EFFECTIVENESS OF AUTOGENIC RELAXATION ON

DEPRESSION AMONG MENOPAUSAL WOMEN

A DISSERTATION SUBMITTED TO THE TAMILNADU

DR.M.G.R. MEDICALUNIVERSITY, CHENNAI, IN PARTIAL

FULFILMENT OF THE REQUIREMENT FOR THE DEGREE

OF MASTER OF SCIENCE IN NURSING

APRIL 2012

CERTIFICATE

This is the bonafide work of **Mrs. W.AROCKIA SUGANTHY M.Sc.,** Nursing II year student from Sacred Heart Nursing College, Ultra Trust, Madurai, submitted in partial fulfilment of the Degree of Master of Science in Nursing under The Tamilnadu Dr. M.G.R. Medical University, Chennai**.**

Dr.Nalini Jeyavanth Santha M.Sc., (N), Ph.D.,
Principal,
Sacred Heart Nursing College
Ultra Trust
Madurai – 625 020.

Place:

Date:

EFFECTIVENESS OF AUTOGENIC RELAXATION ON DEPRESSION AMONG MENOPAUSAL WOMEN

APPROVED BY THE DISSERTATION COMMITTEE ON:_____

PROFESSOR IN NURSING: _____

RESEARCH   Dr. (Mrs). Nalini Jeyavanth Santha, M.Sc. (N), Ph. D.,(N)

                                              Principal

                                    Sacred Heart Nursing College, Madurai-20.

CLINICAL SPECIALTY : _____

EXPERT   Prof. (Mrs). Jesinda M.Sc. (N)

                                    HOD of Mental Health Nursing

                                    Sacred Heart Nursing College, Madurai-20.

MEDICAL EXPERT   : _____

                                    Dr.(Mr). Karthikeyan, M.D, DPM,

                                    Assistant professor,

                                    Department of psychiatry,

                                    Govt.Rajaji Hospital,Madurai.

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

APRIL 2012

ACKNOWLEDGEMENT

"I have graven you upon the Palm of my hands"

- *Isiah 49: 16*

The satisfaction and pleasure that accompany the successful completion of any task would be incomplete without mentioning the people who made it possible. I consider it a privilege to express my gratitude and respect to all those who guided and inspired me in the completion of this study.

First and foremost, I thank the **Lord Almighty** for his blessings showered upon me.

I express my sincere thanks to **Prof. K.R. Arumugam, M. Pharm.,** Correspondent, Scared Heart Nursing college, Ultra Trust, Madurai for his support, encouragement and for providing the required facilities for the successful completion of this study.

I owe my deepest gratitude to **Dr. Nalini Jeyavanth Santha, M. Sc (N), Ph. D.,** Principal, Sacred Heart Nursing College, Ultra Trust, Madurai for her constant support and guidance in shaping this project into the present form.

It is a privilege to thank **Mrs. Jesinda, M. Sc (N),** HOD of Psychiatric nursing, Sacred Heart Nursing College, who made this thesis possible. I express my heartful gratitude for her efforts, hard work, interest and sincerity to mould this study in a successful way.

An ever green unforgettable memory is friendship. I express my deep sense of gratitude and heartfelt thanks to **Varun, Karthik and Dhanesh** who are the main inspiration behind this book.

I thank all the samples who participated in this study.

TABLE OF CONTENTS

Chapter No.	Contents	Page No.

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

ABSTRACT

A study to evaluate the effectiveness of autogenic relaxation on depression among menopausal women in selected villages at Madurai.

An experimental approach was used and the conceptual framework of the study was based on wiedenbach's helping art of clinical nursing theory. Pre test post test control group design was used for this study. Purposive sampling technique was used to select the samples . The total sample size was 60, 30 were selected in the experimental group and 30 in the control group by simple random sampling. The tool used for data collection had two parts. Part one was demographic variables of the menopausal women and part two was modified Cornell Dysthymia rating scale. Autogenic relaxation was administered for 30 samples in the experimental group which was divided into six groups. Exercise was given for twenty minutes per group. Descriptive statistics (Frequency, mean, percentage) and inferential statistics (paired t test, independent 't' test & chi-square) were used to analyze the data and to test the hypothesis.

In experimental group, majority (43.33%) of the menopausal women were above 50 years and 53.33% had their primary education. 70% of menopausal women in the experimental group were married. 80% of menopausal women in the experimental group were Hindu, 66.66% of menopausal women were housewives, 56.66% have two children, 63.33% belongs to nuclear family, 36.66% of menopausal women in experimental group had their period of cessation of menstruation before one year and 53.33% of women has no problem with their husband. The obtained 't' value (9.49) was statistically significant at 0.05 level using paired 't' test. The obtained 't' value (7.67) was statistically significant at 0.05 level at 58 d.f using

independent t-test. There was a significant association between post test level of depression and selected demographic variables like occupational status and problem with husband.

Autogenic relaxation can be a nurse initiated intervention that has the advantage of being therapeutic for depressive clients. It can be used to reduce the level of depression among menopausal women.

. **CHAPTER – I**

INTRODUCTION

BACKGROUND OF THE STUDY

"The mind is its own place and in itself, can make a heaven and hell or hell and heaven"

-   ***John Milton.***

Menopause is a period equivalent to three previous cycles or as time of cessation of ovarian function resulting in permanent amenorrhea. Menopause is said to be universal reproductive phenomenon, which can be perceived as unpleasant. This period is generally associated with unavoidable manifestation of aging process in women. (As cited by Susan Nolan Hoeksema 1990).

Menopause is the time of a woman's life when reproductive capacity ceases. Menopause is a life changing event that will affect all women in the world, there is no race or ethnicity that is excluded from the onset and upheaval that menopause can cause in woman's life. Overtime, a woman's ovaries slowly make less and less of the hormones estrogen and progesterone. Eventually, ovaries in women run out of functioning eggs which results in menopause. (retrieved from //en.wikepedia.org).

Menopause is marked by Hypoestrogenism which lead to hot flashes, sleep disturbances, vaginal Atrophy and Dryness. The sexual drive may not be diminished but some women find it difficult to accept that they are no longer fertile. This results in cognitive and affective disturbances like anxiety, irritability, difficulty in concentration and decreased self confidence which leads to depression (Mary.c.townsend ., 2006).

Depression is the illness that has many causes. In a scientific way, it is caused by biologic factor. Serotonin hormones in the brain are required to regulate the mood. In depression, women feels sad, hopeless, melancholy for prolonged period of time. Depression has too many effects in life such as physical ailments, isolation and even suicide (Niraj Ahuja.,2005).

Women's perception towards physiological problems during menopause has been described as an omitted area in our country and needs vital attention.

Around the world, 8% to 15% of menopausal women experience some form of depression. There is no reason behind why most of the menopausal women feel Bipolar mood disorders (retrieved from www.indepression.com).

Currently men and women in India in the 60 plus age group number 60 million i.e. about 6% of the population. Projection for the year 2025 shows that aging population would increase to about 12% of the total. According to Indian menopause society research there are 65 million at the age of menopause (cited by www.Indian Psychiatry.com)

Autogenic relaxation was rooted in Germany, developed by psychiatrist and neurologist Dr. Johannes Schultz (1884-1970) in the early 20th century. Schultz was influenced and supported by Freud.

The term "Autogenic" comes from the Greek word "autos" meaning "self" and "genous" meaning "produced by". Autogenic relaxation is a powerful, successful, self healing technique that almost anyone can learn to practice alone and it will. It can

successfully be taught and practiced either individually or in group and or less, but it is not recommended by Schultz and Luther for children under age 16 (Andrea,Dunn and Chambliss,2005).

The rationale of autogenic relaxation is to enable autonomic self regulation by eliminating environmental distraction that accompanies the autonomic self regulation through a structured set of specific exercise which is easy to learn and practice on one's own (Linden, 1994). It has demonstrated over time the capacity to bring forth a healthy balance between the sympathetic (flight or fight) and the parasympathetic (rest, renewal, repair) workings of the autonomic nervous system.

SIGNIFICANCE AND NEED FOR THE STUDY

Menopause experiences are different among individual women and also among women in different culture and in different parts of the world. The research has shown that women's experiences of menopause can be related to many things including genetics, diet, lifestyle, social and cultural attitude towards older women (Brown, Gallichio, 2009).

Women's perception towards physiological problems during menopause and described that menopause has been omitted area in our country and needs vital attention.

Due to stress imposed on oneself diseases like hypertension, diabetes, heart diseases are precipitated. There was an association between illiteracy and women's mental health (Bhargari Davar,1995).

Menopausal women are most affected because of the changes in physical and psychological well being. Adding to this, life events and role changes in the life is if positive enhances health and if negative lead to mental disequilibrium (Barbara,signel,2000).

Indian has a large population, which has already crossed the one billion mark with 71 million people over 60 years of age and the number of women about 43 million. Projected figures in 2026 have estimated the population in India will be 1.4 billion, people over 10 years 173 million and the menopausal population will be 103 million. Average age of menopause is 47.5 years in Indian women with an average life expectancy of 71 years (cited by www.google .com).

There was a relationship between menopause depression and variables including self concept, menopause attitudes, life event stresses, climacteric physiologic symptoms. The prevalence of depression during menopause among Taiwan women is 31.2%.

Low self concept and increased climacteric symptoms are closely related to depression among menopausal women.

Major depressive disorder is a common debilitating condition that affects twice as many women as men. Accumulated evidence suggested that hormone fluctuation may play an important role such as increased rate of depression among females.

Four epidemiological surveys and four longitudinal surveys reported increased rate of depression among menopausal women (Burt et. al 2004).

There was the greatest difference between rate of admission for male and female for affective disorder was between the age of 45 and 55 years which corresponds to menopausal and perimenopausal years (Weisman,1979).

The researcher have witnessed many cases of menopausal women in her personal experience who do not have awareness regarding the menopausal symptoms and how it is detoriating their life. During the literature review, the researcher found only handful of studies on autogenic relaxation. Hence, the researcher felt the need to perform an experimental study to evaluate the effectiveness of autogenic relaxation on depression among menopausal women.

STATEMENT OF THE PROBLEM:

A Quasi experimental study to evaluate the effectiveness of autogenic relaxation on depression among menopausal women in selected villages at Madurai.

OBJECTIVES OF THE STUDY:

❖ To assess the pre test and post test level of depression among menopausal women in the experimental group who had autogenic relaxation.

❖ To assess the pre test and post test level of depression among menopausal women in the control group.

❖ To evaluate the effectiveness of autogenic relaxation on depression among menopausal women.

❖ To associate the post test depression level of menopausal women in the experimental group with their demographic variables. (age, educational status, marital status, religion, women's occupational status, number of children, type of family, period of cessation of menstruation, problem with husband and any medical problems)

HYPOTHESIS:

All hypothesis will be tested at 0.05 level of significance.

1. The mean post test depression score of the menopausal women who had autogenic relaxation will be significantly lesser than the mean pre test score in the experimental group.

2. The mean post test depression score of the menopausal women in experimental group who had autogenic relaxation will be significantly lower than the mean post test depression score of menopausal women in the control group.

3. There will be a significant association between post test depression level of menopausal women who had autogenic relaxation and their selected demographic variable (age, educational status, marital status, religion, women's occupational status, number of children, type of family, period of cessation of menstruation, problem with husband and any medical problems).

OPERATIONAL DEFINITION:

Menopausal Women:

It is the cessation of menstruation in the period of women's life above 40 years from the time of onset.

Depression:

It refers to the illness that involves body, mind and thought that affects the menopausal women which is measured by using modified cornell dysthmia rating scale.

Effectiveness:

It is the outcome of autogenic relaxation which will be appraised, validated by decrease in depression level among menopausal women.

It is the difference in the post test level of depression between experimental group and control group and it is measured by modified cornell dysthymia rating scale.

Autogenic relaxation:

It is the kind of relaxation technique which involves six progressive steps practicing for once in a day for 20 minutes during which menopausal women focus on breathing, circulation and muscle relaxation.

ASSUMPTION:

1. Menopause is a period in which the women feels hopelessness ,sadness, tired, increased anger and looking out for support
2. Many women fear about menopause and thus stress lead to depression.
3. Relaxation enhances sense of well being.

DELIMITATION:

1. The study is delimited to menopausal women in selected villages at Madurai.
2. The data collection period is limited to six weeks.

PROJECTED OUTCOME :

The study is to evaluate the effectiveness of autogenic relaxation in reduction of depression among menopausal women. The study sessions will help to arrange autogenic relaxation sessions in order to manage depression among menopausal women.

CONCEPTUAL FRAMEWORK

This study is based upon Wiedenbach's helping art of clinical nursing theory. .Wiedenbach first published her ideas in 1964 in clinical nursing. She further refined her theory in "Nursing wisdom in nursing theory" published in 1970.

Wiedenbach views nursing as an art based on goal directed care. Factual and speculative knowledge, judgment and skills are necessary for effective nursing practice.

Wiedenbach's vision of nursing practice closely parallels assessment, implementation and evaluation steps of nursing process.

