

**A STUDY TO ASSESS THE EFFECTIVENESS OF RELAXATION THERAPY  
ON STRESS AND ANXIETY AMONG  
CAREGIVERS OF MENTALLY ILL PATIENTS  
INSNEKAMIND CARE CENTRE  
AT THIRUNELVELI**



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

**APRIL 2015**

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**Internal Examiner**

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**External Examiner**

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Approved by Dissertation Committee on.....

**RESEARCH GUIDE:**

Prof. Mrs. Violin Sheeba, M. Sc.(N), Ph.D.,

Principal ,

Thasiah College of Nursing,

Marthandam, K.K District, Tamil Nadu : .....

**SUBJECT GUIDE:**

**Mr. Gurudhas. M.Sc(N),**

Head of the department in Mental health Nursing,

Thasiah College of Nursing,

Marthandam, K.K District, Tamil Nadu : .....

**MEDICAL GUIDE:**

**Dr.C. PaneerSelvan M.D. (PSYCH); NIMHANS,**

Consultant Psychiatrist,

Sneka Mind Care Centre, Thirunelveli : .....

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**CERTIFICATE**

This is to certify that this is the bonafide work of ----- II Year M.Sc. Nursing, Thasiah College of Nursing, Marthandam, in partial fulfillment of the requirements for the degree of Master of Science in Nursing from the Tamil Nadu Dr. M.G.R. Medical University, Chennai.

**Place:**

**Principal,**

**Date:**

Thasiah College of Nursing,

Marthandam.

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**Investigator**

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## **ABSTRACT**

A study to assess the effectiveness of relaxation therapy on Stress and Anxiety among caregivers of mentally ill patients in Sneka Mind Care Centre at Thirunelveli.

The objectives of the study is to assess the Stress and Anxiety level of caregivers of mentally ill patients and to find out the effectiveness of relaxation therapy.

Quantitative research approach with pre experimental - one group pre test and post test design was adopted to this study. The study was conducted among the caregivers of mentally ill patients at Sneka Mind Care Centre at Thirunelveli. Convenience sampling technique was adopted to select 60 caregivers of mentally ill patients.

Data collection was done by using caregivers Stress assessment scale and Beck Anxiety Inventory. Relaxation therapy was administered for the samples. The data gathered were analyzed by descriptive and inferential statistical method and interpretation was done on the basis of the objectives of the study.

The findings revealed that there was highly significant difference in level of Stress and Anxiety among caregivers of mentally ill patients after rendering the relaxation therapy.

During pre test, in caregivers Stress assessment the analysis of pre test out of 60 samples 47 (78.3%) had moderate level of Stress and 13 (21.6%) had severe level of Stress. In Modified Beck Anxiety Inventory Scale the analysis of pre test out of 60 samples 38(63.3%) had moderate Anxiety and 22(36.6%) had severe anxiety. So it indicates that moderate and severe level of

Stress and Anxiety was common among caregivers of mentally ill Patients and they require some relaxation measure.

In post test care givers Stress assessment, the mean post test score was 23.4 and standard deviation was 7.29. The mean difference was 28.5. The obtained paired 't' test value 20.26 which is more than the table value at 0.05 level of significance. In Modified Beck Anxiety Inventory Scale, the mean post test score was 26.3 and standard deviation was 5.62. The mean difference is 25. The obtained paired 't' test value 21.36 which is more than the table value at 0.05 level of significance.

Hence the research hypothesis (H1) was accepted and it was inferred that relaxation therapy is effective in reducing the level of Stress and Anxiety among caregivers of mentally ill patients.

From the results of the study it is concluded that rendering relaxation therapy to the caregivers of mentally ill patients was effective in reducing Stress and anxiety. The caregivers of mentally ill patients with Stress and Anxiety can include this therapy in their routine activities. The caregivers leisure time may be enough and utilized for doing this relaxation therapy.

# CHAPTER- I

## INTRODUCTION

*'Mental calmness is a natural result of physical relaxation'*

*- Dr Edmund Jacobson.*

### *Background of the Study*

Caregivers play a vital role in supporting family members who are sick, infirm or disabled. Families not only provide practical help and personal care but also give emotional support to their relatives with a mental disorder. Therefore the affected person is dependent on the caregiver and their well-being is directly related to the nature and quality of the care provided by the caregiver. These demands can bring significant levels of Stress and Anxiety for the caregiver and can affect their overall quality of life.

Research into the impact of care-giving shows that one-third to one-half of caregivers suffer significant psychological distress and experience higher rates of mental ill health than the general population. Being a caregiver can raise difficult personal issues about duty, responsibility, adequacy and develop guilt. Caring for a relative with a mental health problem is not a static process since the needs of the care recipient alter as their condition changes. The role of the caregiver can be more demanding and difficult if the care recipient's mental disorder is associated with behavioral problems or physical disability.

Over the past few decades, research into the impact of care-giving has led to an improved understanding of this subject including the interventions that help. It has now been realized that developing constructive working relationships with caregivers and considering their needs is an essential part of service provision for people with

mental disorders who require and receive care from their relatives.(**Aadil Jan Shah, OvaisWadoo and JavedLatoo; 2010**)

The family has always been recognized as an important factor both in the genesis and prognosis of mental illness. Initial studies generally focused on the possible etiologic role of the family, but the perspective has now changed to incorporating the family as a “reactor” to mental illness of a member. This has led to interest in various problems that arise from the patient’s presence at home such as financial difficulties or marital disharmony. The sum total of these problems or difficulties which affect the significant others of a psychiatric patient is referred to as social or family burden.

Care for severely mentally ill individuals may carry a heavy burden than care for other disabled individuals. It is particularly true for close family members such as parents, many of whom take care of their mentally ill children for long. Such burden manifests in reduced caregiver wellbeing which admittedly depends in part on caregiver factors such as care-giving style. Moreover, such burden may manifest in reduced wellbeing of the mentally ill individuals themselves, for example, impaired caregiver support. (**Guru Raj. et. al, 2008**).

Stress is a term that is commonly used today but has become increasingly difficult to define. It shares, to some extent, common meanings in both the biological and psychological sciences. Stress typically describes a negative concept that can have an impact on one’s mental and physical well-being, but it is unclear what exactly defines Stress and whether or not Stress is a cause, an effect, or the process connecting the two. With organisms as complex as humans, Stress can take on entirely concrete or abstract meanings with highly subjective qualities, satisfying definitions of both cause and effect in ways that can be both tangible and intangible.

Anxiety is a diffuse presentation which is vague in nature and associated with feelings of uncertainty, helplessness, feelings of isolation, alienation, and insecurity. Experiences provoking Anxiety begin in Infancy and continue throughout life. They end with the fear of greatest unknown outcome.

At one time or another, most people experience Stress. The term Stress has been used to describe a variety of negative feelings and reactions that accompany threatening or challenging situations. However, not all Stress reactions are negative. A certain amount of Stress is actually necessary for survival. The Stress reaction maximizes the expenditure of energy which helps prepare the body to meet a threatening or challenging situation and the individual tends to mobilize a great deal of effort in order to deal with the event. Both the sympathetic/adrenal and pituitary/adrenal systems become activated in response to Stress. The sympathetic system is a fast-acting system that allows us to respond to the immediate demands of the situation by activating and increasing arousal. The pituitary/adrenal system is slower-acting and prolongs the aroused state. However, while a certain amount of Stress is necessary for survival; prolonged Stress can affect health adversely.

Constant Stress is one of the defining features of modern life, and the source of many health problems. Stress plays an obvious role in nervousness, anxiety, insomnia and vast number of illnesses.

When we are mentally Stressed and anxious, we unconsciously tense our muscles. Tension held in our muscles adds physical discomfort or pain. It will commonly showed as headache, backache, stomachache, and ache in neck and shoulders - making the mental Stress even worse. Therefore relaxation is the best and cheapest method which helps an individual to combat Stress. The challenge is to identify relaxation techniques that provide both safety and stimulation to help reboot the system.

Relaxation techniques are those strategies used to reduce feelings of Stress and Anxiety. They can be very useful during times of high Stress or nervousness and can even help a person with getting through a panic attack. The most popular relaxation technique was Progressive muscle relaxation (PMR) that has been found to help and relieve feelings of Stress and Anxiety.

### **Need for the Study**

Family caregivers are integral to the care of patients with physical or mental impairments. Unfortunately, providing care is often detrimental to the caregivers' health. As a result, in the last decade, there has been a proliferation of interventions designed to improve caregivers' well-being. Interventions for caregivers of persons at the end-of-life, however, are relatively few in number and are often underdeveloped. They also are typically designed to help and reduce the work of care giving or to help caregivers cope with the physical and emotional demands of providing care. While useful, these interventions generally ignore a primary Stressor for family caregivers a loved one's suffering. Patient suffering whether physical, psychosocial, or spiritual, has a major impact on family caregivers.

Living with and caring for an individual with a psychiatric disorder seems inherently stressful. Relatives of psychiatric patients report a wide range of reactions to their situation. On the whole, these family members endorse significantly higher level of psychological distress than the general population.

Deinstitutionalization, restricted hospital admission and reduction of length of inpatient treatment also change the situation of relatives. Nowadays they are much more involved in the care of patients. Many caregivers of a person with schizophrenia suffer from ongoing distress whereas professionals tend to underestimate family burden. Thus caregivers feel ignored by mental health professionals. This divergent perception underlines the importance of quantitative studies on family burden

In a study on patient-caregiver dyads conducted in Trivandrum, it was found that all eleven patients were obliged to give up work as a result of illness. In many families, the caregiver also had to change work habits. All respondents stated illness had forced them to sell assets.

According to a report from the Study to Understand Prognoses and Preferences for Outcomes and Risks of Treatment, or support study, one-fifth of all family members of mentally ill patients had to quit work or make another major life change in order to care for their family member. Almost one-third reported the loss of all of their family savings, and 29% reported the loss of the major source of family income.

A study was conducted to explore the influences of selected social and psychological factors that are associated with perceived caregiver burden in a sample of 263 primary caregivers of the elderly in Allahabad City in northern India. The results indicated that although male caregivers' perceived burden depends only on the size of the role overload, female caregivers' perceived burden depends on the interrelationship between the size of the role overload and adherence to Asian cultural norms.

