regarding the premenopausal symptoms and its management. The nurses should educate, provide guidance to subordinates and the student nurses while attending the women with premenopausal symptoms. Health education program can be conducted in the hospital settings and community settings.

A community health nurse should educate the other paramedical staff, village health guides and other health professionals of community to attend and manage the women with premenopausal symptoms and its management.

### **Nursing Administration:**

The administrator should take initiative by providing the adequate time, material and training for the personnel in delivering effective health education of women regarding premenopausal symptoms and its management. Community health programs and primary health services should be expanded according to the needs of the women in the community. Job description of the health personnel should include the skill in delivering health education to the clients and community.

### **Nursing Research:**

Nurse researchers can conduct further research on knowledge and attitude of women regarding premenopausal symptoms and its management. The data should be collected to find out the problems faced by the women in the age group 40-50 years. Instructional materials and folk plays can be prepared and administered to the women regarding the management of premenopausal symptoms to improve the women's knowledge.

## **RECOMMENDATIONS**

On the basis of the study following recommendations can be done.

- The present study can be replicated by using a large sample so that findings can be generalized.
- A study can be conducted to identify the attitude of the women on premenopausal symptoms and problems faced by the women in the age of 40-50 years.
- A quasi experimental study can be conducted to evaluate the effectiveness of planned teaching program on premenopausal symptoms and its management.
- A comparative study can be administered between premenopausal and menopausal women regarding the management of premenopausal symptoms
- The study can be conducted to compare the knowledge of illiterate and literate women.
- A study can be conducted to identify the attitude of women regarding hormone replacement therapy in relieving the premenopausal symptoms.
- A comparative study can be administered in rural and urban women to identify the difference in lifestyle modification associated with menopause.

- A study can be conducted to identify the age related problems in pre and post menopausal women among the women of age group 45-55 years.

## REFERENCES

### Text book

1. **A D T Govan, (2000)**, “Gynecology illustrated”, Fourth edition, Churchill Livingstone publishers, New York, Page no. 471-483.
2. **Brincat M P et al, (2000)**, “Treatment of the post menopausal women: Basic and clinical aspect”, Lippincott Williams and Wilkins publishers, Philadelphia, Page no.203-212.
3. **Chris Henderson, (2008)**, “Maye’s Midwifery”, Thirteenth edition, Baillere Tindall Publications, London, Page no. 10-11.
4. **D C Dutta, (2006)**, “Text book of Gynecology”, Fourth edition, New Central Book Agency PVT Ltd, New Delhi, Page no. 46-58.
5. **David Mckay Hart, (2008)**, “Gynecology Illustrated”, Fifth edition, Churchill Livingstone Publishers, New York, Page no.412-420.
6. **Denise F Polit, (2004)**, “Nursing Research”, Eighth edition, Wolters Kluwer PVT Ltd, New Delhi, Page no.30-36.
7. **Derek Llewellyn, (2000)**, “Fundamentals of Obstetrics and Gynecology”, Fifth edition, Wolfe Publishing Agency LTD, London, Page no. 270-278.
8. **Diane M Fraser, (2007)** “Myle’s Text Book for Midwives”, Fourteenth edition, Elsevier publishers, London, Page no.137.



9. **Gita Ganguly, (2007),** “Current Obstetrics and Gynecology”, First Edition, Jaypee brothers Publishers, New Delhi, Page no. 314-319.
10. **Gorodeski G I et al, (2000)** “Epidemiology and risk factors in cardiovascular diseases in post menopausal women”, Lippincott Wilkins and Williams Publications, Page no. 315-326.
11. **Ian Symonds, (2002),** “Problem oriented Obstetrics and Gynecology”, First edition, Arnol Publishers, Page no.222-226.
12. **John Studd, (1996),** “Progress in Obstetrics and Gynecology”, First edition, Churchil Livingstone Publishers, New York, Page no.293-300.
13. **Jyoti Sinha, (2006),** “Practical Obstetrics and Gynecology”, First edition, Jaypee brothers, New Delhi, Page no.277-291.
14. **Lowdermilk, (2004),** “Maternity and Women’s Health care”, Eighth edition, Mosby Publishers, Philadelphia, Page no.246-252.
15. **Lynna Y Littleton, (2005),** “Maternity Nursing Care”, Thomson Delmar Learning, Canada, Page no. 180-194.
16. **Pankaj Desai, (2008),** “Principles and Practice of Obstetric and Gynecology”, Third edition, Jaypee brothers Publishers, New Delhi, Page no. 1111-1121.

17. **Partha Basu, (2003),** “A practical approach to Gynecologic Oncology”, Second edition, Jaypee Brothers, New Delhi, Page no. 220-224.
18. **Pilliteri, (2007),** “Maternal Child Health Nursing”, Fifth edition, Lippincott Wilkins and Williams Publications, Philadelphia, Page no.90-91.
19. **R S Mahale, (2000),** “Changing Trends in Obstetrics and Gynecology”, First edition, Jaypee Brothers, New Delhi, Page no. 279-283.
20. **Rashid Latif, (2006),** “Gynecology”, Third edition, C B S Publishers, New Delhi, Page no. 30-36.
21. **Reva Tripathi, (2001),** “Common Clinical Problems in Obstetrics and Gynecology”, First edition, Jaypee Brothers, New Delhi, Page no. 286-300.
22. **S. DasGupta, (1997),** “Recent Advances in Obstetrics and Gynecology -3”, First edition, Jaypee Brothers, New Delhi, Page no. 186-191.
23. **Sabaratnam Arulkumaran(2005),** “Essentials of Gynecology”, First edition, Jaypee publishers, New Delhi, Page no. 237-247.
24. **Shalini Rajaram,** “Advances in Obstetrics and Gynecology”, First edition, Jaypee Brothers Publishers, New Delhi, Page no. 381.

25. **Sharon Mantik Lewis, (2000)**, “Medical Surgical Nursing”, Sixth edition, Mosby Publishers, Philadelphia, Page no.1409.
26. **Shirish N Daftery, (2009)**, “Obstetrics and Gynecology-5”, First edition, B F Publications, New Delhi, Page no.237-241.
27. **Susan Scott Ricci (2007)**, “Essentials of Maternity Newborn and Women’s Health Nursing”, First edition, Lippincott Wilkins and Wilkins Publishers, Philadelphia, Page no. 97-101.
28. **Suzane C Smeltzer, (2004)**, “Brunner and Suddarth’s Text Book of Medical Surgical Nursing”, Tenth edition, Lippincott Wilkins and Williams publications, Philadelphia, Page no. 1386-1389.
29. **Tamara Callahan (2009)**, “Obstetrics and Gynecology” Fifth edition, Wolfers Kluwer PVT Ltd. New Delhi, Page no. 212-217.
30. **Thankam Varma, (2004)**, “Management of Obstetrics and Its related problems”, Second edition, Jaypee brothers Publishers, New Delhi, Page no. 303-306.
31. **Vern C Katz, (2007)**, “Comprehensive Gynecology” Fifth edition, Mosby Publishers, Philadelphia, Page no. 1039-1051.

## **Journals**

1. **Barson R et al**, “*Definition of women’s sexual dysfunction reconsidered: Advocating expansion and revision*”, Journal of psychosomatic Obstetrics and Gynecology, 2003, 24(4), Page no. 221-229.
2. **Dimitrakakis C et al**, “*Breast cancer incidence in post menopausal women using testosterone in addition to usual hormone therapy*”, Menopause, 2004, 11(5), Page no. 531-535.
3. **Nachtigall L E, Nachtigall m J**, “*Menopausal changes and Quality of life and Hormone therapy*”, Clinical obstetrics and gynecology, 2004, 47(2), Page no. 485-488.
4. **N V Ismail**, “*A Study of Menopause in Malasia*”, Maturitas, 1999, 19, Page no. 205-209.
5. **Griso J A et al**, “*Racial difference in Menopause Information and Experience of hot flushes*”, Journal of general Internal medicine, 1999, 14(2), 98-103.
6. **P Damodaran et al**, “*Profile of a menopause clinic in Urban Population in Malasia*, Medical Journal, 2000, 41(9), page no. 431-435.
7. **Vingerling J R et al**, “*Macular degeneration and Menopause*”, British Medical Journal, 1995, 310, 1570-1571.