According to Wiedenbach, nursing practice consists of identifying a patient's need for help, ministering the needed help and validating that the need for help was met. The main concepts of this study are,

1. Identifying a need for help

2. Ministering needed help

3. Validating that need for help was met.

1. Identifying a need for help:

Here the individual is considered as a unique experience person. Person needs are determined and seen whether the person realizes the need and what prevents the person from meeting the need. In this study, it refers to the assessment of depression level among menopausal women before autogenic relaxation.

2. Ministering the needed help:

It measures to meet the need of the individual who needs help. In this study it refers to ministering autogenic relaxation to the menopausal women with depression.

3. Validating that a need for help was met:

It is to evaluate and show that individual need have been met and his functional ability has been returned as a direct result of the nurse action. In this study it refers to assessment of post test level of depression after autogenic relaxation. There will be a reduction in the level of depression.

Fig-1 CONCEPTUAL FRAMEWORK BASED ON WIEDENBACH'S HELPING ART THEORY

Identify a need for help

Ministering the needed help

Validating that a need for help was met

Assessment of level of depression among the menopausal women in selected villages.

- Insomnia
- Worry
- Sad feelings
- Forgetfulness
- Loneliness
- Tired
- Low sexual interest
- Worthlessness

Experimental Group

Administration of Autogenic relaxation

Control Group

Time: 20 minutes / session

Preparation
Six standard formulas
- Heaviness formula
- Warmth formula
- Cardiac formula
- Respiratory formula
- Abdominal formula
- Coolness formula

Assessment of level of depression among menopausal women:

- Improved sleep
- Ability to experience pleasure
- Feels worthy
- Increased energy level
- Relaxed

No Autogenic relaxation

Ineffective response and no depression reduction on assessment

FEEDBACK

CHAPTER – II

REVIEW OF LITERATURE

The Review of Literature was done from published articles, textbooks, reports and Medline search literature review is organized and presented under the following sections.

1. Overview of menopause

2. Literature related to Menopausal depression

    a. Definition of menopause

    b. Definition of depression

    c. Stages of menopause

    d. Changes during menopause

    e. Theoretical views of menopause

    f. Types of depression in menopause

    g. Risk factors for depression during menopause

    h. Causes of depression during menopause

    i. Effects of menopause

    j. Management of depression in menopausal women

3. Studies related to menopausal depression

4. Literature related to Autogenic relaxation

5. Studies related to effect of autogenic relaxation on depression of menopausal women.

"We do not have to visit madhouse to find disordered minds; our planet is the mental institution of the universe".

- Goethe

OVERVIEW OF MENOPAUSE:

Menopause is a term used to describe the permanent cessation of primary function of the human ovaries, the reopening and release of ova and the release of hormones that cause both the creation of uterine lining and subsequent shedding of the uterine lining (cited by en.wikepedia.org).

The word "Menopause" literally means the "end of monthly cycles" from the Greek word "pauses" (Cessation) and the root men (month), because the word "menopause" was created to described this change in human females, where the end of the fertility is traditionally indicated by permanent shopping of monthly menstruation or menses. However, menopause also exists in some other animals, some of which do not have monthly menstruation (Gail. Stuart., 2001).

Menopause and Depression:

Depression is a serious psychiatric illness. "It is the most common illness in world and appears to be an underlying component of almost all other illness. Significant depression essentially weakens the immune system and thus leads to multiple disturbances in the entire metabolic control system" (Shealy, 2005, P. 95).

During menopause feel sad and thus sadness leads to depression. Many women fear about menopause and that stress lead to menopausal depression menopausal depression is like with fluctuating levels of hormones in the body. These

hormones are directly related to the mood centers of the brain. Women feel sad and hopeless when hormones drop especially estrogen (chedraui, Grucopobia,2008).

The date of menopause in human females is formally, medically defined as the time of the last menstrual period (or menstrual flow of nay amount) in those women who have not had a hysterectomy. Women who have their uterus removed but retain their ovaries immediately going into menopause even though period cease (Dayton, Prez, 2009).

The age at which the natural menopause occurs is between the ages of 45 and 55 years for females worldwide.

It is generally accepted that the average age at menopause is about 51 years in industrialized countries. In developing countries, it ranges from 43 to 49 years (David Mckay., 2002)

a) Definition of Menopause:

Menopause is defined as the last menstrual period (or menstrual flow of any amount) in those women who have not had a hysterectomy. (Raeda., 2001).

b) Definition of Depression:

Depression is a disease caused by fluctuation of hormones in the brain especially serotonin, which is responsible for regulating the mood. (Niraj ahuja., 2005).

c) Stages of Menopause:

- ❖ Perimenopause
- ❖ Premenopause
- ❖ Post menopause (retrieved from www.Menopause.org).

Perimenopause:

Perimenopause is technically defined as the time from which menses started to become irregular and FSH levels have increased, the hormonal changes are gradual, both in onset and in termination.

During perimenopause, the ovarian production and the estrogen and progesterone become more irregular, often with wide and in predictable fluctuations in levels.

Premenopause:

Premenopause is a word used to describe the years leading upto the last period, when the levels of reproductive hormones are already becoming lower and more erratic and the effects of hormonal withdrawal may be present.

Post menopause:

The term post menopause is applied to women who have not experienced a menstrual bleed for minimum of 12 months.

Post menopause is all of the time in a women's life that take place after her last period, or more accurately, all of the time that follows the point when her ovaries become inactive.

d) Changes during Menopause:

During the time leading upto menopause as well as during the postmenopausal period, women can begin to feel depressed and anxious. She may also feel irritable and less like her usual self. It is thought that drop in the hormones such as estrogen levels, is a trigger of changes within the brain, which can then be linked to depression. (Werten,1992).

Other medical professionals, however, believe that the menopausal symptoms such as hot flashes, fatigue and night sweats are the basis for a woman experiencing depression symptoms during the menopausal periods--- still, there is another belief in women's health is that it is an intricate combination of hormones and menopausal symptoms that lead to depressive symptoms.

e) Theoretical views of Menopause (Retrieved from www.gfmr.ech/books).

The Hormonal Theory:

Changes in hormones do affect the emotions, in some women this is pronounced, and in others it is hardly noticeable. This depends to some extent on how rapidly the hormone levels change and also of course on the general make up of the women and how she reacts to it, but the menopause may be a time of instability. The actual level of circulating hormones also has an effect. The depression associated with hormonal changes in menopause is similar to emotional instability of puberty and postpartum depression which often occurs during delivery of a child.

The Involutional Theory:

If the woman's periods have gone, it is thought that women feels death is around the corner. Death is something "happens to someone else", if she is on the top of thing. But admittedly, in this youth oriented society, depending on what women have valued in the past, changes at this time do perhaps suggest a loss of youth. Fortunately, more and more women realize that there is more in life than youth.

f) Types of Depression in Menopause:

There are six main types of depression which are related to menopause. The following are categories of depression linked to menopause (Snello et .al 2001).

Major Depression:

It lasts for more than 2 weeks characterized by intense feelings of sadness, loss of interest in normal activities, withdrawal from friends and family and negative thoughts.

Dysthymic Disorder:

It is less intensive than major depression but often lasts for longer, normally for two years (or) more.

Adjustment Disorder:

Often brought by a stress fill event or situation. It can be acute (lasting less than 6 months) or chronic (lasting longer).

Seasonal Affective Disorder:

A type of depression that is triggered by the seasons and most commonly caused by a lack of sunlight in winter months.

Other types of depression which are less associated with menopause include the following:

Manic depression or Bipolar disorder:

A brain disorder that causes unusual shifts in a person's mood, energy and ability to function.

Psychotic Depression:

Include some features of psychosis such as hallucinations / delusions.

g) Risk factors for Depression during menopause: (Jane, 2002).

There are people who are susceptible to the feelings of depression during menopause. Risk factors for depression during menopause include:

- ❖ Stressful events occurring at the sometime as menopause
- ❖ Severe symptoms of menopause
- ❖ Lifestyle factors such as smoking or lacking of exercise.
- ❖ Negative image associated with menopause
- ❖ Regrets that you can no longer have children
- ❖ Having experienced depression prior to menopause
- ❖ Poor support network during menopause
- ❖ Dissatisfaction with your relationship or career
- ❖ Financial difficulties
- ❖ Poor self confidence and low body image.

h) Causes of Depression in Menopausal women :(retrieved from http//:women to women.com)

Women are about twice as likely as men to suffer from depression. This two-to-one difference persists across racial ethnic and economic divides. The underlying cause of depression in menopausal women has to do with hormonal imbalance, especially decreased levels of estrogen. As women approach menopause, their estrogen levels begins to drop off. This hormone plays a big part in regulating brain functions, especially. Chemicals that influence mood, such as serotonin and cortisol. Decreased level of estrogen during menopause can also cause physical & mental symptoms other causes include:

- ❖ Biochemical factors

- ❖ Genetic

- ❖ Personality

- ❖ Environmental factors

- ❖ Disease

i) Effects of Menopause:

Physical symptoms:

- ❖ Fatigue

- ❖ Decreased energy

- ❖ Over eating

- ❖ Appetite loss

- ❖ Insomnia

- ❖ Early morning wakefulness

- ❖ Excessive sleeping

- ❖ Persistent aches or pain

- ❖ Headache, cramps or digestive problems.

Emotional Symptoms:

- ❖ Persistent sad, anxious or 'empty' feelings

- ❖ Depression

- ❖ Anxiety

- ❖ Feeling of hopelessness & pessimism

- ❖ Feelings of guilt, worthless and helplessness

- ❖ Irritability

- ❖ Restlessness

- ❖ Thoughts of suicide

Behavioral symptoms:

- ❖ Loss of interest in activities or hobbies once pleasurable which includes sex.

- ❖ Difficulty concentrating

- ❖ Difficulty in remembering details

- ❖ Difficulty in making decisions

- ❖ Neglecting responsibilities

- ❖ Failing to attend to one's physical appearance.

j) Management of Depression in Menopausal Women: (Bertha selia,Mary Jirovce,2001)

Pharmacological Treatment:

- ❖ Hormone replacement therapy

- ❖ Conjugated equine estrogen

- ❖ Selective estrogen receptor modulators

- ❖ Anti-depressants

- ❖ Gabapentin

- ❖ Anti-hypertensive

Psychological Treatment:

- ❖ Cognitive behavior therapy

- ❖ Psychotherapy

- ❖ Behavior therapy

Complementary system of medicine:

- ❖ Autogenic relaxation

- ❖ Acupressure

- ❖ Aromatherapy

- ❖ Ayurveda

- ❖ Breathing exercise

- ❖ Homeopathy

- ❖ Muscle relaxation

- ❖ Spiritual therapy

- ❖ Visual imagery

- ❖ Photo stimulation

3) Studies related to Menopausal Depression:

Lu Sy, Tseng, H.F et.al (2009) conducted their study at Southern Taiwan on factors related to depression during menopause. The purpose of this study was to survey prevalence of women's depression during menopause and to investigate the relationship between menopause depressions and variables including self concept, menopause attitudes, life event stressors, climacterically physiological symptoms and demographics. The prevalence of depression among participants was 31.2%. This preliminary survey suggests that low self concept and increased climactically physiological symptoms are closely related to depression among menopausal women.

Kanfert, P.A. Gilbert, P. Tate, R (2008) conducted a study on re-examination of the link between menopause and depression. This study re-examines the association between menopause and depression using data from a study in which 497 women were interviewed six times over a three year period. Menopause is examined as one of the series of factors which may increases the risk of depression in woman of middle age. This study concludes that rather than hormonal changes, stresses of family life in a women's menopausal year trigger her depression.

Freeman E.W. Sammel, MD Lin et. al (2009) studied temporal associations of hot flashes, depression in the transitions to menopause. The aim of this study was to evaluate association between hot flashes and depressed mood in the menopausal transitions and association of these symptoms with reproductive hormone changes. They compared the evidence of hot flashes with the incidence of depressed mood for 10 years among which 67% of the women reported hot flashes, 50% reported depressed mood and 41% reported both symptoms. They finally concluded that depressive symptoms are more likely to precede hot flashes in women who reported both symptoms.

Ryan. J. Burger. H.G. et al (2009) conducted a prospective study to determine (or) find out the association between endogenous hormone and depressive symptoms in post menopausal women. This study deals with the variations in hormone levels which are known to influence mood and well being changes in hormone levels over a period of time are associated with depression among post menopausal women. They suggest that the changes in estradiol and to a lesser extent, in follicle stimulating hormone levels are associated with an increased risk of depressive symptoms in post menopausal women. These results further support a role a fluctuating rather absolute hormone levels in depression in later life.

Marsh W.K. Ketter, T.A. Rasgon N.L (2009) studied increased depressive symptoms in menopausal age women. This study examines the course of bipolar disorder focusing on depressive symptoms in menopausal transition age women, compared to similar aged men as well as younger adult women & men. They examined 164 bipolar disorder patients 167 type, 82 type II, and 15 not otherwise specified? Found that 34% were rapid cycling and 58% woman than non-cyclic. They

concluded that the menopausal transition aged women with the bipolar disorder experience a greater proportion of visit to clinic with depressive symptoms compared to similarly aged men, and younger women and men with bipolar disorder.