In the above discussion it has been seen that Stress faced by caregivers can lead to many complications such as depression, stroke and other diseases which eventually leads to death. As health professionals we should also pay attention to the caregivers for such a study to be conducted. Therefore the researcher felt that there is a need for such study to be conducted. which has been effective in relieving Stress and Anxiety. The researcher is interested in taking up progressive muscles relaxation Technique as it is found to be effective, easy to follow the steps, convenient for most of the people and also takes 20 minutes only.



## **Statement of the Problem**

A study to assess the effectiveness of Relaxation Therapy on Stress and Anxiety among Caregivers of mentally ill patients in Sneka Mind Care Centre at Thirunelveli.

## **Objectives of the Study**

- To assess the level of Stress and Anxiety among the Caregivers of mentally ill patients before giving Relaxation Therapy.
- To assess the effectiveness of Relaxation Therapy among Caregivers of mentally ill patients after giving Relaxation Therapy .
- To find out the association between Stress and Anxiety among caregivers of mentally ill patients with their selected demographic variables.

## **Hypotheses of the Study**

- This study attempts to examine the following hypotheses.
- **H<sub>1</sub>**: There will be a significant difference between the level of Stress and Anxiety among Caregivers of mentally ill patients after Relaxation Therapy.
  - **H<sub>2</sub>**: There will be a significant association between the level of Stress and Anxiety among Caregivers of mentally ill patients with their selected demographic variables.

## **Operational Definitions**

### **Effectiveness**

It refers to the outcome of Relaxation Therapy given to the Caregivers of mentally ill patient, and it can be measured by caregiver Stress-assessment scale and modified beck Anxiety inventory scale.

## **Relaxation Therapy**

It is used to relieve Stress and Anxiety by affecting the synapses and producing a relaxation response. It should be performed by tensing of each muscle groups and then relaxing them in an orderly fashion as forehead, eyes, nose , lips, cheeks, jaws, hand, shoulder, back, stomach, hip, feet, and toes practiced for 20 minutes daily about seven days.

## **Stress**

It refers to the outcome of burden experienced by caregivers from the demand of caring and seeing the suffering of their loved ones, which is manifested as psychological response such as hopelessness , helplessness and physiological response such as body ache, indigestion,due to Stressors among the Caregivers of mentally ill patient.

## **Anxiety**

It refers to the varying degrees of emotion experienced by caregivers stated as unable to relax, difficulty in remembering, worry a lot, less intrest in activies, and it can be measured by Beck Anxiety inventory scale.

## **Caregivers**

It refers to the blood related family members or related to marriage and adoption, who provide care to the mentally ill patient.

## **Assumptions**

1. The Caregivers may experience significant level of Stress and Anxiety due to caring of mentally ill patients.
2. Relaxation Therapy will have a significant effect in relieving Stress and Anxiety among the Caregivers of mentally ill patients .
3. The Stress and Anxiety can lead to Stress related diseases if unattended which can be prevented by effective utilization of Relaxation Therapy.

## **Delimitations**

The study is delimited to

- The Caregivers of mentally ill patients in sneka mind care centre at Thirunelveli.
- The Caregivers of mentally ill patients above 18years.
- Blood related family members and family members related to marriage and adoption who is caring the mentally ill patients.

## **Ethical Consideration**

This study required intervention in the form of Relaxation Therapy for which the investigator had undergone training in Relaxation Therapy before data collection to prevent harm to the participants. Confidentiality was assured by the investigator. The ethical clearance was obtained from the ethical committee. Prior permission was obtained from the Sneka Mind Care Centre and informed consent was obtained from the caregivers.

## **Conceptual Framework**

A conceptual framework can be defined as a set of concepts and assumptions that integrate into a meaningful configuration (Fawcett, 1994). The conceptual framework facilitates communication and provides a systematic approach to nursing research, education, administration and practice. Conceptual models attempt to represent reality with a minimal use of words.

The conceptual framework selected for this study is Ludwing Von Bertalanffy's General system theory. In 1968 Bertalanffy's introduced this theory as a universal theory that could be applied to many fields of study.

Bertalanffy's model includes the following components.

### **System**

In this study, caregivers of mentally ill patients are considered as a system.

### **Input**

In this study, input includes selected socio demographic variables among caregivers of mentally ill patients in Sneka Mind Care Centre at Thirunelveli and the pre-test questionnaire which is assessing the level of Stress and Anxiety.

### **Through put**

The system uses, organizes and transforms the information in between input and output is throughput or process. This study try to evaluate the effectiveness of progressive muscle Relaxation Therapy on Stress and Anxiety among caregivers of mentally ill patients in Sneaka Mind Care Centre at Thirunelveli by administering the progressive muscle Relaxation Therapy. The investigator conduct the post –test and compare the results of pre and post test.

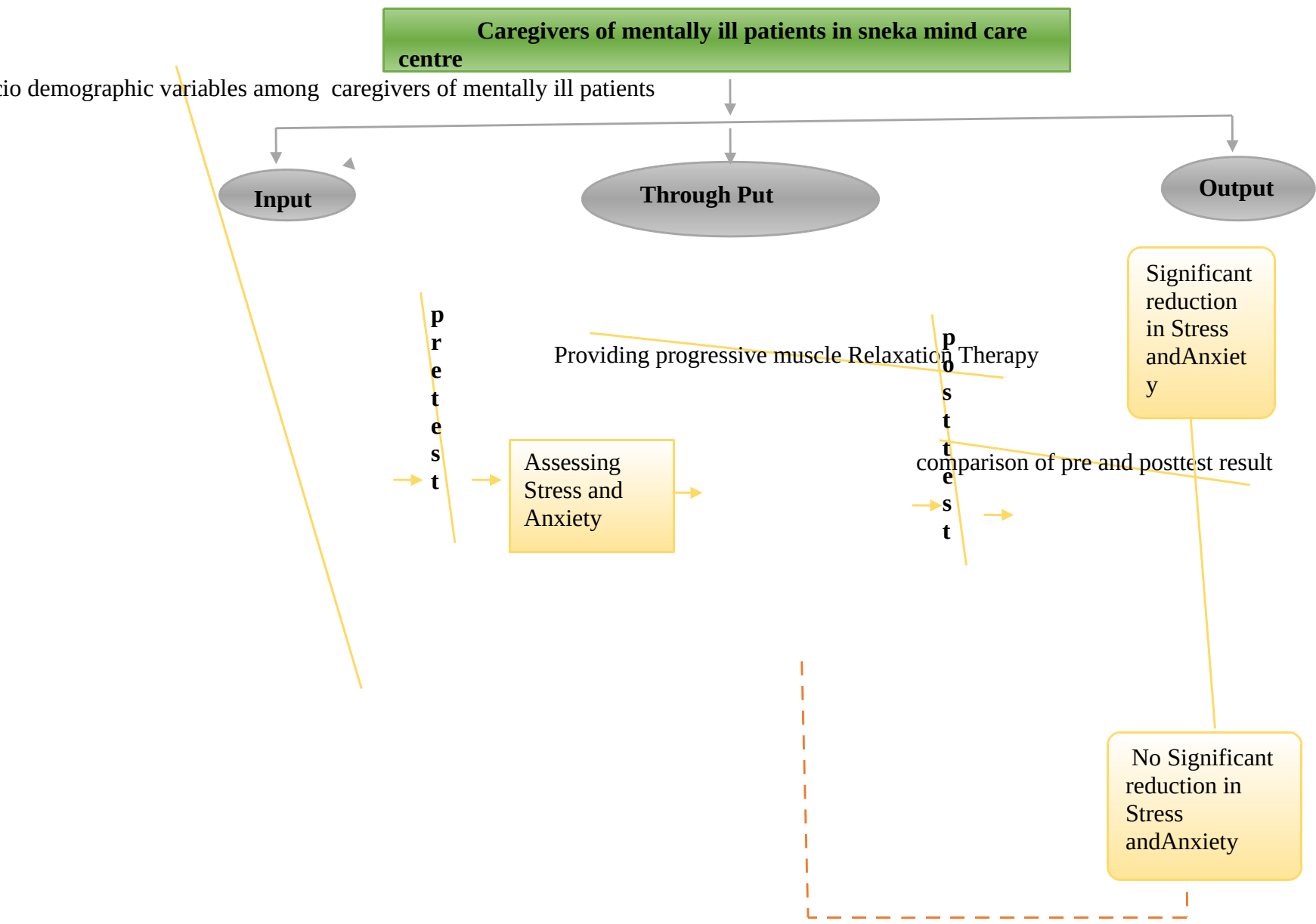
### **Output**

The outcome of Progressive Muscle Relaxation Therapy is evaluated bycaregivers Stress assessment scale and beck Anxietyinventory. After post test, there will be significant reduction in level of Stress and Anxiety that indicates the effectiveness of Progressive Muscle Relaxation Therapy on Stress and Anxiety Among caregivers of mentally ill patients .

### **Feedback**

The feedback refers to the output that may be positive, negative or neutral. In this study, feedback measured in the output reveals the significant effectiveness or non effectiveness of the progressive muscle Relaxation Therapy on Stress and Anxiety.





**Figure:1 Conceptual Framework Based on Ludwing Von Bertalanffy's General system theory(1968)**





## **CHAPTER-II**

### **REVIEW OF LITERATURE**

Review of literature is an essential component of the research process. This chapter deals with studies related to research literature that will review to understand and to gain insight into the selected chapter under study.

Review of literature is a written summary of the state of existing knowledge on a research problem. The task of reviewing research literature involves the identification, selection of a critical analysis and written description of existing information on a topic(**Polit D.F. and Hungler; 2003**).

Review of literature is an essential step in the research project. It provides basis for future investigations, justifies the need for study and throws light on the feasibility of the study.

Review of literature for the present study is classified under two headings.

- ❖ Studies related to Stress and Anxiety among caregivers of mentally ill patients.
- ❖ Studies related to Relaxation Therapy (progressive muscle Relaxation Therapy)

#### **Studies Related to Stress and Anxiety among Caregivers of Mentally ill Patients.**

**Jose Anne;(2013)** Study was conducted to investigate burden experienced by caregivers of schizophrenia. Qualitative assessments were done by focus group discussions (FGDs) with 20 family caregivers of patients diagnosed as Schizophrenia. 2 focus groups were held involving 10 caregivers. Data was analysed using thematic and content analysis. The areas of burden identified are family functioning, financial problems, social isolation, emotional burden, caregivers health, and refusal of medicines.