8. **Shutnakar S A et al**, "*The Women's Health initiative*", Journal of American medical Association, 2003, 289, Page no. 2651-2652.
9. **Grady D Herrington, Bittner V**, "*Cardiovascular disease Outcomes during the years of Hormone Therapy*", Journal of American medical Association, 2002, 288, Page no. 49-57.
10. **Ginsberg J et al**, "*The management of Menopause*", The Millenium Review, 2000, 59-68.
11. **Berret Connor E et al**, "*Raloxifen and Cardiovascular events in Post Menopausal women*", Journal of the American Medical Association, 2002, 287, Page no. 847-857.
12. **Ash Goodkin J**, "*Caring for post menopausal women*", Patient care for Nurse practitioner", 2001, 4(5), page no. 15-22.
13. **Batchman G**, "*Physiological aspect of natural and surgical Menopause*", Journal of Reproductive medicine, 2001, 46(3), Page no. 307-315.
14. **De Masters J**, "*Hormone replacement therapy: A clinical guide to Understanding the Dilemma*", AWHONN, Lifelines, 2000, 4(2), Page no. 26-35.
15. **Finkel M L et al**, "*Treatment options for the Menopausal women*", Nurse practitioner, 2001, 26(2), Page no. 11-17.
16. **Goolsby**, "*Postmenopausal hormones and incontinence*", Journal of American Medical Association, 97(1), 116-120.

17. **Hulley S**, "*Heart and Estrogen Progesterone replacement study Research Group*", *Journal of the American*, 1998, 280(7), Page no. 605-613.
18. **Manson J, Martink**, "*Postmenopausal Hormone replacement therapy*", *New England of Journal of Medicine*, 345(1), Page no. 34-40.
19. **Mosca et al**, "*Hormone Replacement Therapy and Cardiovascular diseases*", *Circulation*, 2001, 104(4), Page no. 499-503.
20. **Penckofer S, Schertz D**, "*Hormone Replacement Therapy: primary and secondary prevention*", *Journal of Cardiovascular Nursing*, 2001, 15(3), Page no. 1-25.
21. **Pilon A et al**, "*Estrogen Replacement Therapy: Determinants of Persistence with treatment* ", *Obstetrics and Gynecology*, 2001, 97(1), Page no. 97-100.
22. **Sawaya G et al**, "*The Heart and Estrogen /Progestin replacement Study*", *Annals of Internal medicine*, 133(12), 942-950.
23. **Scott Bair D, Kotal B**, "*Effectiveness of Self care actions and menopausal symptoms in middle aged women*", *Medical Surgical Nursing*, 2000, 9(6), Page no. 302-308.
24. **Jaylor M**, "*Psychological consequences of surgical Menopause*", *Journal of Reproductive medicine*, 2001, 46(3), Page no. 317-324.

25. **Utian W, Bogys P**, “*Menopause and midlife*”, *Menopause*, 6, Page no. 122-128.
26. **Vandenakker C B**, “*Menopause and aging with Disability*”, *Physical and Medical Rehabilitation of clinics of North America*, 2001, 12(1), 133-151.
27. **B Jayabharathi**, “*Perception of physical and psychological symptoms of Perimenopause*”, 2011 september 7(8), Page no. 15-17.
28. **Albertazz P**, “*Alternatives to Estrogen to manage hot flushes*”, *Gynecology Endocrinology*”, 2001, 20(1), page no. 13-21.
29. **Faure E et al**, “*Effects of standardized Soy extraction on hot flushes*”, *Menopause*, 2002, 9(5), Page no. 329-334.
30. **Kaunitz A**, “*Menopausal hormone therapy*”, *Breast Journal*, 2002, 8(6), Page no. 329-337.
31. **Sanborn**, “*Disorders of eating and female athlete triad*”, *Clinics in sports medicine*, 2000, 19(2), Page no. 199-213.

## **APPENDIX - A**

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

FROM

Sajeera S  
II Year M.Sc (N),  
Vivekanandha College Of Nursing,  
Elayampalayam,  
Namakkal.

TO

Health and Family Welfare officer,  
Namakkal District

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

I Mrs. SAJEERA S M.Sc(N) II Year student Obstetrical and gynecological Nursing, Vivekanandha College of Nursing, Elayampalayam, have under taken a thesis on the topic “ A COMPARATIVE STUDY TO ASSESS THE KNOWLEDGE REGARDING PREMENOPAUSAL SYMPTOMS AND ITS MANAGEMENT AMONG WOMEN AGED BETWEEN 40-50 YEARS IN SELECTED URBAN AND RURAL AREAS OF NAMAKKAL DISTRICT.”

#### **OBJECTIVE OF THE STUDY**

1. To assess the knowledge regarding premenopausal symptoms and its management among women residing at selected urban areas of Namakkal district.



2. To assess the knowledge regarding premenopausal symptoms and its management among women residing at selected rural areas of Namakkal district.
3. To compare the knowledge scores of women in urban and rural areas.
4. To determine the relationship between the knowledge with selected demographic variables.
5. To prepare a health education pamphlet on premenopausal symptoms and its management.

I would request you to grant me the permission to conduct the study at Karattupalayam and Kosavampalyam, Tiruchengode and issue necessary instruction to the women to extend their co-operation to undertake my study successfully.

Thanking You

Place:

Date:

Yours faithfully  
SAJEERA S

## **APPENDIX -B**

### **LETTER GRANTING PERMISSION TO CONDUCT THE STUDY**

From,

Health and Family Welfare officer,

Namakkal District

**Sub: Permission to conduct the study at katattupalayam and  
Kosavampalyam Tiruchengode.**

With reference to the above letter, it has been informed that Mrs.SAJEERA S, II year M.Sc. Nursing student (Obstetrical and Gynaecological nursing), Vivekanandha College of Nursing, Elayampalayam is allowed to conduct the study on the above area in Tiruchengode. In this regard the women in that area are very helpful.

With Thanks

Yours sincerely,

Health and Family Welfare officer

Place:

Namakkal District

Date:

## **APPENDIX –C**

### **LETTER SEEKING CONSCENT FROM THE PARTICIPANTS**

Dear participants,

I Mrs. SAJEERA S, II year M.Sc. Nursing student (Obstetrical and Gynecological Nursing), Vivekanandha College of Nursing, Elayampalayam, is interested to know more about knowledge regarding premenopausal symptoms and its management among women aged between 40- 50 years. The information which you are giving will be kept confidential and will be used only for this study. Please participate in this program by answering my questions honestly and state your willingness to participate in this study.

Thanking You

Name:

Signature:

#### **Consent from the participant**

I understand the purpose of this study and I am willing to participate in this study

**Signature**

## **APPENDIX-D**

### **LETTER FOR THE VALIDATION OF THE TOOL**

FROM

SAJEERA S

II Year M.Sc (N),

Vivekanandha College Of Nursing,

Elayampalayam,

Namakkal.

TO

THROUGH:

THE PRINCIPAL,

VIVEKANANDHA COLLEGE OF NURSING

ELAYAMPALAYAM

**Sub: Request for content validation of the tool.**

Respected Sir,

I, Mrs. Sajeera S, II year M.Sc.(N) student of Vivekanandha College of Nursing ,Elayampalayam, Tiruchengode, have taken a project on “ A COMPARATIVE STUDY TO ASSESS THE KNOWLEDGE REGARDING PREMENOPAUSAL SYMPTOMS AND ITS MANAGEMENT AMONG WOMEN AGED BETWEEN 40-50 YEARS IN SELECTED URBAN AND RURAL AREAS OF NAMAKKAL DISTRICT.”To be submitted to The Tamil Nadu Dr. M. G. R Medical University as a partial fulfillment for Master of Nursing Degree.