Brown. J.P. Galliochio L, Flaws J.A Trocyn (2009) studied relationship between menopausal symptoms, sleep disturbance and depressive symptoms in midlife. The aim of this study is to investigate the relationship between hot flashes, other menopausal symptoms, sleep quality and depressive symptoms in midlife women. This study concluded that there is a significant link between depressive symptoms and several menopausal symptoms extent, in follicle stimulating hormones levels are associated with an increased risk of depressive symptoms in post menopausal women. These results further support a role of fluctuating rather than absolute hormone levels of depression in later life.

Lee Y, Kim H (2008) studied the relationship between menopausal symptoms, depression & exercise. The aim of this study is to determine the relationship between the severity of menopausal symptoms and depression in Korean women 40-60 years of age and to compare the severity of menopausal symptoms and depression between subject who exercise regularly and subjects who do not exercise regularly.

This study concludes that the women who were depressed had more menopausal symptoms than the women who were not depressed and who exercised regularly are less depressed and less symptomatic than women who did not exercise.

Spangler L. Scholes D. Brunner R.L et al (2008) studied depressive symptoms, tone loss and fractures in post menopausal women. The aim was to assess the association between depression symptoms (Burnam's scale) or antidepressant use

and bone outcomes. This study concluded that the post menopausal women, at an average age of 64, were observed to have the minimal association between depressive symptoms and changes in either BMD or risk of fracture.

Monterrosa A, Blumel J.E Cherani P (2008) studied the increased menopausal symptoms among Afro Colombian women. The aim of this study is to compare frequency and severity of menopausal symptoms among Afro and non Afro Hispanic Colombian climacteric women. This study suggests that compared to non-Afro, Colombian women have a higher rate and severity of menopausal somatic and psychological symptoms.

Polisseni A.F de Asarjo D.A et. al (2007) studied depression and anxiety in menopausal women. This study determines the prevalence of depression and anxiety in climacteric women and the probable factors responsible for its occurrence. The average depression prevalence among the menopausal women was 36.8% while that of anxiety was 53.7%. This study concludes that prevalence of depression and anxiety is high in climacterium.

Soares CN (2007) studied menopausal transition and depression. This study states that the menopausal transition may impose a challenge to clinicians and health professionals who are interested in improving women's quality of life, after all, this period in life is commonly marked by significant hormone fluctuations accompanied by some. Vasomotor symptoms e.g. hot flashes at night and other somatic complaints. This study concludes that hormonal and non hormonal factors may contribute to the occurrence of physical and / or psychiatric complaints diving menopausal transition.

Soares CN Taylor V, (2007) studied the effects and management of menopausal transition in women. This study suggests that unipolar and bipolar disorder are the major cause of disease burden for women in the United States. This study concludes with the best strategy to treat women with Bipolar disorder and depression as the age processes.

AUTOGENIC RELAXATION

"The Only Journey is the one within"

- Rilke

Autogenic relaxation also referred to as autogenic training, is a carefully developed relaxation procedure, it is a form of autonomic self-regulation (self-hypnosis approach) with a psycho physiological orientation. The rationale of autogenic relaxation is to enable autonomic self-regulation by eliminating environmental distraction thus introducing imagery that accompanies autonomic self-regulation through a structured set of specific exercises which are easy learn and practice on one's own (Linden, 1994, P228). It has demonstrated overtime the capacity to bring forth a healthy balance between the sympathetic (fight or flight) and the parasympathetic (rest, renewal, repair) workings of the autonomic nervous system (Linden,1994)

The term "Autogenic" comes from the Greek autos; meaning self and genous meaning produced by (retrieved from http://www.guide to psychology.com/autogenic.html). Autogenic relaxation is a powerful successful self-healing technique that almost anyone can learn to practice alone and it will. It can successfully be taught and practiced either individually or in group of 8 or less, but is not recommended by Schultz Luthe for children under age 16.

OVERVIEW OF AUTOGENIC RELAXATION:

Autogenic relaxation has its origin is rooted in Germany where it continues to be a useful process for healing. Psychiatrist and Neurologist Dr. Johannes Schultz (1884-1970) developed autogenic relaxation in the early 20th century. Schultz was influenced and supported by Freud as is suggested in the following account of their first encounter.

Freud looked at me, sizing me up and said: "Suaby you do not believe that you could heal" whereupon I replied: "By no means, but I think that, like a gardener, I could remove obstacles hindering a person's true development: "Then we will understand each other" answered Freud, and finished our one and a half hours long conversation with a charming smile (Retrieved December 1, 2004 from http://autogenictherapy.org.uk//index.php?=com).

Autogenic relaxation extends back to 1894-1903 when Oskar Vogt was researching hypnosis and sleep. A renowned psycho physiologically oriented Neuropathologist? Vogt noticed that intelligent patients who had practiced a series of heterohypnotic sessions supervised by Vogt. He observed that these "auto hypnotic" exercises induced feelings of warmth and heaviness in the patients and he believed there was significant potential to be discovered within this state. He observed that the "auto hypnotic rest" had undeniable recuperative value for his patients, and eventually it became evident that patients who practiced these short-term exercises daily showed reduction in stress effects of fatigue tension & depression (Luthe and Schultz, 1969, P5).

In 1905, Schultz began to study the efficacy of hypnosis. Reflecting on what he had told Freud years earlier, he focused on developing a therapeutic process which would reduce and eliminate hypnotherapy shortcomings such as extreme passivity of patient and patients relinquished control to the therapist (Jbid, P.5). During his research Schultz noted that most of the hypnotized patients reported feelings heaviness in their extremities, a general feeling of relaxation, and a feeling of warmth throughout the entire body. Building on these observations Schultz eventually designed six specific exercises called "standard formulae" which induced a hypnotic state. This series of six physiologically oriented autogenic exercises became the foundation of autogenic relaxation.

Mechanism of Autogenic Relaxation:

Thinking creates an image

Images control feelings

Feelings cause actions

Actions create results

- Leland Val Vandell

From a psycho physiologic perspective Schultz says that this technique "characterizes the therapeutic implications resulting from a self-induced psycho physiologic shift to a specific state (autogenic state) which facilitates autogenic (brain directed, self-generating, self-regulatory) process of self-normalizing nature (Luth & Schultz, 1969, P.1). The exercises are assembled specifically to enhance brain directed, self, regulatory mechanisms which automatically work to create recuperation, healing and homeostasis within the organism. Schultz sees the physiological and psycho physiological effects of these exercises as being diametrically opposed to changes elicited by depression & stress **(Ibid p5).**

The Six Autogenic Formulae:

After the patient is as comfortable and relaxed as possible in the appropriate position, eyes closed, he or she is ready to start the first of six standard formulae. Following are the standard formulas developed by Luthe and Schultz.

1.   First standard exercise: heaviness formula

        e.g.: "My right arm is heavy"

2.   Second standard exercise: Warmth formula

        e.g.: "My right arm is warm"

3.   Third standard exercise: Cardiac formula

        e.g.: "Heartbeat calm and regular"

4.   Fourth standard exercise: Respiratory formula

        e.g.: "Breathing calm and regular"

5.   Fifth standard exercise: Abdominal formula

        e.g.: "My solar plexus is warm"

6.   Sixth standard exercise: forehead formula

        e.g.: "My forehead is cool" (Luthe, 1970, P.139)

Data from physiologically based research indicate that passive concentration on the standard formulae affects a number of physiologic changes other than those related to functional theme of a given formulae.

STUDIES RELATED TO THE EFFECT OF AUTOGENIC RELAXATION ON DEPRESSION

Morgan and Jorm (2008) conducted a study on "Self help interventions for depressive disorders and depressive symptoms on menopause" & literature search for randomized controlled trials investigating self-help interventions for depressive disorders or depressive symptoms was performed using pub med, PsycINFO and

Cochrane. A number of exclusion criteria were applied, including trials with small sample size and intervention was anti-depressants or psychotherapy. The findings of the research revealed that immediate beneficial effects on depressed mood for distraction, autogenic relaxation, music, pets and prayer of the 38 interventions reviewed, the above therapy showed the best evidence of efficacy in depressive disorders in menopausal women.

Eileen O' Connell, Ph. D., (2006) conducted a mind body program for perimenopause and menopausal women for depressed mood / depressive symptoms. Autogenic relaxation and group support was found to be effective for depressive symptoms.

Eur J. Appl Physiol et al (2009) conducted a study on 'exercise modality and physical fitness in perimenopausal women'. The study findings revealed that autogenic training had higher efficacy on menopausal women with depression.

Joan. L. F Shaver (2003) conducted a study to assess the effect of autogenic relaxation on depressed mood, sleep problems, hot flashes, perhaps directly or indirectly associated with menopausal hormone shifts. Results showed that there was positive mood, reduction in hot flashes and sleep problems with autogenic exercise. This study provides a basis for advocating research that this therapy as alternative or complement to drug therapies for menopausal symptoms.

Bernstein and Borkovec et. al(1973) conducted the study among menopausal women and showed that among 60 women,40 women those who took Autogenic relaxation regularly in the period of three weeks significantly reduced their depression in menopause measured by Hamilton scale.

Deffenbacher, Mc Namara et.al (1990) investigated the effect of relaxational training on depression of menopause which include progressive muscle relaxation, autogenic relaxation, meditation.

Lehrer and woolfolk (1993) found that autogenic relaxation seems to be effective in the treatment of depression on menopause.

Heimberg (1989) found autogenic training was effective in the treatment of depression.

Numerous studies have also investigated the benefits of autogenic relaxation on menopausal depression. A careful review of 35 randomized trials found that autogenic relaxation may be generally helpful at improving the quality of life and in reducing anxiety, depression, stress and fatigue.

CHAPTER – III

RESEARCH METHODOLOGY

The methodology of research indicates the general pattern of organizing the procedure for gathering valid and reliable data for an investigation. This chapter provides a brief description of the method adopted by the investigator in this study. It includes the research approach, research design, setting of the study, population, sample, sample size, sampling technique, description of the tool, pilot study, data collection procedure and plan for data analysis.

RESEARCH APPROACH:

Experimental approach was used for this study.

According to Polit and Hungler (2001) ,

Experimental approach is "a study to explore the dimension of a phenomenon or to develop hypothesis and about the relationship phenomenon". This study was aimed to determine the effectiveness of autogenic relaxation on depression among menopausal women in the selected villages at Madurai.

RESEARCH DESIGN:

According to Polit and Hungler (1985),

Research design refers to the researchers over all plan for obtaining answers to the research question and for testing the hypothesis. The research design spells out the strategies that the researcher adapts to develop information which is accurate, objective and interpretable.

Pre test post test control group design was used for this study.

Group	Pre test	Intervention	Post test
Experimental group (G$_1$)	O$_1$	X (Autogenic	O$_2$
Control group (G$_2$)	O$_3$	relaxation)	O$_4$

Key:

G$_1$ - Experimental group

G$_2$ - Control group

O$_1$ - Pretest experimental group

O$_2$ - Post test experimental group

O$_3$ - Pre test control group

O$_4$ - Post test control group

X - Autogenic relaxation

VARIABLES:

Dependent variable - Depression

Independent variable - Autogenic relaxation

SETTING OF THE STUDY:

The study was conducted in the Karungalankudi and Pettai which is adopted by Karungalangudi PHC, which is 40 kms away from the Sacred Heart Nursing College. The total population of Karungalankudi is 2807 and Pettai was 992. The total number of married women in Karungalankudi is 436. The total number of married women in Pettai is 162.The total number of women above 45 years in Karungalankudi is 241 and in pettai is 115.

STUDY POPULATION:

According to Polit and Hungler (1985),

A population is defined as an entire aggregation of cases that meets a designed set of criteria.

The study population included in this study was menopausal women with depression in selected villages at Madurai.

SAMPLE:

Sample consisted of menopausal women above 40 years who fulfilled the inclusion criteria were selected.

SAMPLE SIZE:

According to polit and Hungler(1985),

A sample of a subject of the entire that makes up the population.

The total sample size was 60, 30 in the experimental group and 30 in the control group.

SAMPLING TECHNIQUE:

Phase 1:

Purposive sampling technique was used for this study.

Under Karungalankudi PHC,two villages were selected namely Karungalankudi and pettai which has two kilometers distance from each other. people of this village will not have contact between them

Phase 2:

Simple random sampling was used to select the experimental and control group.

Karungalankudi was selected as an experimental group and pettai as a control group randomly.

CRITERIA FOR SAMPLE SELECTION:

The samples for the study were selected based on the following criteria.

Inclusion criteria:

1. Menopausal women who stayed in the selected villages at Madurai.

2. Menopausal women in the age group of above 40 years.

3. Menopausal women who can speak and understand Tamil / English.

4. Menopausal women who are willing to participate in this study.

5. Menopausal women who have the cessation of menstrual cycle for the past six months to three years period.

Exclusion criteria:

1. Menopausal women with severe depression

2. Menopausal women with psychotic symptoms and other mental illness

3. Women those who underwent hysterectomy

4. Menopausal women who are taking drugs for mental illness.

RESEARCH TOOL AND TECHNIQUE:

The tool used in this study was modified Cornell Dysthymia rating scale.