**Ratnakar.et al., (2008)** Conducted a study on evaluation of Anxiety and depression among the family caregivers of advanced cancer patients. The results show that the family caregivers of advanced cancer patients undergo Anxiety and depression associated with Stress leading to increased Stress.

**Guru raj; (2008)**Two Indian comparative studies were conducted in different states of India on the caregivers' burden of schizophrenia and OCD patients. Ninety two First degree relatives/ spouses were compared. One study showed higher burden in OCD group that was high among spouses than relatives of schizophrenia group . The same author done another study showed higher burden in schizophrenia than OCD.

**Irene J HigginsonandWei Gao; (2006)**Conducted a study to assess caregiver reports of patient concerns and the roles of caregiver's burden. 64 samples were interviewed, and the level of burden assessed by Palliative Outcome Scale (POS) and Zarit Burden Interview Scale (ZBI). The results showed the Caregivers had significantly higher burden

**Sunil Srivastava;(2005)**The study was conducted to measure the perception of burden by caregivers of patients with schizophrenia at Institute of Mental Health and Hospital, Agra. TheBurden Assessment Schedule (BAS) was correlated to spouse, physical and mental health, external support, caregiver's routines, support to patient, responsibility-taking, other relatives, patient's behavior and caregiver's strategy. A number of sample is thirty four caregivers of patient with schizophrenia. A low positive correlation was found between urban domiciles and support of the patient and the caregiver's routine. There was a low positive correlation between age less than 30 years and the physical and mental health of the caregiver, and with taking responsibility

**Rammohan, A; (2002)** This comparative cross-sectional study assessed family burden among caregivers of patients with OCD and schizophrenia in an Indian

setting. Findings shows Indian families experience significant degrees of burden in the care of their relatives with OCD and schizophrenia. Relatives' demographic characteristics did not influence burden severity. Illness severity and patients' disability had a direct positive relationship with perceived family burden. This study suggests to develop local needs based support programme for families of patients with psychiatric disorders in India.

### **Studies Related to Relaxation Therapy (Progressive Muscle Relaxation Therapy)**

**Ms.Palak Patel; (2014)**Conducted a Study to Assess the Effectiveness Of Progressive Muscle Relaxation Therapy on Stress among Staff Nurses Working In Selected Hospitals at Vadodara City.Pre experimental one group pre - test and post -test research design was adopted to achieve the goal of the study by using instrument i.e demographic data and Stress assessment scale among 30 staff nurses. The findings of the study revealed that in pre test most of the nurses 53.3% had moderate Stress, 40.0% had mild Stress and 6.7% had severe Stress. In post test most of the nurses had mild Stress 73.3 % and no Stress 26.7 % . It is concluded that Progressive Muscle Relaxation Therapy is effective in reducing the Stress level of the staff nurses.

**Febu Elizabeth Joy; (2014)**An exploratory study was conducted to identify the adolescents with social Anxiety and teach theJacobson's Progressive Muscle Relaxation( JPMR) technique to those who would score high on social Anxiety scale. The data were collected from 193 high school adolescents using Demographic Proforma, Social Anxiety Scale for Adolescent and Tool to Assess the Associated Factors of Social Anxiety. The JPMR technique was administered to the adolescents with moderate to severe social Anxiety. The study found that 52(27%) adolescents were having moderate social Anxiety and there was significant association ( $\chi^2=15.297, p<0.05$ ) between age of the adolescents and social Anxiety. The Jacobson's Progressive Muscle Relaxation Technique was found to be effective ( $t=10.646, df=39, p=0.001$ ) in reducing the social Anxiety. Social Anxiety is common among adolescents and many modifiable factors related to parents and teachers are associated with it. Appropriate interventions in an early time may help them to reduce it.

**Rojan Jose; (2013)** Conducted a study to assess the effectiveness of Jacobson's Progressive Muscle Relaxation (JPMR) on Blood Pressure and Health Related Stress Level among Patients with Hypertension in a Selected Hospital of Mangalore. An evaluatory approach with one group pretest- post test design was done on a sample of 40 patients diagnosed with hypertension. JPMR was administered for 20 minutes to the patients for 4 days both in the morning and evening as 8 sessions. Pre and post intervention BP and health related Stress was assessed. The mean systolic BP had reduced from  $155.8 \pm 10.14$  to  $121.7 \pm 4.47$  and mean diastolic BP had reduced from  $92.7 \pm 4.52$  to  $79.9 \pm 62.63$  after the administration of JPMR. The average reduction of systolic BP was 6.42 mm of Hg and that of diastolic BP was 0.8 mm of Hg over the 4 days. The mean health related Stress level had reduced from  $94.03 \pm 7.64$  to  $62.8 \pm 7.15$ , with a mean percentage reduction of 19.5%. JPMR is a cost-effective, non-invasive, non-pharmacological alternative therapy in the management of Stress and hypertension

**Beulah Mavis; (2013)** Conducted a comparative study to assess the effectiveness of Reflexology and Two Minute Relaxation Technique on Fatigue Reduction and Relaxation in Clients Undergoing Haemodialysis in Selected Setting. The research design selected for this study was pre-experimental, that is, two group pre-test post-test design. In this study the data collection instruments used are Baseline Performa of ESRD patients undergoing haemodialysis, Self-expressed Relaxation rating scale, Modified Piper Fatigue scale. The findings showed that there was a significant difference in the pre-test and post-test score of fatigue and relaxation in the reflexology and two minute relaxation technique group. This proved the effectiveness of reflexology and two minute relaxation technique in reduction of fatigue and enhancement of relaxation in both the groups.

**Dolbier, christyln, rush, taylor e.; ( Feb 2012)** Carried out a study to examine the efficacy of abbreviated progressive muscle relaxation (APMR) to enhance physiological and psychological functioning among high-Stress college students. || Participants (N = 128) with high Perceived Stress Scale scores. After random assignment, for 20 min, 66 experimental group participants underwent APMR

lying down and 62 control group participants lied down quietly. Pre- and post intervention measures included the Endler Multidimensional Anxiety Scale, relaxation items, electrocardiograph heart rate and heart rate variability (HRV), and salivary cortisol. Compared with the control group, the experimental group demonstrated significantly greater increases in mental (Cohen's  $d = 0.32$ ) and physical (Cohen's  $d = 0.32$ ) relaxation, and normalized high-frequency HRV (Cohen's  $d = 0.29$ ), and decreases in low- to high-frequency HRV ratio (Cohen's  $d = 0.31$ ). Small effect sizes were observed for Anxiety, normalized low-frequency HRV, and cortisol. Analyses of the reliability and clinical significance of these changes indicate trends in the expected direction. These findings indicate an APMR intervention can have significant short-term effects, both reducing detrimental and enhancing beneficial functioning in high-Stress college students.

**Sandra M; (2011)** Conducted a study to test the outcomes of an Art Infusion (AI) intervention with family caregivers of cancer patients while patients were undergoing treatment. The design used was pre-posttest quasi-experimental design. The convenient sample of 49 family caregivers participated in the study. The findings shows that highly significant findings indicate that family caregivers achieved relief from Stress ( $p=.000$ ), had lower Anxiety ( $p=.000$ ), and increased positive emotions ( $p=.000$ ) following participation in the AI. They concluded that the research participants demonstrated significant changes in Stress, Anxiety, and emotions.

**Nayak H K, Hemant Tiwari et al., (2011)**Conducted a study about community-based cross-sectional study to assess the prevalence and pattern of Stress relaxation practices in Ahmedabad city, Gujarat, India. The prevalence of different types of Stress Relaxation practices in relation with their socio demographic profile studied. Results reveals that out of 904 persons above 20 years of age were surveyed among them 310 doing Stress Relaxation practices were able to maintain balance between work and other activities than non - Stress relaxation practices group. Also concluded that research study of the Stress among the workers of sedentary occupation should be carried out.

**Mohsen yazdani; (2010)** Conducted a study on the effectiveness of Stress management training programme (which included progressive muscle relaxation technique) on depression, Anxiety and Stress of the nurses in Isfahan university of medical science with 68 samples by using randomized quasi experimental trial, result saws that there was no significant difference before the intervention in depression, Anxiety and Stress mean score of two groups, after the intervention, the mean score of Anxiety and Stress in the intervention group was 5.09 (4.87) & 8.93 (6.01) and in the control group was 10 (6.45) & 13.17 (7.20). This reduction also had been remained after a month

**Max G Feirstein; (2009)**An experimental study was conducted to determine whether the characteristics of absorption or worry would moderate by the effects of progressive muscle relaxation technique or guided imagery delivered to groups. Twenty male and 49 female students were administered either progressive muscle relaxation technique or imagery by a certified hypnotherapist. Although both treatments produced significant increases in relaxation and reductions in Stress and Anxiety, relaxation scores increasing from pre-test to post-test and Stress and Anxiety decreasing, It is suggested that progressive muscle relaxation technique may hold certain inherent benefits over imagery, as it may be less likely to were cause adverse effects.

**Manzoni et al;(2008)** Conducted a study to enhances understanding of the variability and clinical significance of Anxiety reduction outcomes after relaxation treatment. observational and without control group, evaluating the efficacy of relaxation training (Jacobson's progressive relaxation, autogenic training, applied relaxation and meditation) for Anxiety problems and disorders were identified .27 studies qualified for the inclusion in the meta-analysis. As hypothesized, relaxation training showed a medium-large effect size in the treatment of Anxiety. Cohen's d was .57 (95% CI: .52 to .68) in the within analysis and .51 (95% CI: .46 to .634) in the between group analysis. Efficacy was higher for meditation, among volunteers and for longer treatments. Implications and limitations are discussed.. The results show consistent and significant efficacy of relaxation training in reducing Anxiety.

**Giju Thomas; (2006)**Conducted a quasi experimental study to determine the effectiveness of progressive muscle relaxation technique on Anxiety among elderly people in selected old age home at Bangalore.|| Study was carried out in Sarvodaya old age home, Bangalore. Data was obtained from the 40 elderly persons staying in Sarvodaya old age home through the standard state trait Anxiety inventory scale the level of Anxiety was assessed. Purposive sampling technique was used .the finding of the study reveals that the mean level of Anxiety during pretest was 89.82 and post test it was reduced to 69.55. there was an effectiveness found after STP of progressive muscle relaxation technique through statistical analysis by using paired  $t$  test. ( $t = 5.524$   $P < 0.05$ ) .