## OBJECTIVE OF THE STUDY

1. To assess the knowledge regarding premenopausal symptoms and its management among women residing at selected urban areas of Namakkal district.
2. To assess the knowledge regarding premenopausal symptoms and its management among women residing at selected rural areas of Namakkal district.
3. To compare the knowledge scores of women in urban and rural areas.
4. To determine the relationship between the knowledge with selected demographic variables.
5. To prepare a health education pamphlet on premenopausal symptoms and its management.

I achieved the mentioned objectives I have prepared a health education pamphlet. I request you to kindly give your valuable opinion and suggestions. Kindly validate and certified the tool.

Thanking you

Place,

Date:

Yours obediently,

Sajeera S

**APPENDIX -E**  
**SEMISTRUCTURED INTERVIEW SCHEDULE**

**PART-I**

**SOCIO DEMOGRAPHIC PROFILE OF THE WOMEN**

Code number:

1. Age of the women
  - A. 40-45years [ ]
  - B. 46-50years [ ]
2. Religion
  - A. Hindu [ ]
  - B. Christian [ ]
  - C. Muslim [ ]
3. Marital status of the women
  - A. Married [ ]
  - B. Unmarried [ ]
  - C. Divorcee/widow/separated [ ]
4. Educational status
  - A. Illiterate [ ]
  - B. Primary education [ ]
  - C. High school [ ]
  - D. Higher secondary [ ]
  - E. Graduates [ ]
5. Occupational status
  - A. Unemployed. [ ]
  - B. Coolie [ ]
  - C. Government employee [ ]
  - D. Private employee [ ]

6. Monthly income of the family
- A. Below Rs.3000/- [ ]
  - B. Rs.3001 to Rs.6000/- [ ]
  - C. Rs.6001 to Rs.9000/- [ ]
  - D. Above Rs.9001/- [ ]
7. From whom you have received the information about premenopausal symptoms and its management?
- A. Mass media [ ]
  - B. Health care professionals [ ]
  - C. Friends or relatives who had premenopausal symptoms [ ]
  - D. Any other, specify [ ]

## **PART-II**

### **SECTION-A**

#### **KNOWLEDGE REGARDING GENERAL INFORMATION ABOUT MENOPAUSE AND PREMENOPAUSAL PERIOD**

1. What is menopause?
- a. Temporary cessation of menstruation [ ]
  - b. Permanent cessation of menstruation [ ]
  - c. Heavy menstruation [ ]
  - d. Prolonged cycles of menstruation [ ]
2. What is the ideal age for attaining menopause?
- a. 30-35years [ ]
  - b. 35-40years [ ]
  - c. 40-45years [ ]
  - d. 45-50years [ ]

3. What are the basic criteria to confirm the women have attained menopause?

- a. Amenorrhea for 3 consecutive months [ ]
- b. Amenorrhea for 6 consecutive months [ ]
- c. Amenorrhea for 9 consecutive months [ ]
- d. Amenorrhea for 12 consecutive months [ ]

4. What is premenopausal period?

- a. 2-10years before menopause [ ]
- b. 2-10years after menopause [ ]
- c. 10-15years before menopause [ ]
- d. 10-15years after menopause [ ]

5. What is the average age for premenopausal symptoms to occur?

- a. 35years [ ]
- b. 40years [ ]
- c. 45years [ ]
- d. 50years [ ]

6. What are the causes of premenopausal symptoms?

- a. Reduced intake of diet [ ]
- b. Lack of exercise [ ]
- c. Stressful life [ ]
- d. Hormonal imbalance [ ]



## SECTION-B

### KNOWLEDGE REGARDING PHYSIOLOGICAL SYMPTOMS OF PREMENOPAUSE AND ITS MANAGEMENT

7. What are the common physiological symptoms seen during premenopausal period?

- a. Irregular menstruation [ ]
- b. Hotflashes [ ]
- c. Weight gain [ ]
- d. Palpitation [ ]
- e. Vaginal dryness [ ]
- f. Urinary incontinence [ ]
- g. Fatigue [ ]

8. What are the symptoms seen in irregular menstruation?

- a) Too frequent and excessive vaginal bleeding [ ]
- b) Fatigue [ ]
- c) Muscle cramps [ ]
- d) White discharges [ ]

9. What are the measures to manage irregular menstruation during premenopausal period?

- a. Estrogen replacement [ ]
- b. Taking a balance diet [ ]
- c. Maintenance of personal hygiene [ ]
- d. Avoidance of stressful situations [ ]

10. What are the causes of hotflashes during premenopausal period?

- a. Stressful environment [ ]
- b. Diminished estrogen in the body [ ]
- c. Increased intake of hot drinks and spicy food [ ]
- d. Hot climate [ ]

11. What are the symptoms associated with hotflushes during premenopausal period?

- a. Hypothermia [ ]
- b. Fatigue [ ]
- c. Sudden intense feeling of hot [ ]
- d. Bradycardia [ ]

12. What are the measures to manage hotflushes during premenopause?

- a. Having high calorie diet such as rice, tubers [ ]
- b. Taking cool shower before bed [ ]
- c. Wearing silk or synthetic clothes [ ]
- d. Vitamins and protein rich diet such as milk and fruit juices [ ]

13. What are the causes for weight gain during premenopausal period?

- a. Decreased physical activity [ ]
- b. Decreased estrogen and progesterone level [ ]
- c. Decreased androgen level [ ]
- d. Increased intake of fatty diet [ ]

14. What are the measures to reduce the weight during premenopausal period?

- a. Healthy diet with regular exercise [ ]
- b. Avoiding spicy foods [ ]
- c. Less intake of vitamins and protein [ ]
- d. Reduce the beverage foods [ ]

15. What are the symptoms of palpitation seen in premenopausal women?

- a. Bradycardia [ ]
- b. Perception of one's own heart beat [ ]
- c. Restlessness [ ]
- d. Bradypnoea [ ]

16. What are the measures to manage the palpitation in premenopausal women?

- a. Relaxation technique [ ]
- b. Reduce intake of stimulants [ ]
- c. Vitamins and minerals rich food such as fish and leafy vegetables [ ]
- d. Adequate rest periods [ ]

17. What are the common symptoms of vaginal dryness during premenopausal period?

- a. Dyspareunia [ ]
- b. Vaginitis [ ]
- c. Leucorrhoea [ ]
- d. Burning micturition [ ]

18. What are the measure to manage vaginal dryness in premenopausal period?

- a. Avoidance of stress by relaxation technique like music therapy [ ]
- b. Protein rich diet such as meat fish [ ]
- c. Breathing exercises [ ]
- d. Vaginal estrogen therapy [ ]

19. What are the symptoms of urinary incontinence in premenopausal women?

- a. Dribbling of urine when cough or sneeze [ ]
- b. Dysuria [ ]
- c. Oliguria [ ]
- d. Feeling of bladder fullness [ ]

20.What is the best technique to manage urinary incontinence in premenopausal women?

- a. Avoidance of beverage food items [ ]
- b. Practicing pelvic floor exercises like pelvic tilt [ ]
- c. Avoidance of stress [ ]
- d. Daily intake of 8 glasses of water [ ]

21.What are the symptoms of fatigue in premenopausal women?

- a. Headache [ ]
- b. Lethargy [ ]
- c. Irritability [ ]
- d. Memory lapses and confusion [ ]

22.What are the most effective approach to manage fatigue in premenopausal women?