Part I: Demographic variable

Part II: Modified cornell dysthymia rating scale.

Part I:

It consisted of demographic variables like age, educational status, marital status, religion, occupational status, number of children, type of family, period of cessation of menstruation, problem with the husband, economical problems and other mental illness.

Part II:

Modified cornell dysthymia rating scale was used to determine the depression level of menopausal women, which comprises of 20 items rated on a free point scale.

SCORING PROCEDURE:

Interview technique was used to collect the data from the sample. Each item had different responses and each item in the scale were scored as 0, 1, 2, 3, 4 for their responses.

Each item has 5 options,

0	-	Never
1	-	Seldom
2	-	Occasionally
3	-	Frequent
4	-	Often

Each line score ranged from 0 to 4. The interpretation of the score was as follows.

0	-	No depression
1-26	-	Mild depression
21-53	-	Moderate depression
54-80	-	Severe depression

TESTING OF THE TOOL:

Reliability:

Modified cornell dysthymia rating scale had demonstrated very good internal consistency. Test – Retest method was used using Karl Pearson coefficient and the score was r = 0.88.

Content Validity:

Validity of the tool was evaluated and established by submitting the tool to six experts in the field of psychiatrist, gynecologist, community experts, yoga specialist and psychiatric nursing for their opinions and suggestions. Based on their suggestions, the tool was translated into Tamil and retranslated into English by the language experts.

DEVELOPMENT OF INTERVENTION (Autogenic Relaxation)

DEFINITION:

Autogenic relaxation uses both visual imagery and body awareness to move a person into a deep state of relaxation.

AIMS:

- ❖ Encourage relaxation
- ❖ Reduce tension and pain
- ❖ Reduces the symptoms of depression & anxiety
- ❖ Improve coping skills.
- ❖ Lessen the need for medication.

AUTOGENIC RELAXATION PROCEDURE:

I. Assessment:

Assessment is used by the researcher to find out what the client is going through and to gain any other information that she may wish to find out about the samples.

II. Establishing therapeutic relationships:

1. The researcher established therapeutic relationship by building rapport and gaining the confidence of the samples.

2. The research explained about autogenic relaxation and doubts raised by the participants were clarified.

III. Pre-Preparation:

❖ This relaxational technique need a quiet place

❖ Make the client lie down in a comfortable and relaxed position

❖ Dose the eyes and concentrate on midpoint between eyebrows.

IV. Six-standard formulas:

1. First standard exercise: Heaviness formula e.g. My right arm is heavy

2. Second standard exercise: Warmth formula e.g. My right arm is warm

3. Third standard exercise: Cardiac formula e.g. Heartbeat calm and regular.

4. Fourth standard exercise: Respiratory formula e.g. Breathing calm and regular.

5. Fifth standard exercise: Abdominal formula e.g. My solar plexus is warm

6. Sixth standard exercise: Coolness formula e.g. My forehead is cool.

PILOT STUDY:

In order to test the relevance, feasibility and practicability of the study, a pilot study was conducted among six participants in the same manner as that of the original study in Karungalankudi. It revealed that the study was feasible data were analyzed to find out the suitability of statistics.

DATA COLLECTION PROCEDURE:

The data collection procedure was done for 6 weeks in selected villages at Madurai. Before conducting the study, the researcher obtained formal permission from the dissertation committee, Director General of health service, Department heads of psychiatric nursing and community nursing. Study purposes were explained and obtained written consent. The samples were the menopausal women which were selected purposively. Oral consent was obtained from all the menopausal women, explained the purpose of Autogenic relaxation to each women. Good rapport was maintained with the menopausal women. Door to door survey was used to collect the menopausal women with depression. Modified cornell dysthymia rating scale was used to assess the level of depression among Menopausal women. 30 menopausal women in karungalankudi were selected as experimental group and 30 from pettai as the control group. Relaxation technique was taught for 30 members in the experimental group which was divided into six group. Exercise was given for twenty minutes per group.

INTERVENTION:

Week I   -   Pre test experimental and control group.

Week II   -   Intervention (Autogenic relaxation)

Week III   -   Intervention (Autogenic relaxation)

Week IV   -   Intervention (Autogenic relaxation)

Week V   -   Intervention (Autogenic relaxation)

Week VI   -   Post test experimental and control group.

PLAN FOR DATA ANALYSIS:

Data analysis was done in accordance with the objectives of the study. Both descriptive statistics and inferential statistics were used. The data obtained were organized using both descriptive and inferential statistics. The data was tabulated, summarized and analyzed. The plan for data analysis was divided as follows.

Descriptive Statistics:

Frequency, percentage and mean were used for analysis of pre test and post test assessment.

Inferential Statistics:

Paired 't' test was used to determine the difference between pre test and post test level of depression in the experimental group in terms of effectiveness of autogenic relaxation.

Independent 't' test was used to determine the difference between post test level of depression in the experimental group and control group in terms of effectiveness of autogenic relaxation.

Chi-square was used to find the association between post test level of depression   and selected demographic variables.

PROTECTION OF HUMAN SUBJECTS:

The proposed study was conducted after the approval of dissertation committee of the college of nursing. Permission was obtained from the correspondent and the principal of the sacred heart nursing college. Due consent was obtained from the Director general of health service for the pilot study and main study. Oral consent of each subject was obtained before starting the data collection and assurance was given to them that the anonymity of each individual would be maintained.

CHAPTER – IV

ANALYSIS AND INTERPRETATION OF DATA

Analysis is a process of organizing and synthesizing data in such a way that research questions can be answered and hypothesis tested.

-Polit and hungler

SECTION I:

Table 1: Describes frequency and percentage distribution of menopausal women.

SECTION II:

Table 2: Describes the distribution of menopausal women according to the level of depression among the experimental group and control group.

Table 3: Illustrates the comparison of the level of depression before and after autogenic relaxation among the experimental group.

Table 4: Portrays the comparison of mean post test level of depression in experimental group and control group.

SECTION III:

Table 5: Describes the association between post test level of depression and demographic variables of menopausal women.

SECTION - I

Table 1:

Frequency and percentage distribution of menopausal women in the experimental group and control group. N=60

Demographic Variables	Experimental Group N = 30		Control Group N = 30	
	f	%	f	%
Age (in years):				
a) 41 – 45 years	5	16.67	3	10
b) 46 – 50 years	12	40	10	33.33
c) Above 50 years	13	43.33	7	56.66
Educational Status:				
a) Illiterate	8	26.66	14	46.66
b)Primary school	16	53.33	12	40
c)High school	6	20	2	6.66
d)Higher secondary	0	0	1	3.33
e)Diploma / Graduate	0	0	1	3.33
Marital Status:				
a)Married	21	70	25	83.33
b)Unmarried	2	6.66	1	3.33
c)Widow	5	16.66	2	6.66
d)Divorce	2	6.66	2	6.66
Religion:				
a)Hindu	24	80	18	60
b)Christian	2	6.66	0	0
c)Islam	4	13.33	12	40
Women's occupational status				
a)House wife	20	66.66	17	56.66
b) Coolie worker	10	33.33	13	43.33
c) Private Employee	0	0	0	0
d)Government Employee	0	0	0	0

Demographic Variables	Experimental Group N = 30		Control Group N = 30	
	f	%	f	%
No. of Children:				
a) No	3	10	4	13.33
b) One	3	10	6	20
c) Two	17	56.66	16	53.33
d) Above three	7	23.33	4	13.33
Type of family:				
a) Nuclear	19	63.33	18	60
b) Joint family	9	30	12	40
c) Extended	2	6.66	0	0
Period of cessation of menstruation:				
a) 6 months	4	13.33	0	0
b) 1 year	11	36.66	6	20
c) 2 years	9	30	20	66.66
d) 3 years	6	20	4	13.33
Problem with Husband:				
a) Yes	16	53.33	11	36.66
b) No	14	46.66	19	63.33
Financial problems:				
a) Yes	20	66.66	19	63.33
b) No	10	33.33	10	33.33
Any medical problems:				
a) Diabetes	9	30	5	16.66
b) Hypertension	7	23.33	6	20
c) Thyroid	1	3.33	0	0
d) Others	1	3.33	0	0
e) None	14	46.66	3	10

Most (43.31%) of the menopausal women in the experimental group were above 50 years and (56.66%) in the control group. Only 5% of menopausal women in the experimental group and 10% in the control group were 41-45 years. 43.3% in the experimental group and 33.33% from control group were between 46-50 years.

Majority of the menopausal women in the experimental group (53.33%) had primary education and 20% of menopausal women had completed their higher secondary education.

Most of the menopausal women in the control group (46.66%) were illiterate and (40%) had completed their primary education (40%) had completed their high school.

In the experimental group, the majority of the menopausal women (70%) were married and 16.66% were widow.

In the control group, 83.33% of the menopausal women were married and 3.33% were unmarried.

Majority (80%) of the menopausal women in the experimental group were Hindu and 13.33% were Islam and in the control group 60% of women were Hindu and 40% were Islam.

Majority (66.66%) of the menopausal women were Housewives in the experimental group and rest of (33.33%) them were Coolie worker.

Most (56.66%) of the menopausal women in the control group were Housewives and 43.33% of menopausal women in the control group were Coolie worker.

56.66% of the menopausal women in the experimental group have two children and 23.33% of menopausal women has above three children.

53.33% of the menopausal women in the control group have two children. 20% of the menopausal women have one child and 13.33% have above three children.

Majority (63.33%) of the menopausal women in the experimental group belong to nuclear family and 60% in the control group belong to nuclear family.

Most (36.66%) of menopausal women in the experimental group had their period of cessation of menstruation before one year and (13.33%) of them had cessation of menstruation only before 6 months.

66.66% of the control group had their period of cessation of menstruation before 2 years. 20% of women had their period of menstruation before one year.

66.66% of menopausal women in the experimental group had financial problem and 33.33% of them had no financial problem and 63.33% of menopausal women in the control group had financial problem.
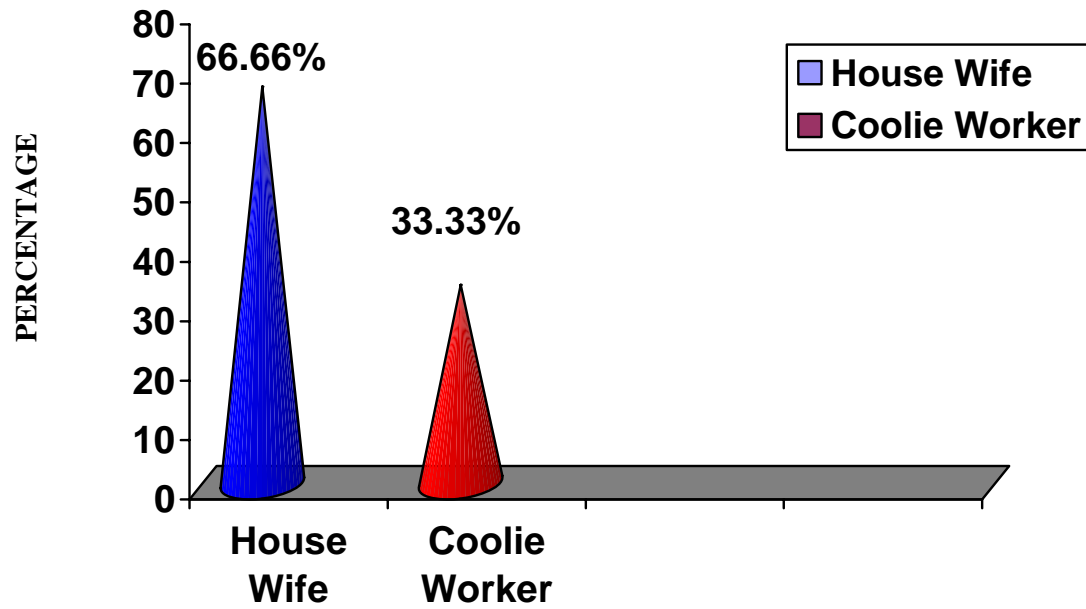
Figure: 2

Percentage distribution of menopausal women's occupational status in the experimental group.