**Kwekkeboom.K.L; (2006)**Conducted a study to review randomized trials of relaxation interventions used for the treatment of pain in adults and to synthesize evidence regarding the efficacy of specific techniques. Studies were reviewed and categorized based on the type of relaxation intervention (progressive muscle relaxation [PMR], autogenic training, jaw relaxation, rhythmic breathing, and other relaxation exercises), and summarized with respect to various study characteristics and results. Most of the studies reviewed had weaknesses in methodology, which limited the ability to draw conclusions about interventions. Further research is needed to confirm positive findings related to PMR, jaw relaxation, and systematic relaxation, to address questions related to the dose-response relationship and the individual differences that might influence response to relaxation interventions. These and other relaxation techniques require testing in carefully designed and conducted trials

## CHAPTER-III

### METHODOLOGY

Research methodology refers to the techniques used to structure the study and to gather and analyze information in a systematic fashion.

This chapter deals with the methodology adopted for this study and includes the research approach, design, setting, variables, population, samples, sampling method, inclusive criteria and exclusive criteria.

#### Research Approach

The study utilized quantitative study approach. The study was conducted in two phases. Pre assessment was done for both Stress and Anxiety, and progressive muscle relaxation was given to the participants in first phase. Post test was done for both Stress and Anxiety in the second phase.

#### Research Design

Research design refers to the overall plan for obtaining answers to research questions and it spells out the strategies that the researcher adopts to develop information that is adequate, accurate, objective and interpretable. **(Polit D.F. and Hungler;1999).**

In view of nature of the problem and to accomplish the objectives of the study pre experimental - one group pre testpost test design was used to evaluate the effectiveness of Relaxation Therapy on level of Stress and Anxiety.

Pre Experimental - one group pre testpost test design

O<sub>1</sub> X O<sub>2</sub>



<b>Pre test</b>	<b>Intervention</b>	<b>Post test</b>
O <sub>1</sub>	X	O <sub>2</sub>

O<sub>1</sub> = Pretest (Level of Stress and Anxiety before Intervention)

X = Intervention (progressive muscle Relaxation Therapy)

O<sub>2</sub> = Posttest (Level of Stress and Anxiety after Intervention)

### **Variables**

Independent variable:

Relaxation Therapy (progressive muscle relaxation )

Dependent variable:

Stress and Anxiety among Caregivers of mentally ill patients.

### **Setting of the Study**

In this study the research setting is ‘SnekaMind Care Centre’ at Thirunelveli, which is located 75 kilometers away from Thasiah College of Nursing and it is an 80 bedded psychiatric hospital where the daily outpatients are above 250 and the inpatients are 60-80. Among this majority of them are with acute mental illness with psychosis. The hospital have a separate wing for alcohol deaddiction and psychiatric rehabilitation. The hospital is equipped with facilities for activity therapy and other psychological therapies. Counseling services also available within the hospital.

### **Population**

Target population : Caregivers of mentally ill patients above 18 years.

Accessible population : Caregivers attending SnekaMind Care Centre at Thirunelveli.

## **.Sample Size**

The sample size consist of 60Caregivers of mentally ill patients in Sneka Mind Care Centre.

## **Sampling Technique**

The sampling technique adopted for this study is convenience sampling method.

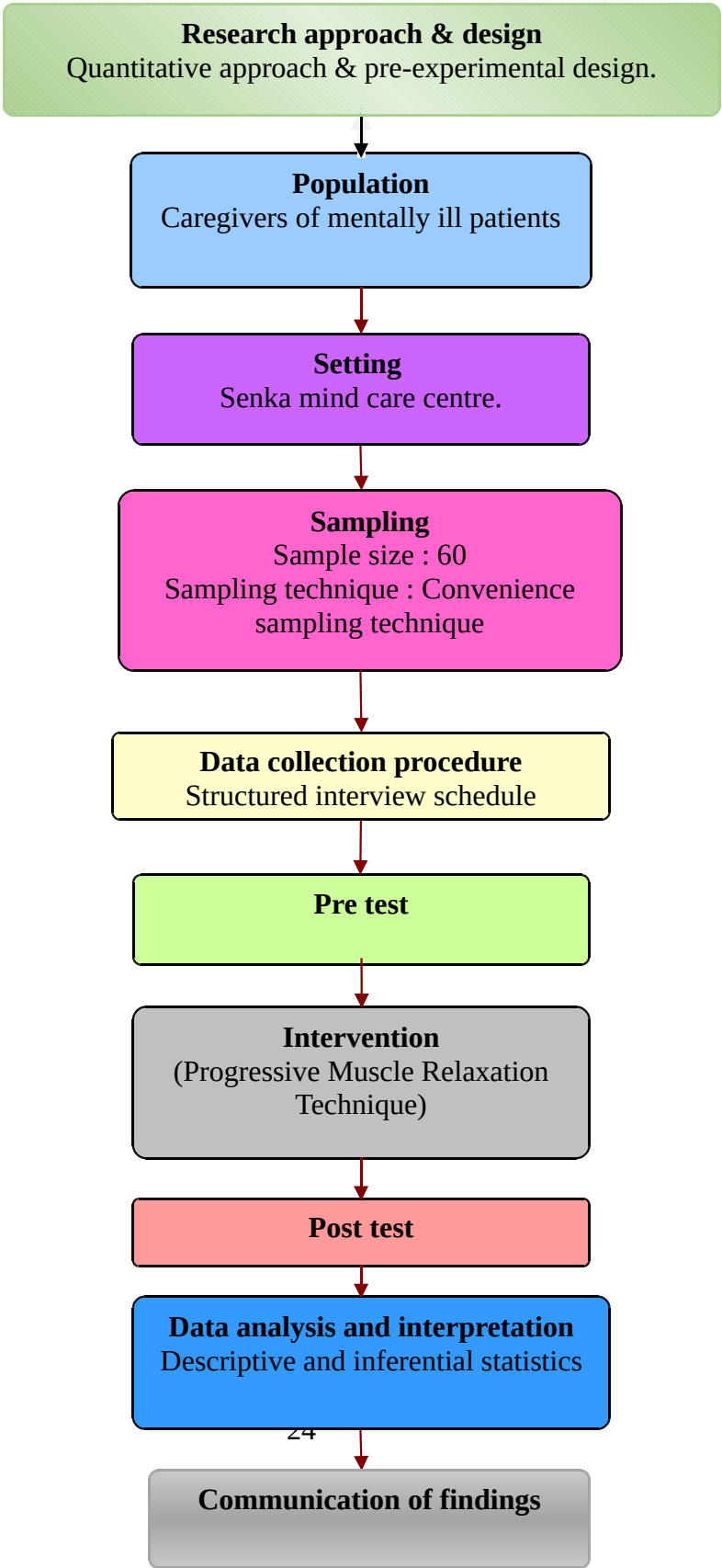
## **Sample Selection Criteria**

### **Inclusive criteria**

- Caregivers who were willing to participate in the study
- Caregivers who were present from first day of admission about 8 days.
- Caregivers those who have moderate and severe level of Anxiety and Stress will be taken as a sample.

### **Exclusive criteria**

- Caregivers who are not attended intervention regularly.
- The discharge of the patient before 8 days.
- Caregivers who are not familiar with Tamil and English language.



**Figure : 2 Schematic Representation of the Research Methodology.**

**Description of the Tool**

The tool consist of 3 sections,

**Section: A**

Demographic profile comprised of 10 variables such as age, sex, educational status, religion, occupation, family income per annum, marital status, relationship with the patient, type of family and duration of illness.

**Section: B**

This section dealswith caregivers Stress assessment to assess the level of Stress. This section comprised of 20 items. Each item carries a score between 0-4 depending on the level of Stress. The minimum and maximum scores were 0 and 80 respectively. The score interpretation was done as follows,

***Scoring andinterpretation***

No Stress	0-20 (0-25%)
Mild Stress	21-40 (26% - 50%)
Moderate Stress	41-60 (51% - 75%)
Severe Stress	61-80 (76% - 100%)

**Section: C**

This section dealt with Beck's Anxiety Inventory scale to assess the level of Anxiety. This section comprised of 25 items. Each item had a score between 0-3

depending on the level of Anxiety. The minimum and maximum scores were 0 and 75 respectively. The score interpretation was done as follows,

### **Scoring and interpretation**

Mild Anxiety	0-25 (0 - 33%)
Moderate Anxiety	26-50(34% - 66%)
Severe Anxiety	51-75 (67% - 100%)

### **Content Validity**

Validity of the tool was established with the consultation of the guide and five experts includes three M.Sc nursing faculties with five years experience, a expert of psychiatric practitioner and an expert of clinical psychologist. The experts were requested to give their opinion and suggestion for further modification of items to improve the clarity and content of the items. The Final tool was prepared as per the suggestions and advice given by the experts.

### **Reliability of the Tool**

The reliability for application of tool was tested using the test retest method. Instrument reliability is the consistency with which it measures the target attribute. Reliability of the tool was established using test retest reliability method. The reliability score is  $r = 0.82$ , which showed a positive correlation, hence the tool was considered reliable for proceeding with the study. An independent recording of the data was done according to the tool instructions. There was no tool ambiguity experienced by the investigator.

## **Pilot Study**

Pilot study is defined as, "a small-scale version or trial run, done in preparation of a major study". (Denise F. Polit; 2011)

Pilot study was conducted in Sneka Mind Care Centre at Thirunelveli. Initial permission was sought from the institution and formal permission was sought from the director for conducting pilot study. Pilot study was conducted in the month of April for a period of one week. The investigator selected 6 samples using purposive sampling method that fulfilled the inclusion criteria. Pretest was done using the caregivers Stressassessment scale and becks Anxiety inventory scale followed by progressive muscle Relaxation Therapy for 6 days; post test was conducted using the same scales at the 7<sup>th</sup> day. The results of the pilot study, when analyzed, gave the evidence that the tools were reliable then the findings of the pilot study revealed that it was feasible and practicable to conduct the study.