- a. Adequate amount of sleep [ ]
- b. Ingestion of stimulants like coffee, tea [ ]
- c. Exercise yoga, meditation [ ]
- d. Take balance diet and adequate rest between activities [ ]

### **SECTION-C**

#### **KNOWLEDGE REGARDING PSYCHOLOGICAL SYMPTOMS OF PREMENOPAUSE AND ITS MANAGEMENT**

23.What are the psychological symptoms seen during premenopausal phase?

- a. Anxiety [ ]
- b. Depression [ ]
- c. Panic disorders [ ]
- d. Mood swings [ ]

24. What are the psychological manifestations associated with anxiety seen in premenopausal women?

- a. Confusion [ ]
- b. Palpitation [ ]
- c. Nervousness [ ]
- d. Shortness of breath [ ]

25. What are the measures to manage anxiety during the premenopausal phase?

- a. Concentrate on a single job at a time [ ]
- b. Increase physical exercises [ ]
- c. Music therapy [ ]
- d. Having an energy-rich diet [ ]

26. What are the symptoms of depression associated with the premenopausal period?

- a. Persistent feeling of sadness [ ]
- b. Loss of interest or pleasure [ ]
- c. Decreased energy [ ]
- d. Feeling inferior [ ]

27. What are the effective measures to manage depression in the premenopausal period?

- a. Avoid loneliness [ ]
- b. Physical activity such as walking daily [ ]
- c. Natural hormone supplements such as soyabean [ ]
- d. Involvement in social activities [ ]

28. What are the causes of panic disorder seen during the premenopausal period?

- a. Worried about self [ ]
- b. Increased intake of beverage food [ ]
- c. Low estrogen level [ ]
- d. Limited rest periods [ ]

29. What are the symptoms of panic disorder seen during premenopausal period?

- a. Headache [ ]
- b. Confusion [ ]
- c. Fear, choking, palpitation [ ]
- d. Lethargy [ ]

30. What are the measures to manage panic disorders in premenopausal period?

- a. Healthy diet high in nutrients [ ]
- b. Natural hormone supplements [ ]
- c. Adequate amount of sleep [ ]
- d. Proper physical exercises [ ]

31. What are the causes of mood swings in premenopausal women?

- a. Lack of rest and sleep [ ]
- b. Physical discomforts [ ]
- c. Excess consumption of caffeine [ ]
- d. Estrogen decline [ ]

32. What are the symptoms of mood swings associated with premenopausal phase?

- a. Emotional highs and lows [ ]
- b. Irritability [ ]
- c. Depression [ ]
- d. Elevation of mood [ ]

33. What is the most effective measures to manage mood swings in premenopausal women?

- a. Counselling [ ]
- b. Diet rich in calcium such as milk, leafy vegetables [ ]
- c. Pleasurable calming hobbies [ ]
- d. Maintaining open communication [ ]

## gFâ - I

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M) TÈ bjhÊyhË [ ]

i) murhšf cæânahf« [ ]

<) jÅah® cæânahf« [ ]

6. khj FL«g tUkhd«

- m) % .3000â%F Ñœ [ ]
- ] M)% .3001 ÈU<sup>a</sup>J % .6000 tiu [ ]
- ï) % 6001 ÈU<sup>a</sup>J % .9000 tiu [ ]
- <) % 9001 ;F nkš [ ]

7. khjÉy; if g%<sub>o</sub>ç a Ét<sup>u</sup>çij vÏgo mç<sup>a</sup>Ô®fÿ

- m) bjhiyçbjhl®ð (bjhiy; fhšá) [ ]
- M) Rfhjhu mikÿäd® [ ]
- ï) FL«g cWÿäd®fÿ [ ]
- <) gçâÇ; iffÿ [ ]

**gFâ - II**

**ãÇî - m**

**khjÉy; F k%<sub>o</sub>W« khjÉy; F K< mçFçfÿ bjhl®ghd**

**mçîçâw<**

1. khjÉy; F v<whš v<d?

- m) j%<sub>o</sub>fhÈfkhf khjÉlhœ ã<W nghjš [ ]
- M) ã<sup>u</sup>çjukhf khjÉlhœ ã<W nghjš [ ]
- ï) mâfkhf câuÿngh; F V%<sub>o</sub>gLjš [ ]
- <) Ú©lfhy khjÉlhœ [ ]

2. khjÉy; »< taJ tu«ð v<d?

- m) 30 - 35 tiu [ ]
- M) 35 - 40 tiu [ ]
- ï) 40 - 45 tiu [ ]
- <) 45 - 50 tiu [ ]

3. khjÉy; F mil<sup>a</sup>jij vÏgo Ô®khÅÿgJ?



m) 3 khj« khjÉlhCE tuhkš iU¥gJ [ ]

M) 6 khj« khjÉlhCE tuhkš iU¥gJ [ ]

i) 9 khj« khjÉlhCE tuhkš iU¥gJ [ ]

<) 12 khj« khjÉlhCE tuhkš iU¥gJ [ ]

4. khjÉy;F K< fhyšfÿ v<whš v<d?

m) khjÉy;»%F K< 2 - 10 tUIšfÿ [ ]

M) khjÉy;»%F ã< 2 - 10 tUIšfÿ [ ]

i) khjÉy;»%F K< 10 - 15 M©Lfÿ [ ]

<) khjÉy;»%F ã< 10 - 15 tUIšfÿ [ ]

5. khjÉy;if miltj%F ruhrÇ taJtu«ò?

m) 35 taJ [ ]

M) 40 taJ [ ]

i) 45 taJ [ ]

<) 50 taJ [ ]

6. khjÉy;»%F K< V%ogL« m;F;fÿ ahit?

m) czî c£bfhÿSjš Fiwjš [ ]

M) cl%ogÆ%óáÆ<ik [ ]

i) kd mGæj« [ ]

<) Ah@nkh<fÿ< nfshW [ ]

### ãÇi - M

#### khjÉlhCE K< m;F;fS«, ifahS« KiwfS«

7. khjÉy;F%oF K<ò V%ogL« m;F;fÿ vit?

m) Kiwa%ow khjÉlhCE [ ]

M)cl«ãš cZz« mâfkhFjš [ ]

i) clš gUk< mâfÇæjš [ ]

<)ijjaæ Joÿò mâfÇæjš [ ]

c)bg© idÿbgU;f gFâ tw£á [ ]

C) áWÚ® mo;fo fÊªjš [ ]

v) glglŸò ( mšyJ) ga« [ ]

8. Kiwa%ow khjÉlhÆ< m;F;fŸ?

m) mâfkhf iuªjš« btËgLjš [ ]

M) ga« [ ]

i) jirãªjš [ ]

<) btŸisgLjš [ ]

9. khjÉlhÆ Óu%W tUtij jL;F« KiwfŸ?

m) <°fnuh#< gÇkh%ow« [ ]

M) msthd czî c£bfhŸSjš [ ] i)

cl%öÆikia guhkÇªjš [ ]

<) kd mGªªâ%ofhd NœÃiyiaª jÉ®ªjš [ ]

10. khjÉy;»< K< clš cZz« mâfÇŸgâ< fhuzšfŸ?

m) kdmGªjš« [ ]

M) <°fnuh#< msî Fiwjš [ ]

i) mâfkhhd Nlhd k%W« fhukhd czîKiw [ ]

<) btÆš fhy« [ ]

11. khjÉy;»< K< clš cZzªâ< m;F;fŸ?

m) clš btŸgÃiy Fiwthf iUªjš [ ]

M) nrh®î [ ]

i) âObud btŸgÃiy mâfÇªjš [ ]

<) ija JoŸò Fiwthf iUªjš [ ]

12. khjÉy;»< K< clš cZzªij á»çir brÆí« tÊKiwfŸ?

m) khîr⊲ bghU£fis c£bfhŸSjš [ ] M) cwšf  
brštj%oF K< FË⊲jš [ ] i) g£L JÂfis mÂjš

[ ]