46
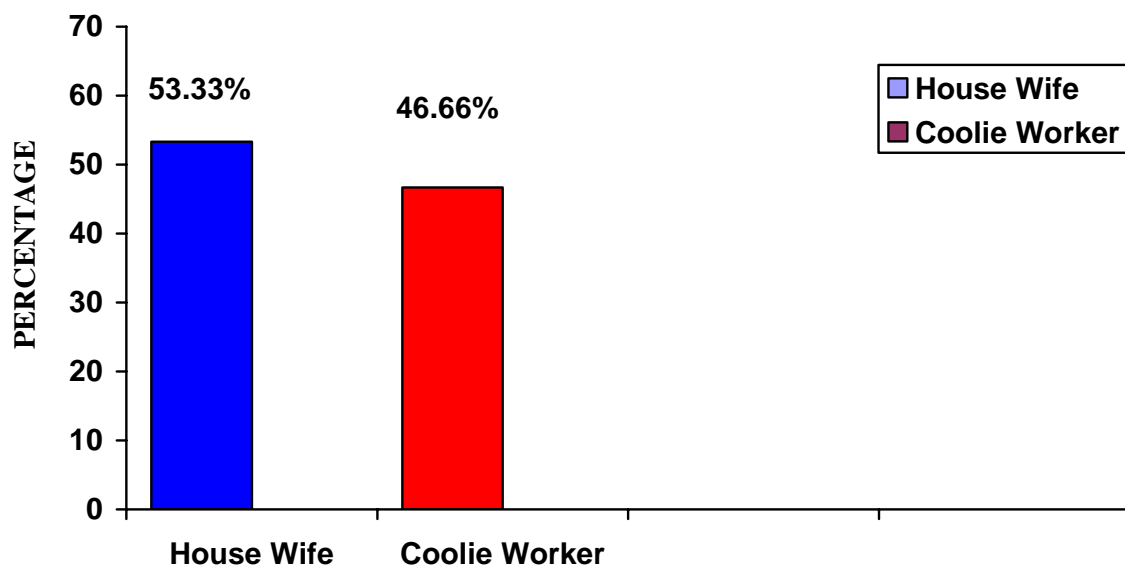
Figure: 3

Percentage distribution of menopausal women's problem with husband in the

experimental group.

SECTION – II

Table 2:

Distribution of the menopausal women according to the level of depression in the experimental group and control group.

Level of Depression	Experimental Group n = 30				Control Group n = 30			
	Pre Test		Post Test		Pre Test		Post Test	
	f	%	f	%	f	%	f	%
No	-	-	-	-	-	-	-	-
Mild Depression (1-26)	7	23.33	19	63.33	6	20	5	16.66
Moderate (27-53)								
Severe (54-80)	23	76.66	11	36.66	24	80	25	83.33
	-	-	-	-	-	-	-	-

P<0.05

Table 2 depicts the pre test and post test level of depression of both experimental and control group. Among the pre test experimental group, majority (76.66%) of the menopausal women had moderate depression and 23.33% had mild depression. Most (63.33%) of the menopausal women in the post test experimental group had mild depression and 36.66% had moderate depression. Majority (80%) of the menopausal women in the pre test control group had moderate depression and 20% had mild depression. 83.33% of the menopausal women in the post test control group had moderate depression and 16.66% had mild depression.
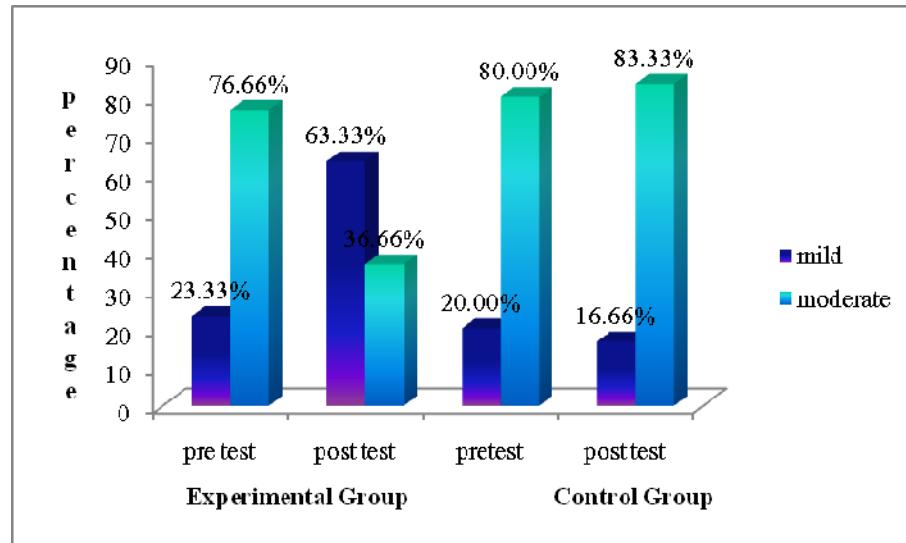
Figure :4

Percentage distribution of the menopausal women according to the level of depression in the pretest and post test in the experimental group and control group

Table 3:

Comparison of the mean pretest and posttest level of depression of menopausal women in the experimental group.

N=30

Variables	Mean	MD	SD	T-value
Pre test	42.63			
		14.27	8.29	9.49*
Post test	28.36			

P<0.05

To compare the mean pre test and post test level of depression of the menopausal women in the experimental group, the null hypothesis was stated as follows,

Ho1 - There will be no significant difference between the post test and pre test level of depression of experimental group

The hypothesis was tested using paired 't' test.

This table portrays that the mean post test level of depression (28.36) was lesser than the mean pre test level of depression (42.63). The obtained 't' value (9.49) was statistically highly significant at 0.05 level. This illustrates that the mean difference of (14.27) was a true difference has not occurred by chance. So, the researcher rejects the null hypothesis and accepts the research hypothesis.

Figure 5

Comparison of the mean pretest and post level of depression of

menopausal women in the experimental group

Table 4:

Comparison of the mean pre test and post test level of depression of menopausal women in the control group.

N=30

Variables	Mean	MD	SD	T-value
Pre test	41.23			
		0.8033	9.7	0.01
Post test	42.03			

P<0.05

To compare the mean pre test and post test level of depression of menopausal women in the control group. The null hypothesis was stated as follows,

There will be no significant difference between pre test level of depression and post test level of depression at 0.05 level of significance.

The hypothesis was tested using paired 't' test.

This table depicts that the mean post test level of depression (42.03) was higher than mean pre test level of depression (41.23). The obtained 't' value (0.01) was not statistically significant at 0.05 levels. This illustrates that the mean difference of (0.803) was not a true difference and has occurred by chance. So, the researcher rejects the researcher hypothesis and accepts the null hypothesis.

Table 5:

Comparison of mean post test level of depression of menopausal women between experimental group and control group.

N = 60

Variables	N	Mean	SD	T-value	P-value
Experimental Group	30	28.36	8.91		
				7.67	0.05
Control Group	30	42.03	5.58		

To compare the mean post test level of depression of the experimental group and control group, the null hypothesis was stated as follows,

Ho2- There will be no significant difference between the mean post test level of depression of experimental group and control group at 0.05 level of significance.

The hypothesis was tested using independent 't' test.

This table portrays that the mean post test level of depression level in experimental group (28.36) is lesser than mean post test depression score of the control group (42.03). The obtained 't' value (7.67) was statistically highly significant at 0.05 level at 58 d.f. This, illustrate the difference (13.63) was a true difference and that has not occurred by chance. So, the researcher rejects the null hypothesis and accepts the research hypothesis.
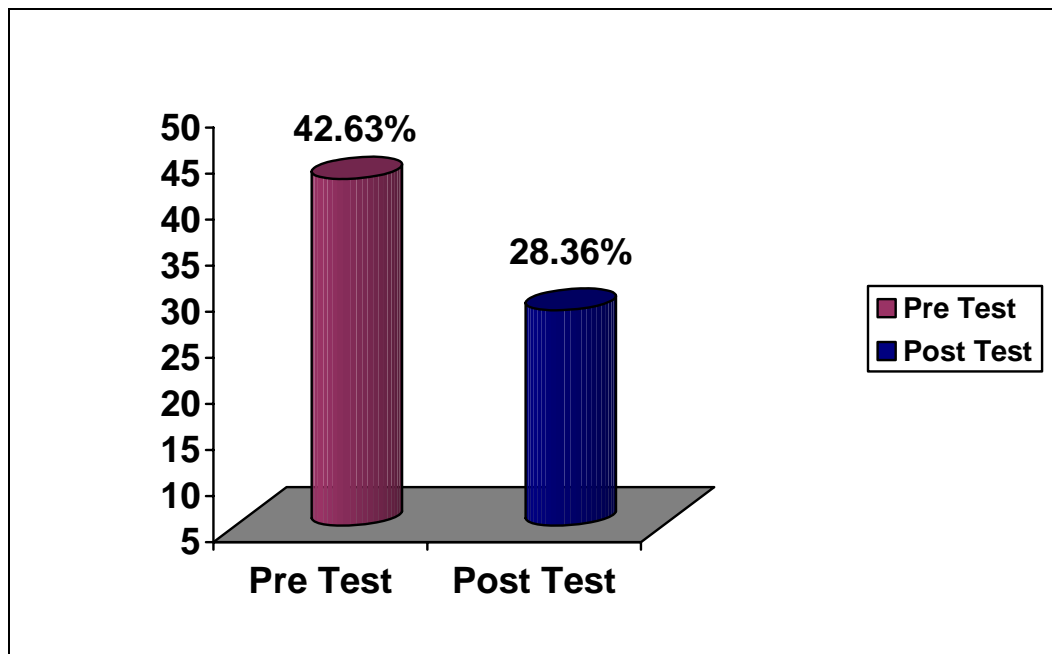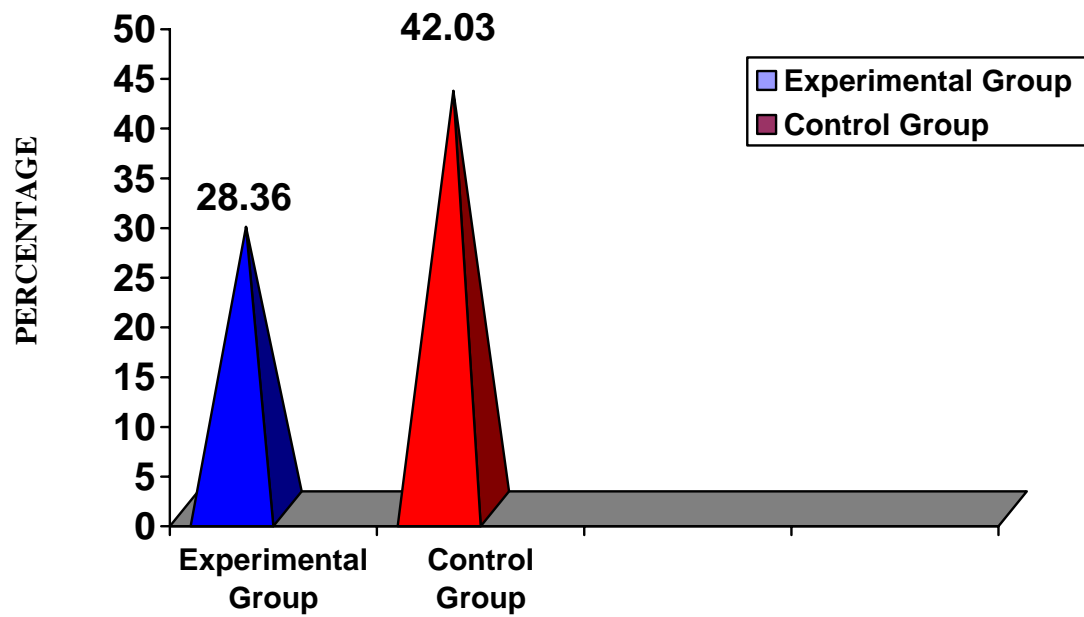
Figure: 6

Comparison of Mean Post Test Level of Depression of the Menopausal Women

between Experimental Group and

Control Group

SECTION – III

Table 6:

Association between post test level of depression and demographic variables of menopausal women

N = 30

Demographic Variable	POST TEST			
	Mild	**Moderate**	**Total n = 30**	**Chi-Square**
Age (in years):				
a) 41 – 45 years	2	3	5	
b) 46 – 50 years	10	2	12	3.743
c) Above 50 years	7	6	13	
Educational Status:				
a) Illiterate	4	4	8	
b) Primary school	10	6	16	0.6659
c) High school	4	2	6	
Marital Status:				
a) Married	14	7	21	
b) Unmarried	1	1	2	0.408
c) Widow	3	2	5	
d) Divorce	1	1	2	
Religion:				
a) Hindu	15	9	24	
b) Christian	1	1	2	1.061
c) Islam	2	2	4	
Occupational status:				
a) House wife	10	10	20	
b) Coolie worker	9	1	10	4.57*

Demographic Variable	POST TEST			
	Mild	**Moderate**	**Total n = 30**	**Chi-Square**
No. of Children:				
a) No	2	1	3	
b) One	2	1	3	0.363
c) Two	10	7	17	
d) Above three	5	2	7	
Type of family:				
a) Nuclear	11	8	19	
b) Joint family	7	2	2	1.191
c) Extended	1	1	2	
Period of cessation of menstruation:				
a) 6 months	3	1	4	
b) 1 year	7	4	11	0.68
c) 2 years	6	3	9	
d) 3 years	3	3	6	
Problem with Husband:				
a) Yes	13	3	16	
b) No	6	8	14	4.6*
Financial problems:				
a) Yes	13	7	20	
b) No	6	4	10	0.074
Any medical problems:				
a) Diabetes	5	4	9	
b) Hypertension	4	3	7	0.71
c) Thyroid	-	-	-	
d) No	10	4	4	

To find out an association between post test level of depression and demographic variables of menopausal women.