## **Data Collection Procedure**

The researcher obtained permission from the hospital authority for conducting the study. Hence the caregivers of mentally ill patients were properly informed about the Relaxation Therapy. The data collection was conducted from 01.05.2014 to 30.05.2015. Structured interview schedule was used to assess the level of Stress and Anxiety of the samples. The time taken by the investigator to complete the tool for each sample was 30 to 45 minutes. The samples were asked to choose the correct response from the given options. After the pre-test the samples were trained with the Progressive Muscle Relaxation Technique in a calm and quite environment. The duration of the procedure was 20 minutes for each sample. During the procedure the samples were requested to tighten and loosen their muscles one by one from head to foot. The samples were instructed to do the technique daily. Next day, the participants were asked to perform the demonstrated Relaxation Therapy in front of the researcher to make sure they are doing it in right manner. Further visit to the

participants were made by the researcher to assess whether they are doing or not. The post-test was done after seven days of intervention. The data were edited for completion.

## **Data Analysis**

Data collected was analyzed using both descriptive and inferential statistics such as mean, standard deviation, chi square and paired't' test.

### **Descriptive Statistics**

Frequency and percentage distribution of sample according to demographic variables of caregivers of mentally ill patients.

Frequency and percentage distribution were used to asses the level of Stress and anxeity.

Mean and standard deviation were used to asses the effectiveness of Relaxation Therapy in reducing Stress and anxeity.

### **Inferential Statistics**

Paired't' test was used to compare pretest and post test level of stres and anxeity among caregivers of mentally ill patient.

Chi square test was used to find out the association of post test level of Stress and Anxiety among caregivers of mentally ill patients with their selected demographic variable.

## **CHAPTER - IV**

### **DATA ANALYSIS AND INTERPRETATION**

Research data must be proceed and analyzed in an orderly fashion so that patterns and relationship can be discerned and validated and hypotheses can be tested. Quantitative data analyzed through statistical analysis include simple procedures as well as complex and sophisticated methods.(**Polit; 2004**)

This chapter deals with the analysis and interpretation of data.

Descriptive and inferential statistics were used for analyzing the data on the basis of objectives of the study. The data has been tabulated and organized as follows.

**Section A :** Description of demographic variables of the Caregivers of mentally ill patients.

**Section B :** Assessment of the pretest and posttest level of Stress among Caregivers of mentally ill patients.

**Section C :** Assessment of the posttest level of Stress and Anxiety among Caregivers of mentally ill patients.

**Section D :** Effectiveness of Relaxation Therapy on Stress and Anxiety among Caregivers of mentally ill patients.

**Section E :** Association of post level of Stress and Anxiety among caregivers of mentally ill patients with their selected demographic variables.



**Section A: Description of Demographic Variables of the Caregivers of Mentally ill Patients.**

**Table: 1 Frequency & Percentage Distribution of Study Samples According to the Selected Demographic Variables.**

**N=60**

<b>SI</b>	<b>Demographic Variables</b>	<b>Frequency</b>	<b>Percentage</b>
1	<b>Age in years</b>		
	18 – 30	16	26.6%
	31 – 45	17	28.3%
	46 – 60	22	36.6%
	Above 60	5	8.3%
2	<b>Sex</b>		
	Male	33	55%
	Female	27	45%
3	<b>Educational status</b>		
	illiterate	11	18.3%
	up to 12 <sup>th</sup> standard	21	35%
	under graduate	25	41.6%
	post graduate	3	5%
4	<b>Religion</b>		
	Hindu	19	31.6%
	Christian	22	36.6%
	Muslim	19	31.6%
	Others	-	-

**Table 1 Cont.**

<b>SI</b>	<b>Demographic Variables</b>	<b>Frequency</b>	<b>Percentage</b>
5	<b>Occupation</b>		
		12	20%
	private employee		
	Government employee	15	25%
	Unemployed	26	43.3%
	Others	7	11.6%
6	<b>Family income per annum</b>		
	Below 25, 000	6	10%
	26000 to 50,000		
	51000 to 100,000	10	16.6%
	Above 1,00,000	18	30%
		26	43.3%
7	<b>Marital status</b>		
	Married	48	80%
	Single		
	Separated	10	16.6%
	Widowed	-	-
		2	3.3%
8	<b>Relationship with Patients</b>		
	Daughter	8	13.3%
	Son		
	Spouse	10	16.6%
	Parent	23	38.3%
	Others	10	16.6%
		9	15%
9	<b>Type of the Family</b>		
	Joint Family	17	28.3%
	Nuclear Family		
		43	71.6%
10	<b>Duration of illness</b>		
	Below one illness	8	13.3%
	One to six month		
	Six to twelve month	22	36.6%
	Above one year	19	31.6%
		11	18.3%

Table: 1 Explains the study sample according to their selected demographic variables. Distribution of sample according to age 26.6% sample falls under the age group of 18-30 years, 28.8% of sample falls under the age group of 31-45 years, 36.6% of sample falls under the age group of 46-60 years, 8.3% of sample falls under the age group of above 60 years.

Distribution of sample according to sex 55% of sample were male and 45% of sample were female.

Distribution of sample according to the educational status 18.3% of sample were illiterate 35% of sample were studied up to 12<sup>th</sup> standard, 41.6% of sample were under graduate, 5% of sample were post graduate.

Distribution of sample according to religion 31.6% of sample were Hindu, 36.6% of sample were Christian, 31.6% of sample were Muslim.

Distribution of sample according to occupation 20% of sample were private employee, 25% of sample were Government employee, 43.3% of sample were unemployed, 11.6% of sample were other employees.

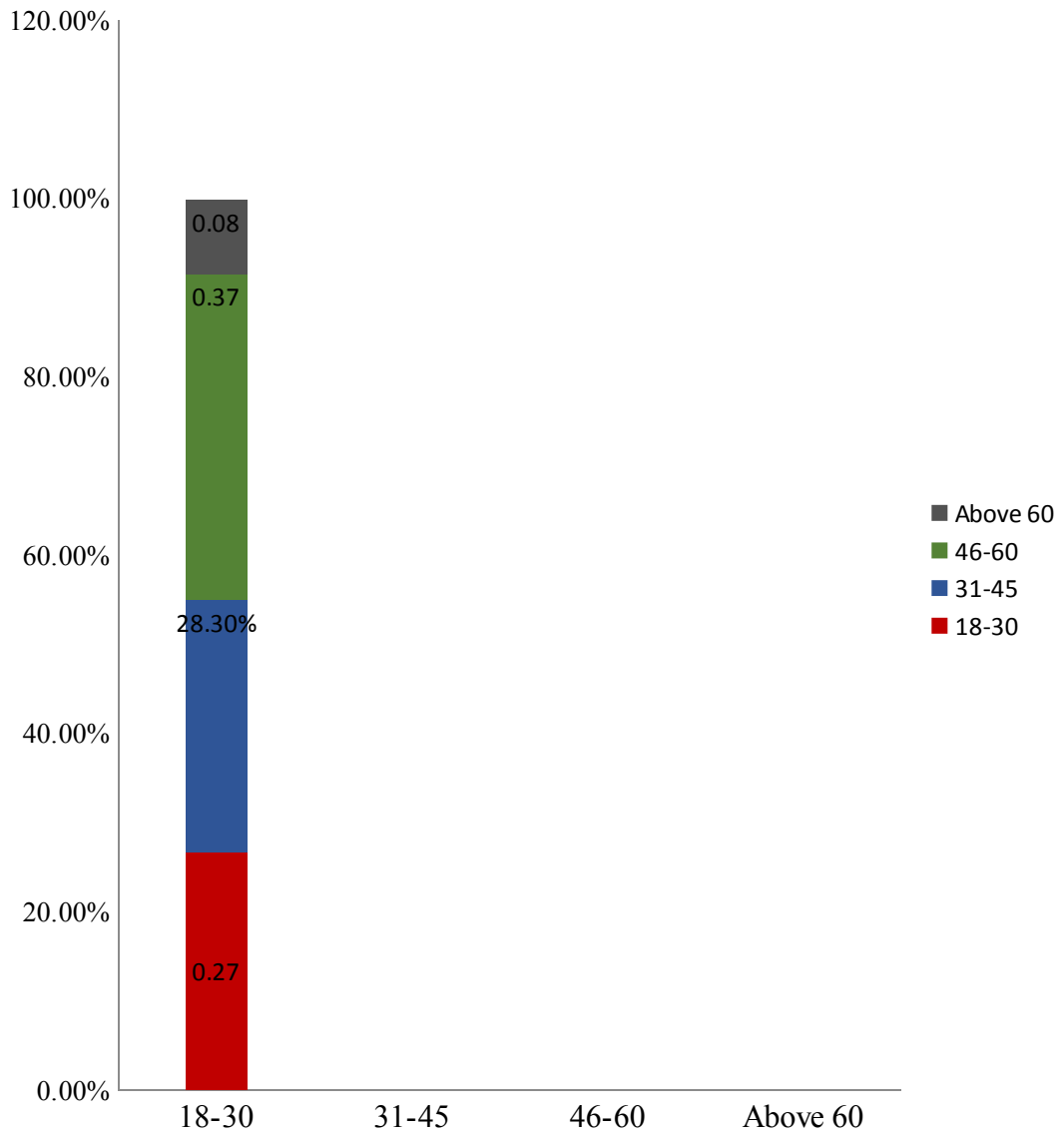
Distribution of sample according to Family income per annum, 10% of sample have family income below 25,000, 16.6% of sample have 26,000 to 50,000, 30% of sample have 51,000 to 100,000, 43.3% of sample have above 1,00,000

Distribution of sample according to marital status 80% of sample were married, 16.6% of sample were single, 3.3% of sample were widowed.