<) it£lÄ< k%oW« òujr⊲JŸs czîfis c£bfhŸSjš [ ]

13. khjÉy|»< K< clšvil TLtj< fhuzšfŸ?

m) cl%ogÆ%oá Fiwthf iU⊲jš [ ]

M) <°£nuh#< k%oW« òub#°£uh< msî Fiwjš [ ]

i) M<£nuh#< msî Fiwjš [ ]

<) bfhGŸò Æiw^j czîfis c£bfhŸSjš [ ]

14. khjÉy|»< K< clšvil FiwŸgj%ofhd fhuzšfŸ?

m) msthd czî k%oW« cl%ogÆ%oá [ ]

M) fhukhd czî bghU£fis jÉ®⊲jš [ ] i) òuj«

k%oW« it£lÄ<fis Fiwthf vL⊲jš [ ]

<) kJghd« c£bfhŸSjiy Fiw⊲jš [ ]

15. khjÉy|»< K< ijaJoŸò mâfkhf iUŸgj%ofhd m£F£fŸ?

m) ijaJoŸò Fiwjš [ ]

M) j<Dila ijaJoŸig cz®jš [ ]

i) öj£Ä<ik [ ]

<) \_çR âzwš [ ]

16. khjÉy|»< K< ijaJoŸig FiwŸgj%ofhd tÊKiwfŸ?

m) XÇEî vL⊲jš [ ]

M) fhukhd czîŸbghU£fis jÉ®⊲jš [ ] i)

it£lÄ<, jhJj£fŸ mâfkhf czîfis c£bfhŸSjš [ ]

<) c%orhf« iU⊲jš [ ]

17. khjÉy|»< K< âwŸòWŸò tw£áahf iUŸgâ< m£F£fŸ?

m) clš cwÉ< nghJ tÈ V%ogLjš [ ]

M) āwŸðWŸð â;fkilš [ ]

ī) btŸisŸgLjš [ ]

<) áWÚ® fÊ;F«nghJ vÇçrš V%ogLjš [ ]

18. khjÉy|»< K< āwŸðWŸð twłáahf iUŸgij rÇbrÇTj%ofhd á»çir KiwfŸ?

m) kdmGçjçij Fiw;F« tÊfŸ (iir nfłš) [ ] M) òuj«

Āiwªj czî vLçjš [ ] ĩ) Rthr gÆ%oá

[ ]

<) āwŸðWŸã< tÊahf <°łnuh#< brYçJš [ ]

19. khjÉy|»< K< bjhl® áWÚ® fÊçjÈ< m;F;fŸ?

m) iUkš k%W« J«kÈ<nghJ áWÚ® btĒnaWjš [ ]

M) tÈíl< áWÚ® fÊçjš [ ] ĩ)

Fiwthf áWÚ® fÊçjš [ ]

<) áWÚ®Ÿig mâfkhf iUŸgjh fczçjš [ ]

20. khjÉy|»< K< bjhl® áWÚ® fÊçjiy fłLŸgLçJ« KiwfŸ?

m) FĒ®ghdçij jÉ®çjš [ ] M)

iLŸbgY«ð cl%ogÆ%oá [ ] ĩ)

kdmGçjçij jÉ®çjš [ ]

<) âdrÇ 8 l«s® j©Û® gUFjš [ ]

21. khjÉy|»< K< nrh®î V%ogLjÈ< m;F;fŸ?

m) jiytÈ [ ]

M) nrh«ng; [ ]

ī) vÇçrš miljš [ ]

<) kd cisçrš, Phgkwâ [ ]

22. khjÉy|»< K< nrh®î V%ogLtij rÇbrÇTj%ofhd tÊKiwfŸ?

m) nghJkhd msî cwšFjš [ ] M)

njÚ®, fhã gUFjš [ ] ĩ)

cl%ogÆ%oá k%W« nahfh brÇjš [ ]

<) rǎJŸs czî k%oW« XŒî [ ]

ãÇî - ï

khjÉy;»« K< bg©fS;F kndhßâahd m¿F¿fŸ k%oW« ifahS« KiwfŸ

23. khjÉy;»« K< V%ogL;Toa kndhßâahd m¿F¿fŸ ahit?

m) mçr« [ ]

M)kd mGǎj« [ ]

ï) ga« V%ogLǎJjš [ ]

<)kdÃiy khWgLjš [ ]

24. khjÉy;»« nghJ mçr« kndhßâahf vŸgo btËgL»wJ?

m) kd FHŸg« [ ]

M)glglŸò [ ]

ï)gj%ow« [ ]

<) \_çR âzwš [ ]

25. khjÉy;»%oF K< V%ogL« mçrǎij Ó©brŒtj%ofhd tÊKiwfŸ?

m) xU rka« xUntisÆš k%oW« ftd« brYǎJjš [ ] M)

cl%ogÆ%óaia brŒjš [ ] ï)

bkšÈa ïiria nfflš [ ]

<) rǎJŸs czî KiwfŸ [ ]

26. khjÉy;»%oF K< kdmGǎjǎâ< m¿F¿fŸ?

m) bjhl®ªJ nrhfkhf iUǎjš [ ]

M) M©t« Fiwjš [ ]

ï) r;â FiwfŸ [ ]

<) jhœî kdÃiy [ ]

27. khjÉy|»< nghJ kdmGꝑꝑij ifahS« KiwfŸ?

m) jÅahf iUŸgij jÉ®ꝑjš [ ] M)

cl%ogÆ%oá k%oW« eiŸgÆ%oá [ ] i)

RuŸãfË< gÇkh%ow« [ ]

<) r\_f elto;iffËš <LgLjš [ ]

28. khjÉy|»%F K< ga« V%ogLtjÈ< fhuzšfŸ?

m) j·idŸg%oç mâfkhf ftiygLjš [ ] M)

mâfkhf FË®ghd« gUFjš [ ] i)

<°nuh#< Fiwªj msî iUꝑjš [ ]

<) XCEÉ<ik [ ]

29. khjÉy|»%F K< ga« V%ogLtj< mçFçfŸ?

m) jiytÈ [ ]

M) kd FHŸg« [ ]

i) ga«, glŸglŸò [ ]

<) nrh«gš [ ]

30. khjÉy|»< K< ga« v%ogLtij ifahS« KiwfŸ?

m) rªJŸs czî [ ] M)

RuŸãfË< gÇkh%ow« [ ] i)

nghJkhd XCEî [ ]

<) cl%ogÆ%oá [ ]

31. khjÉy|»< K< V%ogL« kd cisçrÈ< fhuzšfŸ?

m) XCEÉ<ik [ ]

M) kdÃiy kh%ow« [ ]

i) FË®ghd«, fhã c£bfhŸSjš [ ]

<) <°£nuh#< Fiwjš [ ]

32. khjÉy|»< K< kdcisçryhš tU« mçFçfŸ ?

m) kdkh%ow« [ ]

M) vÇçrš miljš [ ]

ï) kd mGæj« [ ]

<) kdÃiy khWjš [ ]

33. khjÉy|»« K< kdcisçriy á»çir brŒÍ« KiwfŸ?

m) Mnyhrid tH§Fjš [ ]

M) fhšáa« mâfkhf c£bfhŸSjš [ ]

ï) c%orhfkhf brašgLjš [ ]

<) všnyhÇIK« rf#khf gHFjš [ ]

### SCORE KEY

Sl No.	Correct Response	Score
1	1.2	1
2	2.4	1
3	3.4	1

4	4.1	1
5	5.2	1
6	6.4	1
7	7.1,7.2,7.3,7.4,7.5,7.6,7.7	7
8	8.1	1
9	9.1,9.4	2
10	10.2	1
11	11.3	1
12	12.2	1
13	13.2	1
14	14.1	1
15	15.2	1
16	16.1,16.2,16.4	3
17	17.1	1
18	18.1,18.4	2
19	19.1	1
20	20.2	1
21	21.2,21.4	2
22	22.4	1
23	23.1,23.2,23.3,23.4	4
24	24.2,24.3	2
25	25.1,25.3	2
26	26.1,26.2,26.3,26.4	4
27	27.1,27.2,27.3,27.4	4



28	28.3	1
29	29.3	1
30	30.2	1
31	31.4	1
32	32.1,32.3,32.4	3
33	33.1,33.2,33.3,33.4	4
	<b>TOTAL</b>	<b>60</b>

## **APPENDIX-F**

### **EVALUATION CRITERIA CHECKLIST FOR VALIDATION OF THE TOOL**

Instructions

The expert is requested to go through the following evaluation criteria check list prepared for validating the tool for assessing the knowledge of women regarding premenopausal symptoms and its management.