Null hypothesis was stated as follows:

There will be no significant association between post test level of depression and selected demographic variable.

There was a statistically significant association between post test level of depression and selected demographic variables like occupational status (χ^2 - 4.57*) and problem with husband (χ^2 - 4.6*). Therefore, researcher rejects null hypothesis and accepts null hypothesis.

There was no statistically significant association between post test level of depression and selected demographic variables such as age, educational status, marital status, religion, no. of children, type of family, period of cessation of menstruation, economical problems and medical problems.

Therefore, researcher rejects research hypothesis which is there will be significant association between post test level of depression of menopausal women who had autogenic relaxation and demographic variables such as age, educational status, marital status, religion, no. of children, type of family, period of cessation of menstruation, financial problems and medical problems. And thus accepts null hypothesis.

CHAPTER – V

DISCUSSION

Women are often at increased risk for depression when they reach their midlife. The reasons are unclear, but scientists think it may be related to personal history, life stressors, hormonal changes and role changes that comes with middle change.

The aim of this study was to evaluate the effectiveness of autogenic relaxation on depression among menopausal women in the selected villages at Madurai using modified Cornell Dysthymia rating scale.

The study findings are discussed in this chapter with reference to the objectives and hypothesis stated in chapter I.

DISTRIBUTION OF SAMPLES WITH REGARD TO DEMOGRAPHIC VARIABLES:

❖ Majority of the menopausal women in the experimental group (43.33%) and in the control group (56.66%) were above 50 years

❖ Majority of the menopausal women in the experimental group (53.33%) had primary education and in the control group 46.66% of the menopausal women were illiterate.

❖ Majority of the menopausal women (70%) were married and in the control group (83.33%) were married. Majority (66.66%) of the menopausal women in the experimental group and in the control group (56.66%) were House wives.

56.66% of the menopausal women in the experimental group and (53.33%) in the control group has two children.

❖ Majority (63.33%) of the menopausal women in the experimental group and 60% in the control group belongs to nuclear family. Majority (36.66%) of menopausal women in the experimental group had their period of cessation before one year and in control group 66.6% of control group had their period of cessation of menstruation before 2 years.

❖ Majority (53.33%) of the menopausal women in the experimental group and 63.33% in the control group had no problem with their husband. 66.66% of the menopausal women in the experimental group and 63.33% in the control group had financial problems. 46.66% of the menopausal women in the experimental group and 60% in the control group had no medical problems.

The first objective of the study was to assess the pre test and post test level of depression among menopausal women in the experimental group who had autogenic relaxation:

There was a marked improvement in the level of depression in menopausal women after the autogenic relaxation, which proves the efficiency of autogenic relaxation therapy in reducing depression.

It is clear that the percentage of menopausal women with depression from moderate (76.66%) to mild (63.33%) depression. This clearly portrays the meditating effect of autogenic relaxation in reducing depression.

The second objective of the study was to assess the pre test and post test level of depression among menopausal women in the control group:

There was no difference in the control group in the reduction of depression among the menopausal women.

The third objective was to evaluate the effectiveness of autogenic relaxation on depression among menopausal women between experimental group and control group:

In order to evaluate the effectiveness of autogenic relaxation, pre test and post test scores of experimental group were compared.

Table 3 depicts that mean post test depression score (28.36) was lesser than the mean pre test depression score (42.63). The obtained 't' value 9.49 was statistically highly significant at 0.05 level.

The study findings configure with following literature:

Bernstein and Borkovec et.al (1973) conducted the study among menopausal Women and showed that among 60 women, 40 women those who took autogenic relaxation regularly in the period of there weeks significantly reduced their depression in menopause measured by the Hamilton Scale.

Deffenbacher, Me Namara et.al (1990) investigated the effect of relaxation training on depression of menopause which includes progressive muscle relaxation, autogenic relaxation, meditation.

Lehree and Woolfolk (2993) found that autogenic relaxation seems to be effective in the treatment of depression on menopause.

Heimberg (1989) found autogenic training was effective in the treatment of depression.

Numerous studies have also investigated the benefits of autogenic relaxation on menopausal depression. A careful review of 35 randomized trials found that autogenic relaxation may be generally helpful at improving the quality of life and in reducing anxiety, depression, stress and fatigue.

A careful review of 20 trials found the psychological interventions such as cognitive behavior therapy, autogenic relaxation; biofeedback is associated with reduced depression.

There is a fair amount of evidence in the support of relaxation therapies as means to treat the symptoms of anxiety and depression. In 2008, review of 27 studies, researchers concluded that relaxation therapies (including Jacobson progressive relaxation, autogenic training, and meditation) were effective.

The theoretical review addresses that one of the indication for autogenic relaxation therapy as management of depression. (Johannz).

The above theoretical view is applicable to the present study also.

Moreover the observations of the researcher also add to the effectiveness of autogenic relaxation on depression.

To support the evidence, the post test scores of experimental group and control group were compared.

Table 4 explains that post test depression level of experimental group (28.36) is lesser than the mean post test depression score of the control group (42.03). The obtained 't' value 7.67 was statistically highly significant at 0.05 level.

The qualitative statements expressed during evaluation of autogenic relaxation therapy further strengthen the study findings:

S. No	Questions	Responses
1.	Did you like the relaxation session	Yes, I really Liked, It relaxed me It is very pleased
2.	Do you feel autogenic relaxation has improved your mood?	"It gives me peace It made me feel happy
3.	Do you feel relaxation has helped you	"I am ale to concentrate on my breathing' circulation" "I am free from my unnecessary thoughts and worries" "Now I can fall asleep easily" "I feel worthy of myself"

All the above verbatim supports the goal of autogenic relaxation, which also helps in

- ❖ Relieving tension
- ❖ Alleviate stress
- ❖ Lessen the need for medication
- ❖ Improve coping skills
- ❖ Self-awareness
- ❖ Expressing emotions

In the beginning, samples were hesitant. Many had doubts, how it could reduce depression however, after a small introduction on autogenic relaxation and its positive impact they were willing to be involved in the therapy. Many said they felt very relaxed and pleasant experience. By the end of the first session, autogenic relaxation was very well received by the samples. Many menopausal women reported that they wish to continue the session. All samples seemed more relaxed. They felt upliftment of their mood.

The forth objective of the study was to determine the association between post test depression level of menopausal women in the experimental group with their demographic variable:

There was no statistically significant association between age, educational status, marital status, religion, number of children, type of family, period of cessation of menstruation financial problems and medical problems and mean post test level of depression.

There was a statistically significant association between occupational status ($\chi 2$-4.57) problem with husband ($\chi 2$-4.66**) and post test level of depression.

It is clear from the statistical analysis that irrespective of the selected demographic variables like age, educational status, marital status, religion, occupational status, number of children, type of family, period of cessation of menstruation, problem with husband, financial problems and medical problems, all had benefited of autogenic relaxation.

A household survey was carried out in peninsular Malaysia to determine the prevalence rate of depressive symptoms in the middle aged women and to explore its associated factors. Women aged 40-60 years were assessed on socio demographic variables, menopausal status, depressive symptoms, relationship with husband and coping strategies. A total of 3934 women participated and 51 years was the mean age. The prevalence rate of depressive symptom was 54.2%.. Depressive symptoms were significantly associated with relationship with husband (p<.001), and occupational status (p<.001).Depressive symptoms were correlated with marital dissatisfaction.

Researcher feels that major strength of the study is that this therapy is simple but neglected due to lack of sufficient literature. So this study topic and findings will add new knowledge to the nursing profession.

CHAPTER – VI

SUMMARY, CONCLUSION, IMPLICATIONS & RECOMMENDATIONS

This chapter contains the summary of the study and conclusion drawn. It clarifies the limitations of the study, recommendations and the implications. The implications are given for different areas like nursing education, administration and health care delivery system (nursing practice) and nursing research.

The objectives of the study are,

❖ To assess the pretest and post test level of depression among menopausal women in the experimental group who had autogenic relaxation.

❖ To assess the pre test and post test level of depression among menopausal women in the control group.

❖ To evaluate the effectiveness of autogenic relaxation on depression among menopausal women.

❖ To associate the post test level of depression of menopausal women in the experimental group with their demographic variables.

The Hypothesis of the study is,

❖ The mean post test depression score of the menopausal women who had autogenic relaxation will be significantly lesser than the mean pretest score in the experimental group.

❖ The mean post test depression score of the menopausal women in the experimental group who had autogenic relaxation will be significantly

lower than the mean post test depression score of menopausal women in the control group.

❖ There will be a significant association between post test level of depression of menopausal women who had autogenic relaxation and their demographic variables (age, educational status, marital status, religion, women's occupational status, number of children, type of family, period of cessation of menstruation, problem with husband , financial problems, any medical problems)

SUMMARY

This study was undertaken to evaluate the effectiveness of Autogenic relaxation on depression among menopausal women in selected villages at Madurai. The study was conducted at Karungalankudi and Pettai. The population of the study was the menopausal women who were residing in Karungalankudi and Pettai and who met the inclusion criteria. Purposive sampling was used to select the samples. Simple random sampling was used to select the experimental group and control group.

Data collection tools consisted of 5point likert scale to assess the level of depression. First the pretest level of depression was assessed and after pretest, autogenic relaxation was administered in experimental group. Posttest level of depression was assessed four weeks after Autogenic relaxation. Data were analyzed using descriptive and inferential statistics.

MAJOR FINDINGS OF THE STUDY

Majority (43.33%) of the menopausal women in the experimental group were above 50 years and in the control group (56.66%). Majority of the menopausal women in the experimental group (53.33%) had primary education and in the control group (46.66%) menopausal women were illiterate. In the experimental group, majority of the menopausal women (70%) were married and in the control group 83.33% of menopausal women were married. Majority (80%) of the menopausal women in the experimental group were Hindu and in the control group 60% of women were Hindu. Majority (66.66%) of the menopausal women in the experimental group and in the control group were housewives (56.66%). Most of the (56.66%) menopausal women in the experimental group and 53.33% in the control group has two children. Majority (63.33%) of menopausal women in the experimental group and in the control group 60% belong to nuclear family. Majority (36.66%) of menopausal women in the experimental group had their period of cessation of menstruation before one year and 66.6% of the control group had their period of cessation menstruation before 2 years. Majority (53.33%) of menopausal women in the experimental group and 63.33% in the control group has no problem with their husband. Most of the (66.66%) of menopausal women in the experimental group and 63.33% of menopausal women in the control group had financial problems. 46.66% of menopausal women in the experimental group and in the control group (60%) had no medical problems. The mean posttest level of depression (28.36) was less than mean pretest depression level (42.63). The obtained 't' value 9.49 is statistically highly significant at 0.05 level.

✧ The mean posttest level of depression (28.36) was lesser than the mean posttest level of depression in control group (42.03). The obtained 't' value was statistically significant at 0.05 level.

✧ There was no statistically significant association between posttest level of depression and demographic variables like age, educational status, marital status, religion, number of children, type of family, period of cessation of menstruation, economical problems and medical problems.

✧ There was a statistically significant association between posttest level of depression and demographic variables like occupational status (χ^2=4.57) and problem with husband (4.66**).

CONCLUSION

These findings of the study have been discussed in terms of the objectives, theoretical base and hypothesis.

❖ Most (76.66%) of the menopausal women residing in Karungalankudi and pettai were suffering with moderate depression.

❖ Autogenic relaxation was effective in reducing the level of depression among the menopausal women in the selected villages.

❖ The study findings revealed that autogenic relaxation can be administered to all menopausal women in reducing the level of depression.

IMPLICATIONS

The findings of the study have several implications in the following fields.

Implications for Nursing Practice

1. The study findings revealed the importance of nurse's role in reducing depression among the menopausal women using a cost effective, safe, non-pharmacological treatment that is autogenic relaxation.

2. Study findings signify the importance of formulation of guidelines and implementation of autogenic relaxation, especially in community health centers and self help groups where literature reveals lack of psychotherapeutic intervention.

3. Nurses, specializing in mental health need to be empowered in administering autogenic relaxation.

4. In clinical areas there must be provision for administering autogenic relaxation.

Implications for Nursing Education

1. Current concepts of autogenic relaxation can be included in nursing curriculum.

2. Post-graduate nursing students specializing in psychiatry should be trained in administering autogenic relaxation.

3. Nursing personnel working in psychiatric wards and community health centers should be given in service education regarding depression in menopausal women, autogenic relaxation and the benefits of autogenic relaxation.

Implications for Nursing Research

The findings of the present study have added knowledge to the already existing literature and the implications for the nursing research are given in the form of recommendation. This study can be a baseline for future studies to build upon and motivate other researchers to conduct further studies.

Implications for Nursing Administration

1. The nursing administrators can organize in-service education programmes on depression and autogenic relaxation in psychiatric wards and community health centers.

2. The administrators can encourage the nurses to use different safe, cost effective, psychotherapeutic intervention in reducing depression among menopausal women.

3. A considerable amount in the budget can be allocated for organizing the continuing nursing education programme and in preparing and maintaining autogenic relaxation module

4. A staff nurses can be trained specially to administer autogenic relaxation.

LIMITATIONS

1. The study was conducted among the menopausal women from the selected village at Madurai city only. So generalization must be done with caution.