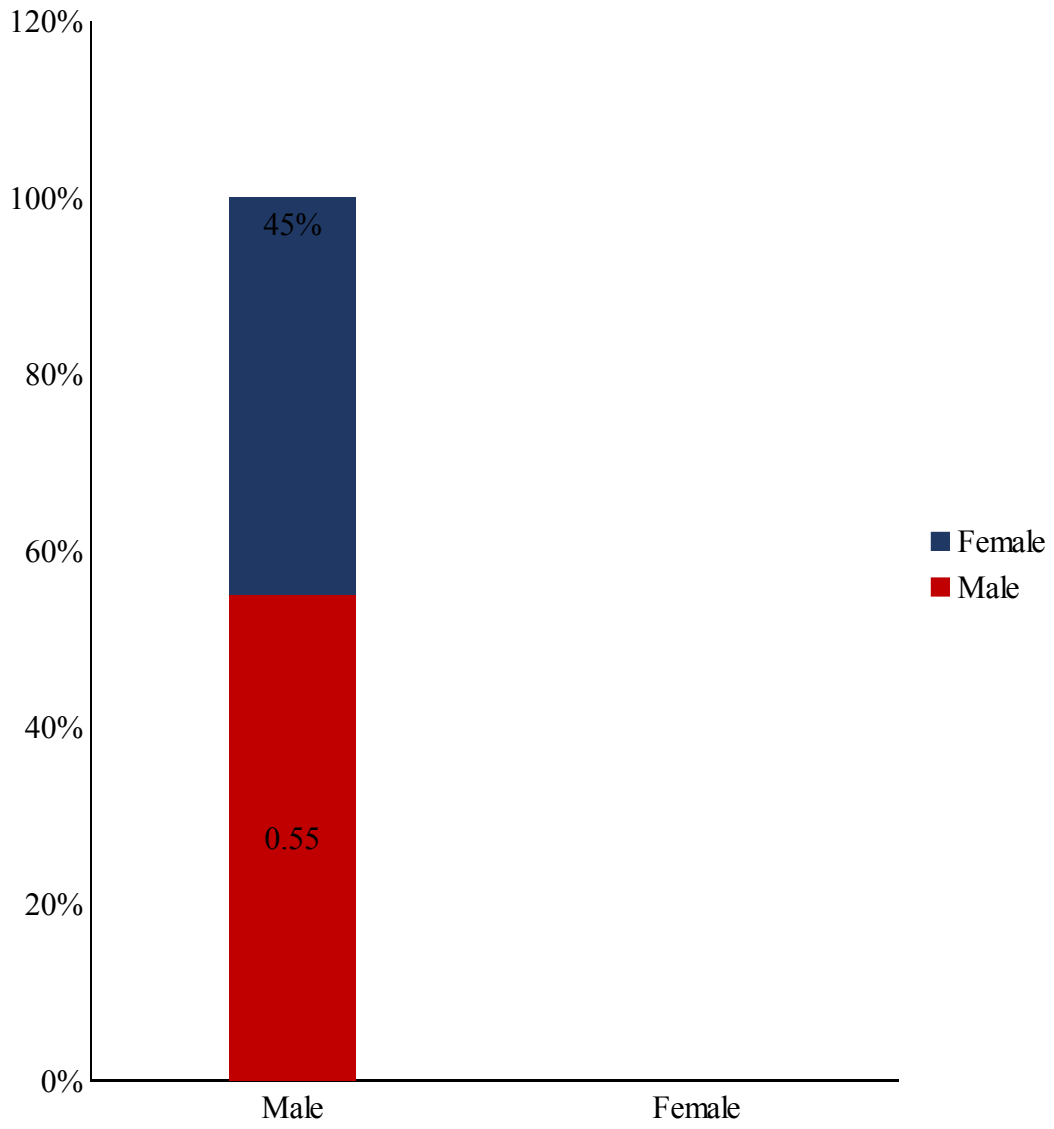
Distribution of sample according to relationship with the patients, 13.3% of sample were Daughter 16.6% of sample were son, 38.8% of sample were spouse, 16.6% of sample were parents, 15% of sample were others.

Distribution of sample according to type of family 28.3% of sample were living in joint family. 71.6% of sample were living in Nuclear family.

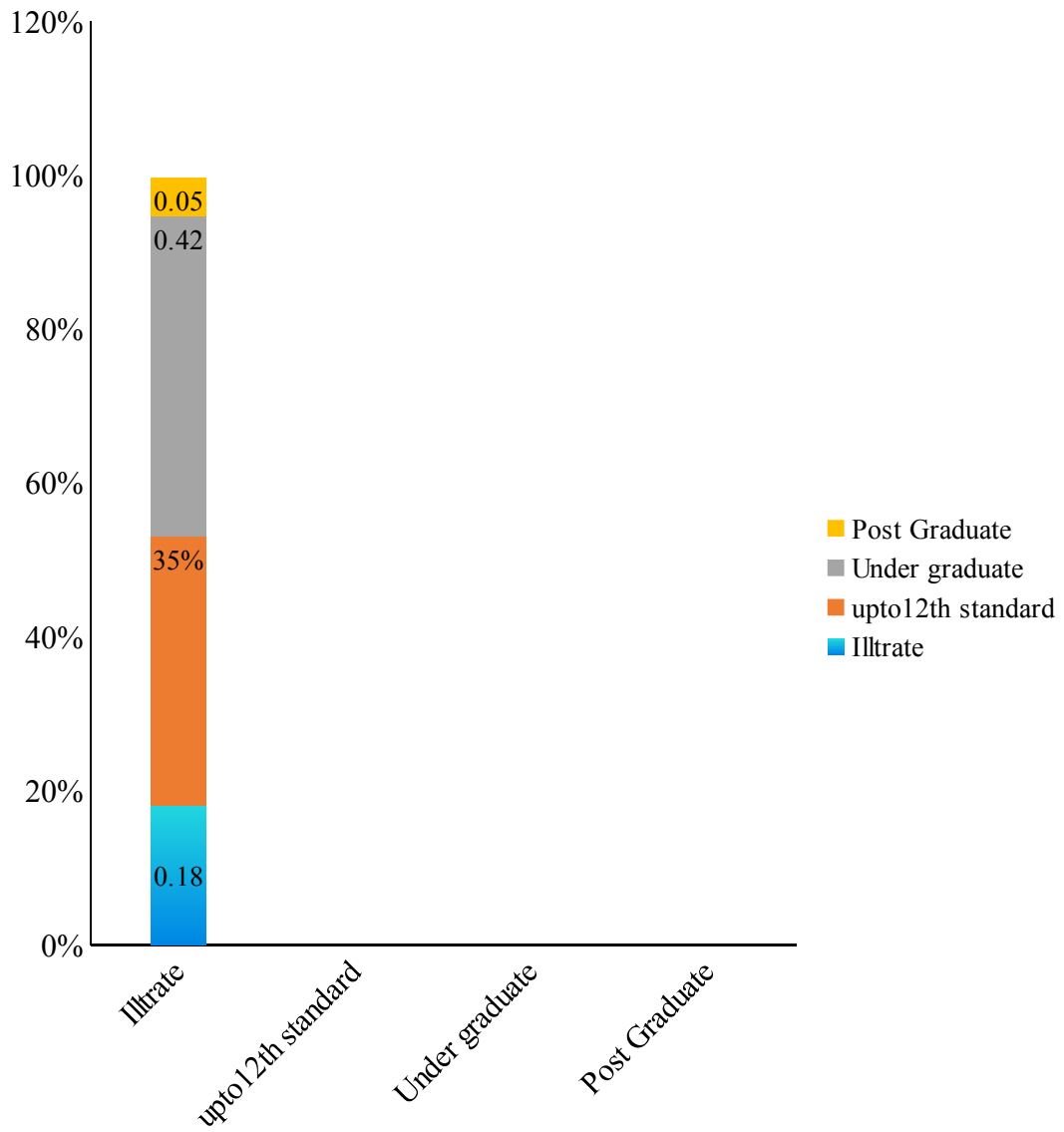
Distribution of sample according to the duration of illness, 13.3% of samples were Below one month, 36.6% of sample were one to six month, 31.6% of sample were six to twelve month, 18.3% of sample were above one year.



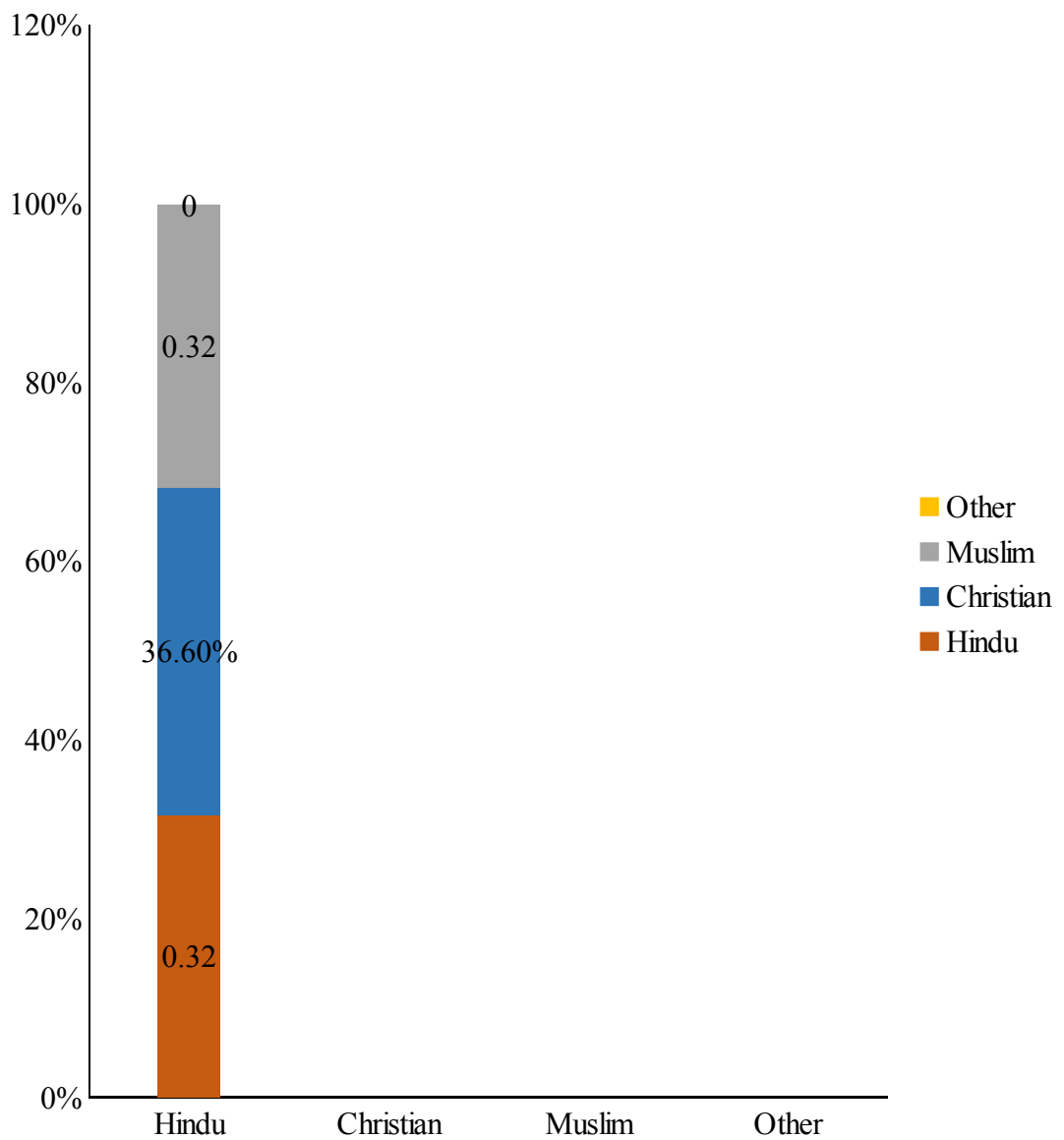
**Figure 3 :Distribution of Demographic Variables According to Age**