Sl no.	Criteria	Yes	No	Remarks
1	Baseline data * The items on the baseline covers all the aspects for the study			
2	Semi structured interview schedule * Relevant to the study * Content Organization * Simple & easy language * Any other suggestions			

## **APPENDIX- G**

### **CERTIFICATE OF VALIDATION**

This is to certify that,

Tool : Semi structured interview schedule

Section I: socio demographic details

Section II: Assessment of knowledge

Prepared by Mrs. SAJEERA S, II year MSc (N) student of Vivekananda College of Nursing to be used in her study titled of “***A COMPARATIVE STUDY TO ASSESS THE KNOWLEDGE REGARDING PREMENOPAUSAL SYMPTOMS AND ITS MANAGEMENT AMONG WOMEN AGED BETWEEN 40-50 YEARS IN SELECTED URBAN AND RURAL AREAS OF NAMAKKAL DISTRICT***” has been validated by me.

Signature

Name:

Designation:

Date:

## **APPENDIX-H**

### **HEALTH EDUCATION PAMPHLET**

#### **PREMENOPAUSAL SYMPTOMS AND ITS MANAGEMENT**

##### **INTRODUCTION**



Menopause and premenopausal symptoms are a natural phase in any woman's life and in fact, each and every women has to go through this phase in her life. The ideal age of attaining menopause is 45-50 years of age.

Menopause means permanent cessation of menstruation menopause is confirmed when women had no periods for twelve consecutive months. Premenopausal precedes menopause, it typically takes 2-10years before menopause. Premenopausal symptoms may start as early as age 35, the average age for premenopausal symptoms to occur is 40 years. Its onset is caused by hormonal imbalance, reasons of which may vary from women to women.

### **PREMENOPAUSAL SYMPTOMS**

Premenopausal symptoms include physiological symptoms and psychological symptoms. Some are discussed below.

#### **Physiological symptoms**

- Irregular menstruation
- Hot flushes
- Palpitations
- Weight gain
- Vaginal dryness
- Urinary incontinence
- Sleep disturbances and fatigue

### Psychological symptoms

- Anxiety
- Depression
- Panic disorders
- Mood swings

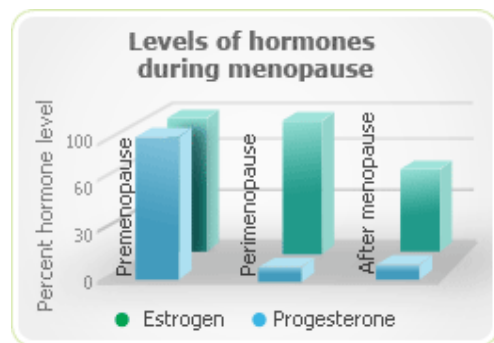
## COMMON PREMENOPAUSAL SYMPTOMS AND ITS MANAGEMENT

### IRREGULAR MENSTRUATION

Irregular periods are often the first signs of that a women is approaching menopause.

### Causes

- Fluctuating hormonal levels such as estrogen and progesterone
- Health condition such as uterine abnormalities, liver disease, diabetes, cancer, anemia etc.
- Lifestyle changes such as weight gain, poor nutrition, drugs, caffeine, over exercise, breastfeeding.



## Symptoms

- ✓ Too frequent vaginal bleeding
- ✓ Missed periods
- ✓ Changes in blood flow
- ✓ Painful cramping



## Management

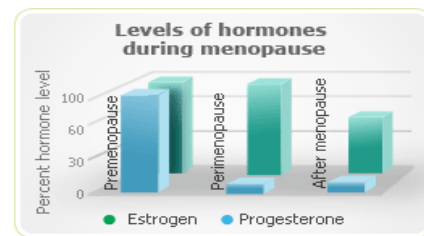
- Hormone replacement mainly estrogen replacement.
- Lifestyle changes such as daily exercise, avoidance of caffeine etc
- Stress relieving techniques such as yoga, meditation



## HOTFLUSHES

### Causes

- Changing levels of estrogen in the body



### Symptoms

- ❖ Sudden intense feeling of heat
- ❖ Perspiration
- ❖ Sleep disturbances
- ❖ Rapid or irregular heart beat



### Management

- ✚ Keeping ice water or cold beverages on hand during day and night
- ✚ Use cotton sheets, avoid silk or synthetics
- ✚ Consider air conditioning aids, ceiling or floor fans
- ✚ Keeping cold pack under or near pillow
- ✚ Avoiding warm environments, stress, hot and spicy foods and drinks, over consumption of caffeine and sugar



- ✚ Practice breathing exercises, meditation, yoga
- ✚ Eat balance diet including soy protein, vitamin E and vitamin

## WEIGHT GAIN

### Causes

- Decreased estrogen and progesterone levels
- Increased androgen levels
- Reduced physical activity
- Stress



### Management

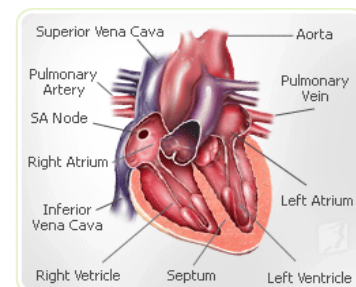
- Regular exercise
- Eat a healthy diet high in nutrients not in amount
- Natural hormone replacement



## PALPITATION

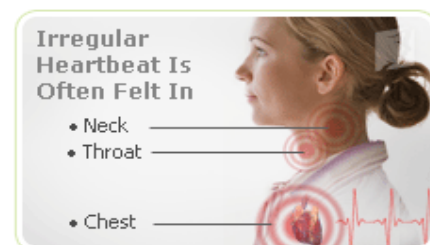
### Causes

- ✓ Decline in estrogen level
- ✓ Exercise
- ✓ Anxiety, stress
- ✓ Caffeine
- ✓ Heart disease, thyroid disease



### Symptoms

- Feeling one's own heart beat
- Rapid heart beat
- Shortness of breath, chest discomfort
- Weakness or fatigue



## Management

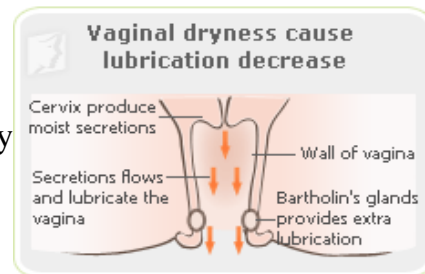
- Relaxation techniques such as yoga, meditation
- Avoiding stimulants such as caffeine
- Natural hormone supplements



## VAGINAL DRYNESS

### Causes

- Decrease in estrogen is the primary cause
- Stress



### Symptoms

- ✓ Itching and irritation
- ✓ Painful intercourse
- ✓ Urinary frequency



### Management

- Vaginal estrogen therapy
- Vaginal moisturizers
- Vitamin E oil, vaginal lubricants
- Diet including soybean



## URINARY INCONTINENCE

### Causes

- ❖ Decreased estrogen levels
- ❖ Stress
- ❖ Infection ,heart problems
- ❖ Medications such as diuretics