2. This study was done on a small sample size of 30, hence generalization is possible only for the selected participants.

3.   The responses were based on self report of the study samples that would not be counter checked.

4.   Long term follow up is not feasible.

RECOMMENDATIONS

On the basis of the present study, the following recommendations have been made for further studies.

1)   A longitudinal study can be undertaken to see the long term effect of autogenic relaxation in reducing the level of depression

2)   A similar study can be done in various other settings with large samples.

3)   A similar kind of study can be conducted to assess the effect of autogenic relaxation on stress and anxiety.

4)   A qualitative approach can be applied in studying the effects of autogenic relaxation on depression.

SUMMARY

This chapter dealt with summary of the study, major findings of the study, discussion, conclusion, implications to the field, limitations of the study, and recommendations for further studies.

REFERENCES

BOOKS:

- Ahuja, N. (2002). *A Short Text Book of Psychiatry.* (2nd edition). New Delhi, Jaypee Brothers.

- Ann Rayes (2000*). Diagnostic and Statistical Manual of Mental Disorders.* (3rd edition). Washington D.C. Stanford Publishers.

- Barbara, B., Signe, S (2000). *Text Book of Mental Health Nursing.* (5th edition), Toronto W.B. Saunders.

- Baron, A. (1995). *Text Book of Psychology.* (3rd edition). New Delhi. Prentice Hall Publishers.

- Clifford, T. Morgan (1994). *Text Book of Introduction to Psychology.* (2nd edition). New Delhi. Mc. GrowHill.

- Denise, F. Polit & Bernadette Hungler. (2002*). Text Book of Nursing Research Principles and Methods.* (6th edition). Philadelphia. Lippincott company.

- Gail Stuart, W. Laria, T (2001). *Text Book of Principles & Practice of Psychiatric Nursing.* (6th edition). New Delhi. Harcourt India Private Ltd.

- Gurumani, N (2004). *An Introduction to Biostatistics.* (1st edition). India. MJP Publishers.

- Pestonjee, J. (1992). *Psychiatric Mental Health Nursing.* (2nd edition). Philadelphia. Davis Company.

JOURNALS:

- Andrea, L. Dunn, O. Chambliss, N (2005). Exercise Treatment for Depression. *American Journal of Preventive Medicine*. 28(1), pp.1-7. Retrieved from http://www.pubmed.com.

- Brow,.J,P & Gallichio, L (2009). Menopausal Women with Depression. *Journal of Obstetrics and Gynecology* 17(3), pp. 121-123.

- Bhargari Davar (1995). Mental Illness among Indian women. *Economic and Political Weekly* 11(2), pp 28.

- Chedraws, A. Guicophobia, C (2008). Menopausal Women with Depression. *Journal of obstetrics and Gynaecology* 17(3), pp 121-123.

- Dennerstein , L. Dudley, E. Hopper, J (2000). a Prospective population based study of menopausal symptoms, journal of obstetrics & gynecology 9(6) pp 22-23.

- Ernst, E. Kanji, N (2000). Autogenic relaxation on Depression. *Journal of Clinical Psychology* 32(4), pp 306-308.

- Graziottin, A. Sarafini . (2009). Menopausal women with Depression. *Internal Journal of Human Development* 4(13), pp 225-265.

- Irvin, H. Domar, C. Clark . (1996). The effects of relaxation response training of menopausal symptoms. *The journal of psychosomatic obstetrics & gynecology* 18(3) pp 143-145.

- Kaurt, P. Gillber,P (2008). Menopausal women with Depression. *Journal of Community health service* 4(2),pp 143-155.

❖ Kanjin,N. White, E (2006). Autogenic relaxation on Depression. *Journal of complimentary therapeutic medicine* 14(2), 144-150.

❖ Kanji. Ernst, E (2006). Autogenic relaxation on Depression. *Journal of Clinical Psychology* 53(6) ,pp 729-735.

❖ Lee. Y,Kim. H. (2008). Menopausal women with Depression. *Journal of American board of family practice* 10(4), pp 280-282.

❖ Li, Y. Yu, Q. Yang ,Y (2008) Menopausal women with depression. *Journal of Bhaviour Therapeutic Psychiatry* 10(4), pp 280-282.

❖ Marsh, W. Kitter, T (2009). Menopausal women with Depression. *Journal of American board of family practice* 27(2), pp 170-172.

❖ Pigone, M. Gaynes, B. Ruston, J. (2002), Screening for Depression systematic evidence review. *Journal of Psychosocial Nursing* 3(11), pp 21-25.

❖ Raeda. Al Qutob (2001). Menopause and associated Problems its types and magnitude. *Journal of Advanced Nursing* 33(5), pp 613-620.

NET REFERENCES:

- ❖ www.google.co.in

- ❖ http://books.google.co.in

- ❖ www.menopause.org

- ❖ en.wikipedia.org/wiki/menopause

- ❖ http://autogenictherpay.org.uk//index.php.com

- ❖ www.guidetopsychology.com/autogenic.htm

- ❖ www.womentowomen.com

- ❖ www.indianpsychiatry.com

APPENDIX – A

COPY OF LETTER SEEKING PERMISSION FROM THE DDHS TO CONDUCT THE STUDY

To

      The Deputy Director of Health services,
      Viswanathapuram,
      Madurai.

Respected Sir/Madam,

Sub: Sacred Heart Nursing Collage, Madurai – project work of M.Sc (Nursing) student – permission requested – reg.

    We wish to state that …………………......... final year M.Sc., (N) student of our collage has to conduct a research project, which is to be submitted to the Tamilnadu Dr. M.G.R Medical University, Chennai in partial fulfilment of University requirements.

    The topic of research project is 'A quasi experimental study to evaluate the effectiveness of autogenic relaxation on depression among menopausal women in selected villages at Madurai'.

    We therefore request you to kindly permit her to do the research work under your valuable guidance and suggestions.

Thanking you,

                          Yours faithfully,

                          Sacred Heart Nursing College
                          Ultra Trust, Madurai – 20.

APPENDIX – B

COPY OF LETTER SEEKING EXPERTS OPINION FOR TOOL AND CONTENT VALIDITY

From,

      II year M.Sc., Nursing,
      Sacred heart Nursing Collage
      Ultra Trust, Madurai – 20.

To,

Respected Madam/Sir,

Sub: Requesting opinion and suggestion of experts for the tool for its validity

    I am ………………. II year Master Degree Nursing student in Sacred heart Nursing Collage. In partial fulfillment of Master Degree in Nursing. I have selected the topic mentioned below for the research project to be submitted to the Dr. M.G.R University, Chennai.

Problem statement:

    A quasi experimental study to evaluate the effectiveness of autogenic relaxation on depression among menopausal women in selected villages at Madurai.

    Hence I request you to kindly examine the tool, content and give your valuable opinion and suggestion for improvement of tool and content.

                      Thanking you,

Place: Yours sincerely,

Date: _____

Enclosure :

- Problem statement
- Demographic profile
- Cornell dysthymia rating scale
- Intervention package

APPENDIX-C

CONTENT AND TOOL VALIDITY CERTIFICATE

I hereby certify that I have validated the content and research tool W.Arockia suganthy who is undertaking study on "A quasi experimental study to determine the effectiveness of autogenic relaxation on depression among menopausal women in selected villages at Madurai.

Name of the expert:

Designation of the expert:

Name of the institution: Signature of the expert:

Place:

Date:

APPENDIX-D

LIST OF EXPERTS CONSULTED FOR CONTENT VALIDITY FOR AUTOGENIC RELAXATION

1.   Dr. Karthikeyan, M.D.,
     Assistant Professor,
     Department of Psychiatry,
     Government Rajaji Hospital,
     Madurai.

2.   Mrs. Jancy Rachel Daisy, M. Sc (N), Ph. D.,
      Reader,
     CSI Jeyaraj Annapackiam College of Nursing,
     Madurai.

3.   Prof.(Mrs). Juliet Sylvia, M. Sc (N), Ph. D.,
     HOD of Community health nursing,
     Scared Heart Nursing College,
     Madurai.

4.   Mr. Ganagadharan, MA.,
      Yogarjuna,
      Mahatma Gandhi Yoga Insitute,
      Madurai.

5.   Prof.N.Chitra
      Clinical psychologist,
      Meenakshi Mission Hospital and Research Centre,
      Madurai.

6.   Dr. Krithika Devi, M.B.B.S ,DGO
      Obstetrician and gynaecologist,
      Abi Hospital,
       Madurai.

APPENDIX-E

PART-I

DEMOGRAPHIC VARIABLES

S.NO

1. Name   :

2. Age (in years)   a) 41- 45years

                                                b) 46- 50 years

                                                c)   Above 50 years

3. Educational status   a)   illiterate

                                                b)   Primary school

                                                c)   High school

                                                d)   Higher secondary

                                                e)   Diploma / Graduate

4. Marital status   a)   Married

                                                b)   Unmarried

                                                c)   Widow

                                                d)   Divorce

5. Religion   a)Hindu

                                             b) Christian

                                             c)Islam

6.	Women's occupational status	a)	House wife
		b)	Coolie worker
		c)	Private employee
		d)	Government employee

7.	Number of children	a)	No
		b)	One
		c)	Two
		d)	Above three

8.	Type of family	a)	Nuclear
		b)	Joint family
		c)	Extended family

9.	Period of cessation of menstruation	a)	6 months
		b)	1 year
		c)	2 years
		d)	3 years

| 10 | Problem with husband | a) | Yes |
| | | b) | No |

| 11. | Financial problem | a) | Yes |
| | | b) | No |

| 12. | Any medical problems | a) | Diabetes |

b) Hypertension

c) Thyroid

d) Others

e) None

PART-II

MODIFIED CORNELL DYSTHYMIA RATING SCALE

S. No	Items	Never 0	Seldom 1	Occasionally 2	Frequent 3	Often 4
1.	I felt sad and depressed					
2.	I felt I had lost interest about everything					
3.	I couldn't experience any positive feeling at all					
4.	I felt that life wasn't worth living					
5.	I felt I am a person of low self esteem					
6.	I feel guilty					
7.	I found myself helpless					
8.	I felt difficult to get along with others					
9.	I felt difficult to make decisions					
10.	I found myself distracted					
11.	I found myself anxious					
12.	I felt perspire noticeably in the absence of physical exertion					
13.	I was worried about the situations					
14.	I found that I was very irritable					
15.	I felt interference with my physical activities					
16.	I found difficult in doing things					
17.	I felt no longer fresh					

18.	I found myself low interest in sex					
19.	I found changing in my sleeping pattern					
20.	I felt I had a diurnal mood variation					

gFjp ? I

khjtplha; epd;w bgz;fisg; gw;wpa neh;fhzy; gotk;

I. FwpaPl;L vz;

1) taJ

    m) 41 – 45

    M) 46 – 50

    ,) 50f;F nky;

2) fy;tpj;jFjp

    m) gof;fhjtd;

    M) Muk;g fy;tp

    ,) cah;epiyf; fy;tp

    <) nky;epiyf; fy;tp

    c) gl;latpay;. gl;ljhhp

3) jpUkz epiy

    m) jpUkzkhdth;

    M) jpUkzkhfhjth;

    ,) tpjit

    <) tpthfuj;jhdth; / gphpe;jpUg;gth;

4) kjk;

    m) ,e;J

    M) fpwp!;jth;

,) ,!;yhk;

<) kw;wit

5) bgz;zpd; bjhHpy; epytuk;

 m) FLk;g jiytp

 M) Typ ntiy bra;gth;

 ,) jdpahh; gzpahsh;

 <) muR gzpahsh;

6) FHe;ijfs; vz;zpf;if

 m) ,y;iy

 M) xd;W

 ,) ,uz;L

 <) K:d;Wf;F nky;

7) FLk;g tif

 m) jdpf;FLk;gk;

 M) Tl;Lf;FLk;gk;

 ,) tphpthd FLk;gk;

8) khjtplha; epd;W Koe;j fhyk;

 m) 6 khjk;

 M) 1 tUlk;

 ,) 2 tUlk;

 <) 3 tUlk;

9) c';fs; FLk;gj;jpy; c';fsJ fztuhy; VnjDk; td;Kiw epfH;fpwjh?

m) Mk;

M) ,y;iy

10) c';fs; FLk;gj;jpy; bghUshjhu gpur;rid VnjDk; cs;sjh?

m) Mk;

M) ,y;iy

11) fPH;fhQqk; kUj;Jtg; gpur;ridfspy; VnjDk; cs;sjh?

m) ePhpHpt[neha;

M) cah; ,uj;j mGj;jk;

,) ijuha;L

<) kw;wit

c) ,y;iy

gFjp ? II

khw;wp mikf;fg;gl;l. kd nrhh;it fz;lwpa[k; mst[nfhs;

fPH;fhQqk; kd cghijfspy; VnjDk; c';fSf;F ,Uf;fpwjh?