**Figure 4 :Distribution of Demographic Variables According to Sex**

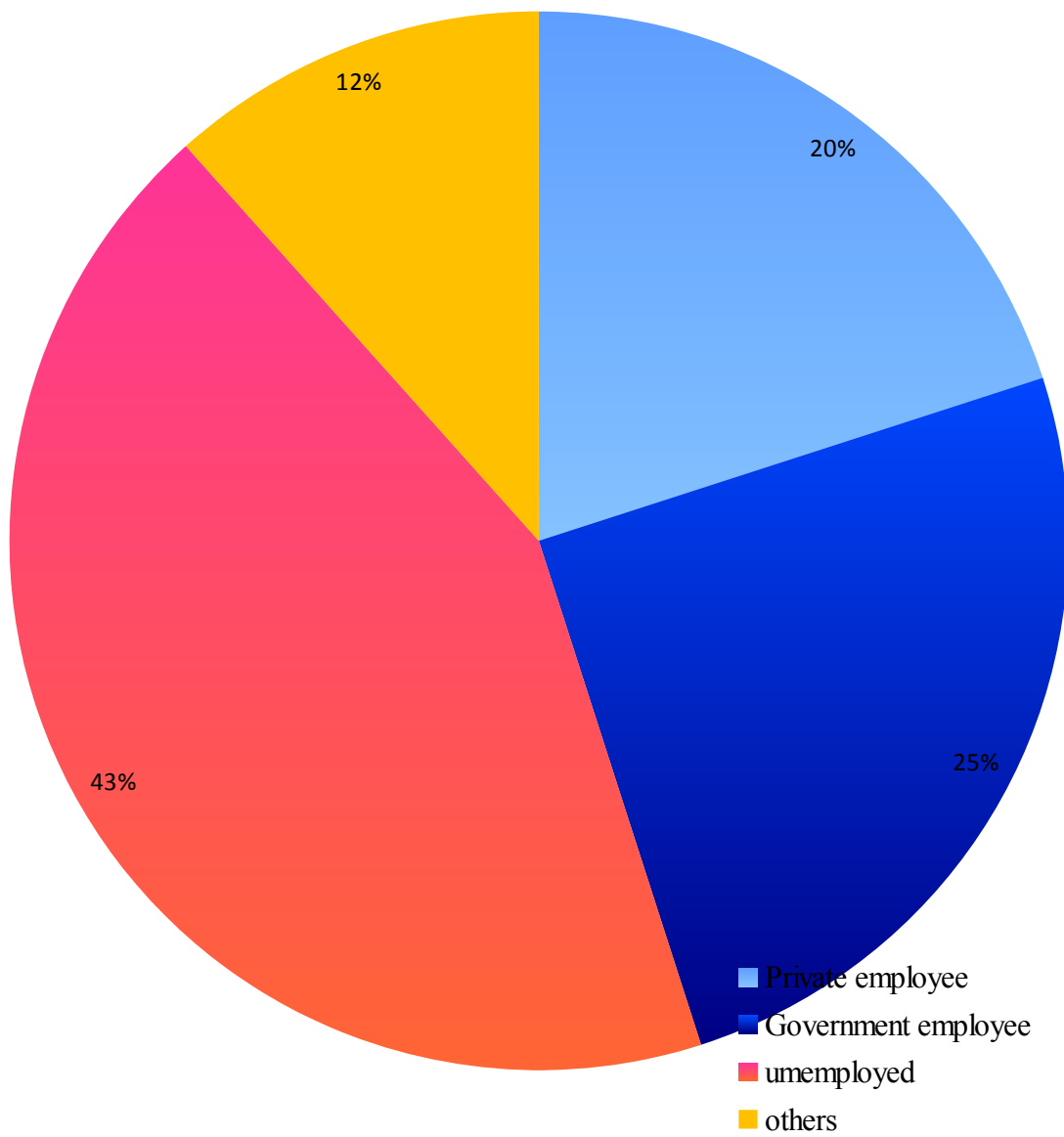


**Figure 5: Distribution of Demographic Variables According to Educational Status**

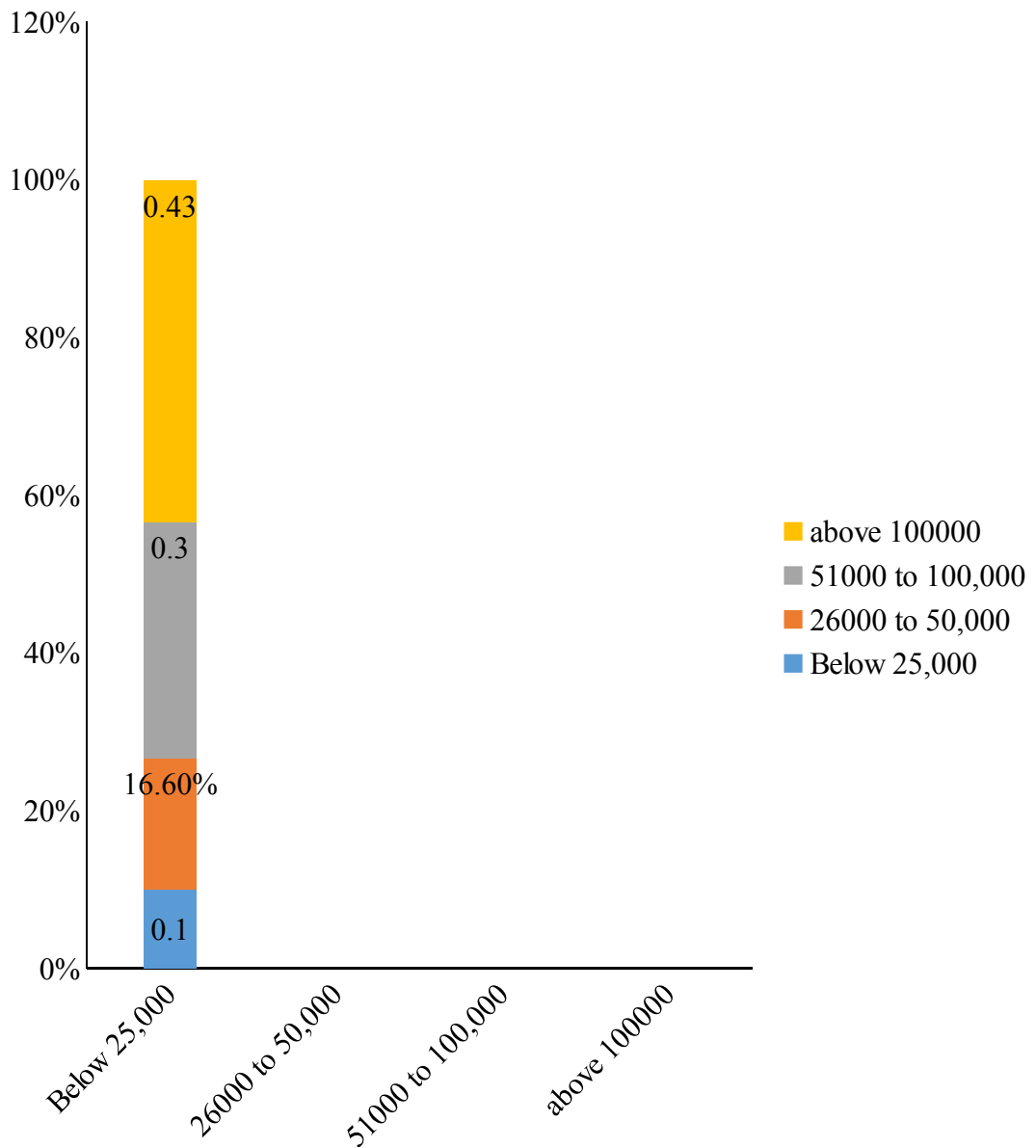


**Figure 6 :Distribution of Demographic Variables According to