### Symptoms

- Urine leaks when cough ,sneeze or laugh
- Urine leaks when running or lifting





- Urine continues to dribble after urinating
- Urine leakage follows an intense desire to empty the bladder

### Management

- ▣ Practicing pelvic floor exercises
- ▣ Avoidance of tobacco and caffeine
- ▣ Avoidance of stress



### FATIGUE

#### Causes

- Levels of estrogen and progesterone decrease
- Sleep disturbances



#### Symptoms

- Decreased attention
- Decreased wakefulness
- Lethargy
- Memory lapses
- Fatigue after eating



#### Management

- Adequate amount of sleep and rest
- Take a balance diet



### PSYCHOLOGICAL SYMPTOMS

### AND ITS MANAGEMENT

#### ANXIETY

#### Causes

- Decreased estrogen levels
- Medical and psychological conditions



## Symptoms

- Nervousness
- Difficulty in concentrating
- Tenseness
- Hyper vigilance
- Restlessness and irritability



## Management

Lifestyle changes and self care which include

- ❖ Increased exercises
- ❖ Dietary changes
- ❖ Relaxation techniques



## DEPRESSION

### Causes

- ✓ Decreased levels of estrogen
- ✓ Genetic causes
- ✓ Personality, anxiety and hot flushes



### Symptoms

At least five symptoms must be present for not less than two weeks, at least one of those must be either

- ❖ Persistent feeling of sadness or
- ❖ Loss of interest or pleasure

### *Physical symptoms*

- ✚ Fatigue
- ✚ Decreased energy
- ✚ Appetite loss, over eating
- ✚ Insomnia
- ✚ Early morning wakefulness
- ✚ Excessive sleeping
- ✚ Persistent aches or cramps



## ***Emotional symptoms***

- ✚ Persistent sad or anxious or empty feeling
- ✚ Feeling of hopelessness
- ✚ Feeling of guilt
- ✚ Thoughts of suicides or suicide attempts



## ***Behavioral symptoms***

- ✚ Loss of interest in activities
- ✚ Difficulty concentrating
- ✚ Difficulty in remembering details
- ✚ Neglecting responsibilities



## **Management**

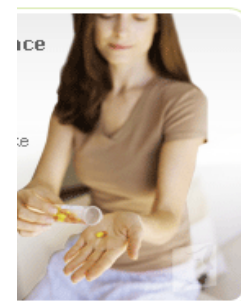
- ❖ Regular exercise
- ❖ Eating healthy
- ❖ Meditation or yoga
- ❖ 30mts sessions of physical activity such as walking ,jogging, swimming and cycling
- ❖ Natural hormone supplements
- ❖ Seek the advice of healthcare professionals



## **MOOD SWINGS**

### **Causes**

- Estrogen decline
- Physical discomforts
- Lack of rest and sleep
- Excess consumption of drugs ,caffeine
- Stress



## Symptoms

- Emotional highs and lows
- Irritability
- Depression and elevation of mood
- Confusion
- Sudden inability to handle stress



## Management

- Healthy lifestyle
- Exercise, diet and calcium supplements such as milk and leafy vegetables
- Counseling, maintaining open communication
- Pleasurable calming hobbies



## PANIC DISORDERS

### Causes

- ✓ Decline in estrogen level
- ✓ Family history
- ✓ Traumatic events
- ✓ Increased consumption of caffeine
- ✓ Disturbed sleeping pattern
- ✓ Excessive consumption of sugars and fats



### Symptoms

- ✚ Choking, chest pain, distress
- ✚ Rapid or shallow breathing
- ✚ Trembling, sweating or shaking
- ✚ Fear, fright, anxious, palpitation



## **Management**

- Healthy diet high in nutrients
- Proper exercises
- Adequate amount of sleep and rest
- Natural hormone supplements



## **CONCLUSION**

The premenopausal symptom adversely affects the daily life of midlife women; there are many ways to approach treatment. These include self care, life style changes, natural therapies and medical options.

**khjÉy;»« K< m;F;fÿ k%W« á»çir Kiwfÿ g%za ey;fšÉ :-**

**K<Diu :-**



khjÉy;F k%W« khjÉy;»« K< m;F;fÿ v<gJ x>bthU  
bg©Â< thœ;ifÆY« el;f; Toa x<W. mt©fÿ jšfÿ thœ;ifÆš i'j  
fłlœij miltJ ia%oif. iij mila; Toa taJ 45-50 tiu MF«.

khjÉy;F v<gJ Æu<sup>a</sup>jukhf khjÉlhœ Æ%oghF«. 12 khjšfÿ  
khjÉlhœ tuhš iU;F«nghJ, khjÉy;if eh« cWâbrœayh«.  
khjÉy;»%F K< m;F;fÿ khjÉy;if miltj%F 2-10 M©Lš;F K<  
tuœbjhlšfyh«. iJ clš RuŸãfË< kh%wœâ< fhuzšfshš cUth»wJ.  
XU bg©Â< clš j<ikÆËU<sup>a</sup>J k%wtÇ< clš j<ik ntWgL«.

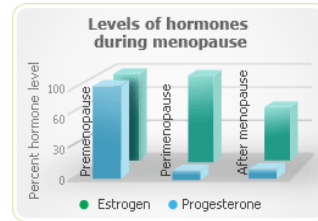
**khjÉy;»« K<m;F;fÿ :-**

clš bâahd kh%wšfÿ k%W« kdâahd kh%wšfÿ vd iU  
tifŸgLœjyh«.

**clšbâahd kh%wšfÿ:-**

- Kiwa%ow khjÉlhœ

- clš cZz« mâfÇᄁjš
- glŸglŸò
- clš vil mâfÇᄁjš
- bg©Âˆ āwŸòWŸò tw£á miljš
- mo;fo áWÚ® fÊᄁjš
- nrh®î



**kdâahd kh%owšfŸ:-**

- ftiy
- kd mGᄁj«
- ga« V%ogLjš
- kdÃiy khWgLjš

**clš âahd mçFçfS« bghJthd á»çir KiwfŸ :-**

**Kiwa%ow khjÉlhŒ :-**

ij khjÉy; if milaÉU;F« bg©fS;F Kjš mçFçahF«.

**fhuzšfŸ :-**

- <°£nuh#ˆ k%oW« òuÍ°ouhd RuŸáfÊš V%ogL« kh%owšfŸ
- f®ŸgŸig nfshW
- fšäuš nfshW
- r®;fiu nehŒ
- ò%oWnehŒ
- iuᄁjnrhif
- clš vil TLjš
- rᄁJ Fiwthd czîKiw
- mâfntiy

## mꞥFꞥfŸ

- ✓ mâf iuꞥjŸnghꞥF
- ✓ ÉLgꞥl khjÉlhŒ
- ✓ iuꞥj Xꞥlꞥâš V%ogL«  
kh%owšfŸ



## á»ꞥir Kiw :-

- <°fnuh#< gꞥkh%ow« brŒjš
- âdK« cl%ogÆ%oa brŒjš
- fhŸã< bghUꞥfis jÉ®ꞥjš
  
- nahfhŸgÆ%oa brŒjš



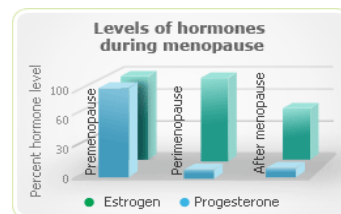
## clš cZz« mâfŒꞥjš :-

### fhuzšfŸ:-

- <°fnuh#< RuŸãÆš V%ogL« kh%ow«

## mꞥFꞥfŸ :-

- clš NL mâfkhjš
- nt®it mâfŒꞥjš
- öjfÄ<ik
- ÓŒšyh ijaꞥJoŸò



## á»ꞥir KiwfŸ :-

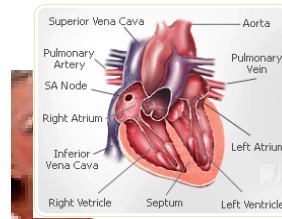


- mâfkhf FĚ®<sup>a</sup>j j©Ûiu vŸbghGJ« Foᄁjš
- gUᄁâ Milfis mĀjš
- Ā< Éá¿ cgnah»ᄁjš