t vz;	epfH;t[fs;	,y;ynt ,y;iy 0	Mhpjhf 1	vg;bghG jhtJ 2	mt;tg;n ghJ 3	mof;fo 4
1/	tUj;jk; kw;Wk; kd cisr;rypy; ,Ug;gjhf czh;fpnwd;					
2/	vjpYk; tpUg;gkpy;yhj kd epiyapy; ,Ug;gjhf czh;fpnwd;					
3/	vija[nk ey;ybjd;W Vw;f Koahj kdepiyapy; ,Ug;gjhf czh;fpnwd;					
4/	thHj; jFjpaw;wjhf vdJ thHf;if ,Ug;gjhf czh;fpnwd;					
5/	vdJ Rakhpahij juk; jhH;e;j epiyapy; ,Ug;gjhf czh;fpnwd;					
6/	kdjpy; Fw;wt[zh;t[cs;stuhf czh;fpnwd;					
7/	epw;fjpahf ,Ug;gjhf					

	czh;fpnwd;					
8/	kw;wth;fSld; nrh;e;J thH;tJ fodkhf ,Ug;gjhf czh;fpnwd;					
9/	Kot[fs; vLg;gij kpft[k; fodkhf czh;fpnwd;					

10/	ftdk; rpjwpa epiyapy; ,Ug;gjhf czh;fpnwd;					
11/	ftiyfs; epiwe;jpUg;gjhf czh;fpnwd;					
12/	cly; ciHg;g[,y;yhj nghJk; kpFjpahf nth;it tUjhf czh;fpnwd;					
13/	R{H;epiyfs; gw;wp kpft[k; ftiyg;gLfpnwd;					
14/	vdf;nf ehd; vhpr;rYhl;Lk; tifapy; ,Ug;gjhf czh;fpnwd;					
15/	vdJ clypay; bray;ghLfspy; ,il";ry; (FWf;fPL) ,Ug;gjhf czh;fpnwd;					
16/	ve;j xU braiya[k; bra;tJ fodkhf ,Ug;gjhf czh;fpnwd;					
17/	g[j;Jzh;r;rp ,y;yhjJ nghy czh;fpnwd;					
18/	ghypay; cwt[fspy; tpUg;gkpd;wp ,Ug;gjhf czh;fpnwd;					
19/	cw';Fk; Kiwfspy; khw;wk; ,Ug;gjhf czh;fpnwd;					
20/	vdJ kdepiyapy; ehs;njhWk; khw;w';fs; Vw;gLtjhf czh;fpnwd;					

APPENDIX-F

AUTOGENIC RELAXATION PROCEDURE

❖ Begin the autogenic relaxation by finding a comfortable position, either seated or lying down.

❖ Focus completely on your breathing. Let all other thoughts go.

❖ Breathe in.....2....3....4....hold....2....3...exhale....2....3....4....5....

❖ Breathe in ....2....3.....4...hold....2....3...exhale....2....3....4....5...

❖ Breathe in ....2....3....4...hold .....2....3...exhale....2....3....4....5...

❖ Continue the autogenic process by turning your attention to your right hand. Imagine your right hand is becoming warm. Starting at the tips of your thumbs and fingers, the feeling of warmth spreads to your palm....to the back of your hand....to your wrist.

❖ Your right hand is very warm....very heavy....relaxed. Focus now on your left hand. Feel the feeling of warmth in your left hand....in your thumb...to your fingers...your palm....to the back of your hand ....your wrist...

❖ Your left hand is very warm, heavy and relaxed.

❖ Continue the autogenic session, enjoying the relaxation you are experiencing.

❖ Turn your attention now to your feet. Notice the feeling of warmth spreading from your right toes....to your right foot....the bottom of your foot...the top of your foot...your ankle....your right foot feels very heavy....warmer...heavier...relaxed.

❖ Feel the warmth beginning in the toes of your left foot. Your left foot is becoming warm....from the bottom of your left foot ....to the top...to your ankle....your left foot is warm....heavy....relaxing

❖ Both of your feet are pleasantly warm....a relaxed feeling of heaviness....warmth...and relaxation.

❖ Feel the relaxation moving...growing...your right lower leg becomes warm...your knee...your right upper leg...your right leg is heavy and warm...

❖ Both of your legs are completely relaxed....

❖ Repeat the following relaxing statements in your mind, imagining each one:

- My right arm is warm.

- My left arm is warm.

- My right arm is heavy.

- My left arm is heavy.

- My right arm is warm and heavy.

- My left arm is warm and heavy.

- Both the arms are warm and heavy.

- My right leg is warm.

- My right leg is heavy.

- My left leg is warm.

- My left leg is heavy.

- Both the legs are warm and heavy.

- My arms and legs are warm and heavy.

- My heart is slow and regular.

- My heartbeat is slowing comfortably.

- My forehead is cool.

- My arms and legs are warm and warm and heavy.

- My heartbeat is slow and steady.

- My forehead is cool.

- My arms and legs are warm and relaxed.

- My heartbeat is steady....slow....relaxed.

- My forehead is smooth and cool.

- I am relaxed.

- I am relaxed.

- (pause).

- Now it is time to re awaken your body from this autogenic session. Feel your mind becoming more alert.

- Wiggle your fingers .Feel your hands and arms reawakening.

- Wiggle your toes.

- Take a deep breath in as you stretch your arms, reaching high above your head. Exhale and lower your arms.

- Open your eyes, and sit quietly for a moment as you become fully alert.

- When you have returned to your usual level of wakefulness, your autogenic relaxation is complete.

jd;dpay; bghUe;jpa ,ay;g[epiy gapw;rp ? thp totk;

- jd;dpay; bghUe;jpa ,ay;g[epiy gapw;rp vd;gJ ehSf;F 20 epkpl';fs; bra;af;Toa 6 go epiyfis bfhz;l gapw;rpahFk;/ ,g;gapw;rpapd; nghJ K:r;R RHw;rp kw;Wk; jirfs; jsh;epiy ,tw;wpy; ftdk; brYj;j ntz;Lk;/

- ,g;gapw;rpf;F mikjpahd R{Hy; ntz;Lk;

- c';fs; trjpf;nfw;wthW mkh;e;J bfhz;nlh my;yJ gLj;Jf; bfhz;nlh ,Uf;fyhk;/

- kw;w vy;yh vz;z';fisa[k; tpl;Ltpl;L c';fs; K:r;rpy; kl;Lk; ftdk; brYj;j ntz;Lk;/

- ❖ K:r;ir cs;th';ft[k; ///////2/////////3//////////4//// epWj;jt[k; ////2////3//// K:r;ir btspna tplt[k; /////2///////3/////4/////5

- ❖ K:r;ir cs;th';ft[k; 2/////3////4 epWj;jt[k; 2/////3////K:r;ir btspna tplt[k; /////2/////3/////4/////5

- ❖ K:r;ir cs;th';ft[k; ////2/////3///4/// epWj;jt[k; ////2/////3////K:r;ir btspna tplt[k; /////2/////3/////4/////5

- ❖ c';fs; KG ftdKk; c';fs; K:r;R RHw;rpapy; ,Uf;f ntz;Lk;/

- ❖ MH;e;j Rthrk; /////// ePskhd Rthrk; //// motapw;W Rthrk;////

- ❖ K:r;ir cs;th';ft[k; ///2///3////4/// epWj;jt[k; ////2////3//// K:r;ir btspna tplt[k;/

- ❖ K:r;ir cs;th';ft[k; ///2///3////4/// epWj;jt[k; ////2////3//// K:r;ir btspna tplt[k; ////2/////3////4/////5

- ❖ K:r;ir cs;th';ft[k; ///2///3////4/// epWj;jt[k; ////2////3//// K:r;ir btspna tplt[k; ////2/////3////4/////5

- ❖ c';fs; ftiyfs; midj;ija[k; tpl;Ltpl;L K:r;rpy; kl;Lk; ftdk; brYj;j ntz;Lk;/

- ❖ ,;g;bghGJ c';fs; KG ftdj;ija[k; c';fs; tyJ ifapy; jpUg;gt[k;/

- ❖ c';fs; tyJ if R{lhf. ,jkhf ,Ug;gij czU';fs;

- ❖ c';fs; tyJ if bjhl';fp. c';fs; bgU tpuy; Edp. tpuy;fs;. c';fs; cs;s';if. kzpf;fl;L. ifapd; gpd;g[wk; R{lhf . ,jkhf. tGthf ,Ug;gij czU';fs;/

- ❖ Xa;t[///////Xa;t[////////Xa;t[

- ❖ c';fs; ,lJ if R{lhf. ,jkhf. tGthf ,Ug;gij czU';fs;/

- ❖ c';fs; ,lJ if bjhl';;fp. c';fs; bgUtpuy; Edp. tpuy;fs;. c';fs; cs;s';if kzpf;fl;L. ifapd; gpd;g[wk; R{lhf. ,jkhf tGthf ,Ug;gij czU';fs;/

- ❖ Xa;t[////////Xa;t[////////Xa;t[

- ❖ c';fs; ,uz;L Kd; if. KH';if. gpd;iffs; R{lhft[k; ,jkhft[k; Xa;thft[k; ,Ug;gij czU';fs;/

- ❖ Xa;t[////////Xa;t[////////Xa;t[

- ❖ ,g;bghGJ c';fs; KGftdj;ija[k; tyJ fhypy; brYj;jt[k;/

- ❖ c';fs; tyJ fhypd; ghjk;. ghjj;jpd; mog;gFjp. nky; gFjp. tpuy;fs;. KH';fhy;. bjhilg;gFjp. ,jkhf////// tGthf/// ,Ug;gij czU';fs;/

- ❖ Xa;t[////////Xa;t[////////Xa;t[

- ❖ c';fs; KG ftdj;ija[k; ,lJ fhypy; brYj;j ntz;Lk;/

- ❖ c';fs; ,lJfhypd; ghjk;. ghjj;jpd; mog;gFjp. nky;gFjp. tpuy;fs;. KH';fhy;. bjhilg;gFjp. R{lhf…….,jkhf////// tGthf/// ,Uf;f ntz;Lk;/

- ❖ Xa;t[////////Xa;t[////////Xa;t[

- ❖ Xa;t[////////Xa;t[////////Xa;t[

- ❖ c';fs; ,U fhy;fSk; MH;e;j Xa;t[vLj;Jf; bfhz;oUf;fpwJ/

- ❖ c';fs; kdjpy; Xa;thd epiyia czut[k;

- ❖ ehd; brhy;Yk; thf;fpa';fis. c';fs; kdjpw;Fs; brhy;yt[k;

- ❖ vdJ tyJ if R{lhf. ,jkhf cs;sJ

- ❖ vdJ ,lJ if R{lhf. ,jkhf cs;sJ

- ❖ vdJ tyJ if tGthf cs;sJ

- ❖ vdJ ,lJ if tGthf cs;sJ

- vdJ ,uz;L iffSk; R{lhf. ,jkhf tGthf cs;sJ

- vdJ tyJ fhy; R{lhf. ,jkhf cs;sJ

- vdJ tyJ fhy; tGthf cs;sJ

- vdJ ,lJ fhy; R{lhf. ,jkhf cs;sJ

- vdJ ,lJ fhy; tGthf cs;sJ

- vdJ ,U fhy;fSk; R{lhf. ,jkhf tGthf cs;sJ

- vdJ ,uz;L iffSk; fhy;fSk; R{lhf. ,jkhf cs;sd/

- vdJ ,ja Jog;g[rPuhf. bkJthf cs;sJ

- vdJ ,jaJog;g[Rfkhf cs;sJ

- vdJ bew;wp Fspuhf cs;sJ

- vdJ iffSk;. fhy;fSk; R{lhf ,jkhf. tGthf cs;sJ

- vdJ ,jaJog;g[bkJthf. rPuhf cs;sJ

- vdJ bew;wp Fspuhf cs;sJ

- vdJ iffSk; fhy;fSk; kpft[k; R{lhf. ,jkhf. Xa;thf cs;sd/

- vdJ ,ja Jog;g[rPuhf. bkJthf Xa;thf cs;sd/

- vdJ bew;wp Fspuhf cs;sJ

- ehd; Xa;thf cs;nsd;

- Xa;t[///////Xa;t[///////Xa;t[

- Xa;t[///////Xa;t[///////Xa;t[

- ,g;bghghGJ vdJ cly; kw;Wk; kdk; kpft[k; nyrhf cs;sJ

- iffs;. fhy;fspd; tpuy;fis klf;fp tphpf;ft[k;

- eP';fs; cw;rhfj;Jld; ,Ug;gij czU';fs;

- ❖ c';fs; iffis jiyf;F nkny tphpf;Fk;nghJ xU bgU K:r;R vLf;ft[k;

- ❖ iffis ,wf;Fk;nghJ K:r;ir btspna tplt[k;

- ❖ fz;fis jpwe;J xU epkplk; Xa;thf ,Uf;ft[k;

- ❖ c';fs; rhjhuz epiyf;F jpUk;gt[k;

- ❖ gapw;rp Kw;wpw;W/

APPENDIX-G

PHOTOGRAPHS

APPENDIX-H

CERTIFICATE