- öĖikahd fh%oiw Rtháᄁjš
- Nlhd NœĀiyia jĚ®ᄁjš
- FhŸã< r«g<sup>a</sup>jŸgfl czîfŸ, fhu czîfis jĚ®ᄁjš



- \_çR gÆ%oá, nahfhrd« brĖjš
- CflçrᄁJŸs czîfis c©Qjš (òuj«, itflĀ< i k%oW« ã)



**clš vil TLjš :-**

**fhuzšfŸ :-**

- <°fnuh#< k%oW« òuc msî Fiwjš
- M©fnuh#< msî Fiwjš
- cl%ogÆ%oá Fiwjš
- kd mGᄁj«



**á»çir KiwfŸ :-**

- bjhl®<sup>a</sup>J cl%ogÆ%oá brĖjš
- rᄁJŸs czîfis c©Qjš
- RuŸãfis gÇkh%ow« brĖjš

**gglŸò :-**

**fhuzšfŸ :-**

- <°onuh#< msî Fiwjš
- cl%ogÆ%oá
- ftiy, kd mGᄁj«
- ijanehĖ, ijÆuhĖL ãuçridfŸ.

## mꞥFꞥfŸ

- ĩjaꞥJoŸig cz@jŸ
- mǎfkhd ĩjaꞥJoŸò
- \_çR âzwŸ
- nrh@î



## á»çir KiwfŸ :-

- nahfh gÆ%oá
- RuŸáfŸ gÇkh%ow«
- fhāia FiwꞥjŸ



## ãwŸò cWŸò twǎá miljŸ

- <°onuh#< FiwjŸ
- kd mGꞥj«

## mꞥFꞥfŸ

- mÇŸò k%W« vÇçrŸ
- clŸ cwÉ< nghJ tÈ V%ogLjŸ
- mǎfkhf áWÚ@ fÈꞥjŸ



## á»çir KiwfŸ:-

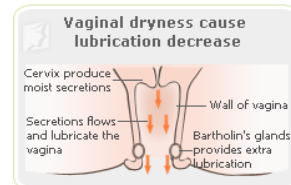
- ãwŸò cWŸã< tÊahf <°onuh#< brYꞥJjŸ
- \_çR gÆ%oá brÇejŸ
- ÒòujçrꞥJŸs czîfis cǔbfhŸSjŸ
- ãwŸò cWŸig ÄUJth;f âutŸfis ga<gLꞥJjŸ



## bjhl@J áWÚ@ fÈꞥjŸ

## fhuzŸfŸ

- <°fnuh#< msî FiwjŸ
- kd mGꞥj«



- ijanehŒ
- »UÄÆ< jh;f«
- kUªJfÿ cfbfhÿSjş



### m¿F¿fÿ

- iUkş, áÇşjş k%W« J«KjÈ< nghJ« áWÚ® btËahjş
- XL« nghJ«, mâf vil ö;F«nghJ« áWÚ® btËahjş
- áWÚ® fÊ;F« cz®î mâfkhf iUşjş



### á»çir Kiwfÿ

- iLÿð k%W« ãwÿð cWÿð gÆ%óá brŒjş
- òifÆiyia jÉ®şjş
- kdmGşşij jÉ®şjş



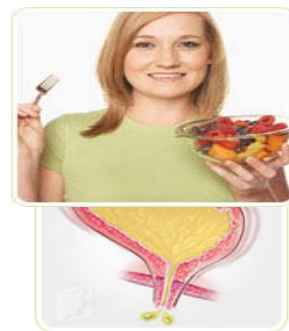
### nrh®î

#### fhuzşfÿ

- <°£nuh#< k%W« òuÍ°£uh< msî Fiwjş
- ö;fÄ<ik

### m¿F¿fÿ :-

- ftdFiwî V%ogLjş
- eilgÆ%óá Fiwjş
- czî cfbfh®l ã<ò« nrh®î V%ogLjş
- Phfr;â Fiwjş



### á»çir Kiwfÿ:-

- e<whf cwşFjş



- rÇÉfj czî c£bfhŸSjš



**kd Bâahd m¿F¿fS« á»çir KiwfS«**

**ftiy :-**

**fhuzšfŸ :-**

- <°£nuh#< msî Fiwjš
- kd mGǻj«
- kd nrh®î



**m¿F¿fŸ :-**

- glglŸð
- gj%ow«
- ftd« Fiwjš
- vÇçrš miljš k%W« guguŸghf iUǻjš



**á»çir KiwfŸ:-**

- mâfkhd ntiy k%W« cl%ogÆ%á
- czîKiw kh%ow«
- nahfh gÆ%á

**kd mGǻj« :-**

**fhuzšfŸ :-**

- <°£nuh#< Fiwjš
- jiyKiwahf tUjš
- gH¿ftH¿f«
- FL«g NœÃiyahš



- ftiyahf iUǻjš

- M@t« Fiwjš

### m¿F¿fŸ :-

- VnjD« m¿F¿fŸ ü©L thušfS;F nkš iUąjš
- ftiy cz@îł< iUąjš
- M@t« FiwªJ fhzŸgŁjš

### clš m¿F¿fŸ :-

- nrh@î
- r;â Fiwjš
- gáÆ<ik
- mâfkhf c©Qjš
- cw;fÄ<ik
- mâfkhf cwšFjš



### kd msÉš m¿F¿fŸ :-

- kd ftiy
- btWikahf cz@jš
- F%ow cz@î
- j%obfhiy cz@î k%W« j%obfhiy  
Ka%oa brĈjš



### gH;ftH;f m¿F¿fŸ :-

- M@t« Fiwjš
- ftd« Fiwjš
- Phgf kwâ

Types of Depression

- Major Depression.
- Dysthymic Disorder.
- Adjustment disorders.
- Postpartum Depression.
- Manic depression or bipolar disorder.
- Psychotic depression.
- Seasonal Affective Disorder (SAD).

**á»çir Kiwfÿ :-**

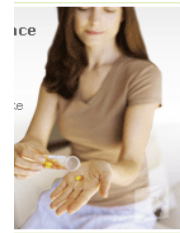
- bjhl® cl%ogÆ%oá brÇejš
- ešy czî Kiw
- nahfhrd« brÇejš
  
- eilgÆ%oá, ÚçršgÆ%oá
- kU»Jtiu mQFjš



**kdÃiy khWghL :-**

**fhuzšfÿ :-**

- <°fnuh#< Fiwjš
- öjfÄ«ik
  
- mâfkhf kh»âiu k%oW« fhã Fo»jš
- kd mG»j«



**m¿F¿fÿ:-**

- kdnrh®î khWg£L c%orhf« miljš
- vÇçrš miljš
- kd mG»j«
- FHÿg« miljš
- kdmG»j»ij ifahs Koahj j«ik



**á»çir Kiwfÿ:-**

- cl%ogÆ%oá
- fhšáa« cÿs czîKiw (ghš, Ñiutiffÿ)
- kdÃiy Mnyhrfiu mQFjš
- k»æçáahf iU»jš



**ga cz®î:-**

**fhuzšfÿ:-**

- <°£nuh#< msî Fiwjš
- FL«g tuyhW
- cwıfÁ<ik
- ÉgαJ V%ogLjš

### m¿F¿fŸ:-

- ga«
- ftiy
- \_çR âzwš
- Máfkhf Éa®αjš
- beŠR tÈ

### á»çir KiwfŸ :-

- rαJŸs czîKiw
- cl%ogÆ%oá

- njitahd msî cwıf«
- RuŸãfŸ gÇkh%ow«