Religion**

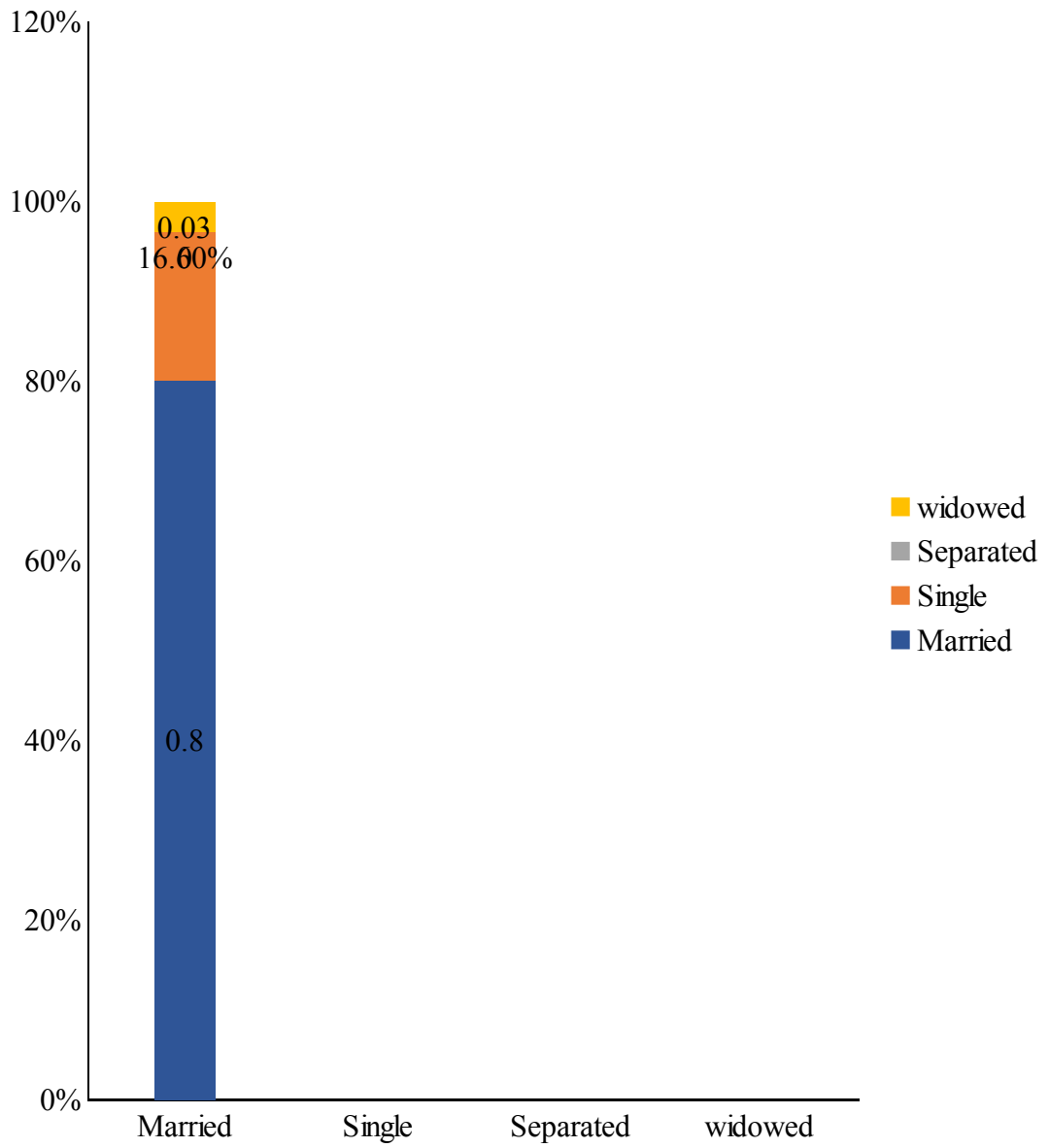




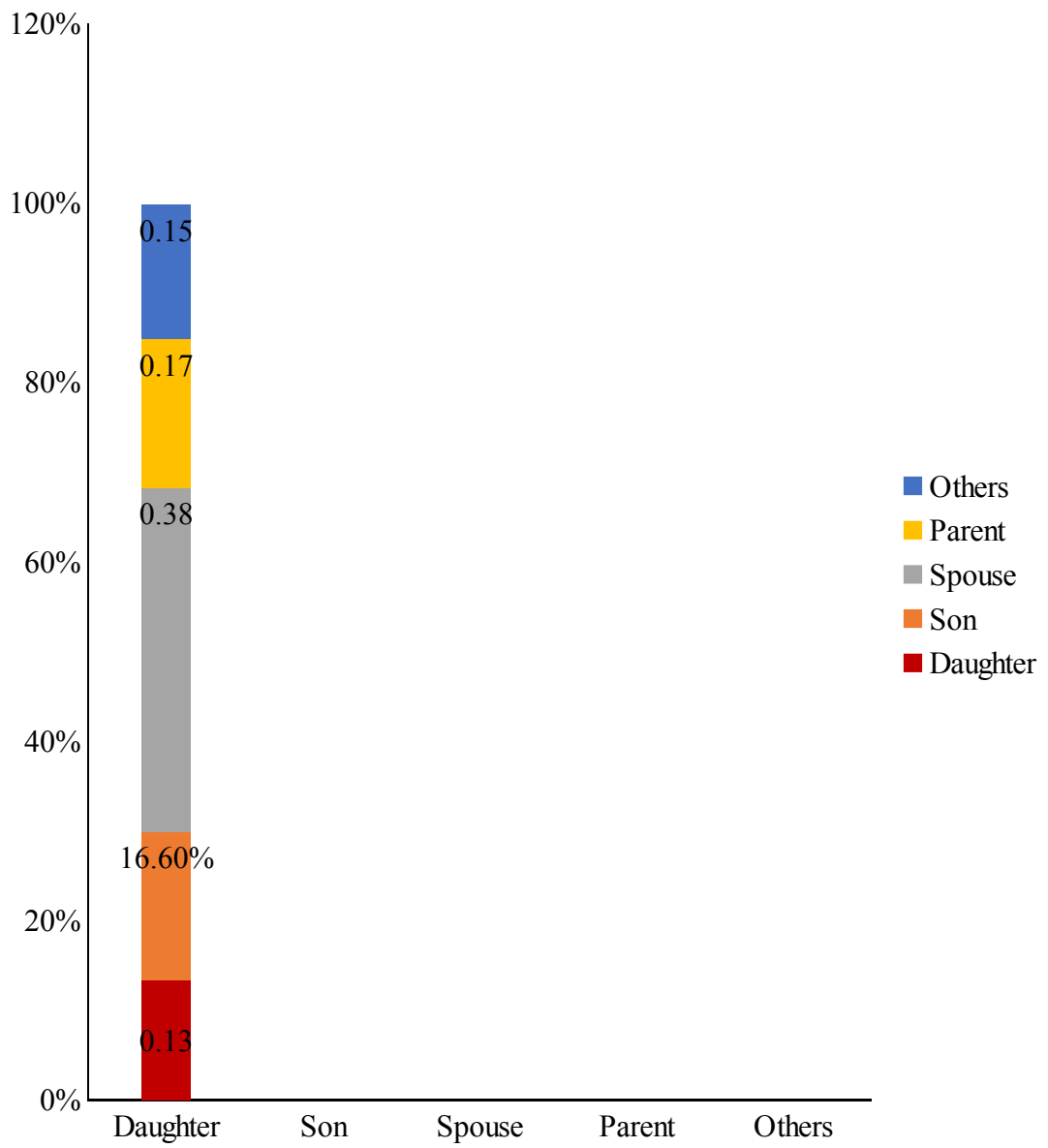
**Figure 7 :Distribution of Demographic Variables According to Occupation**



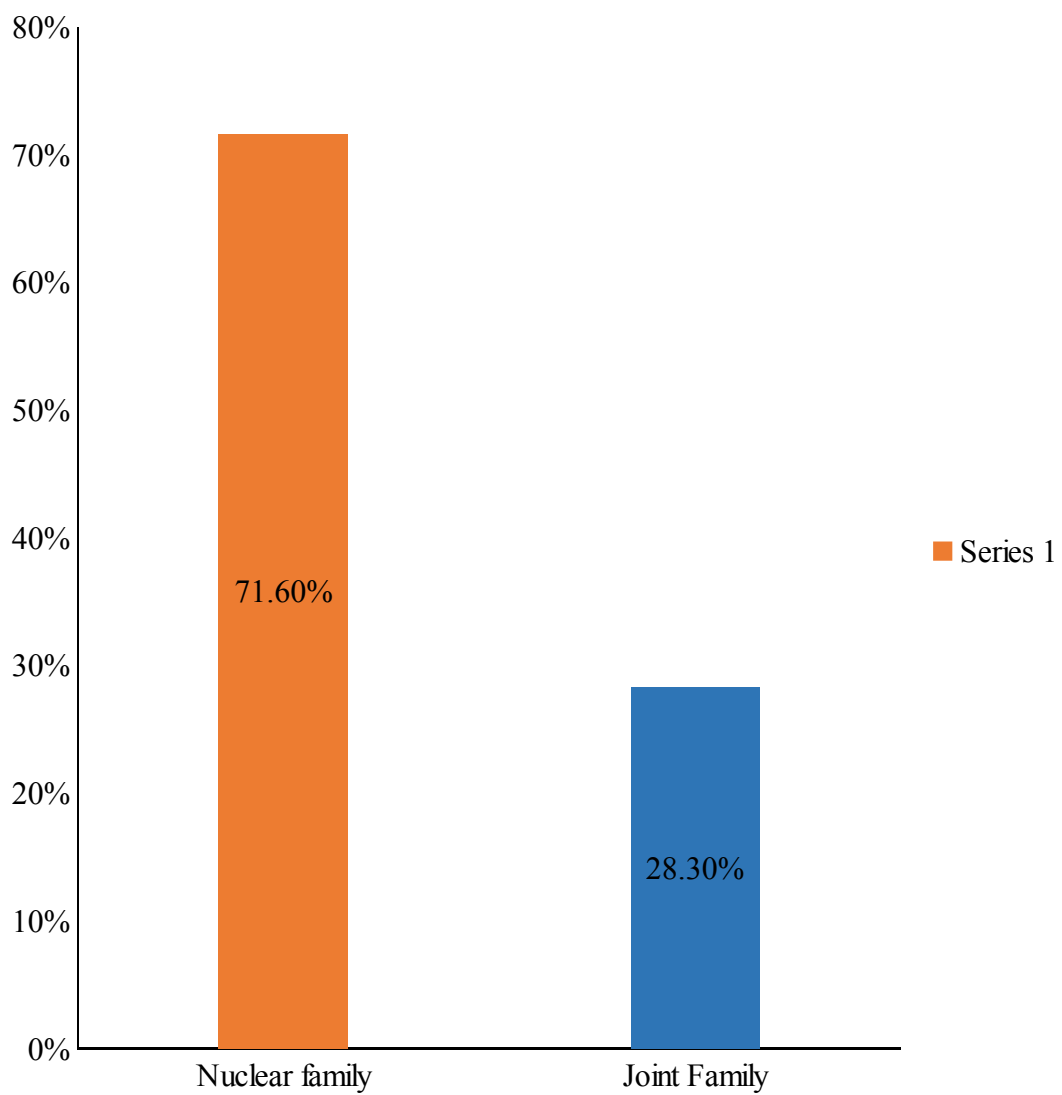
**Figure 8: Distribution of Demographic Variables According to Family Income per Annum**



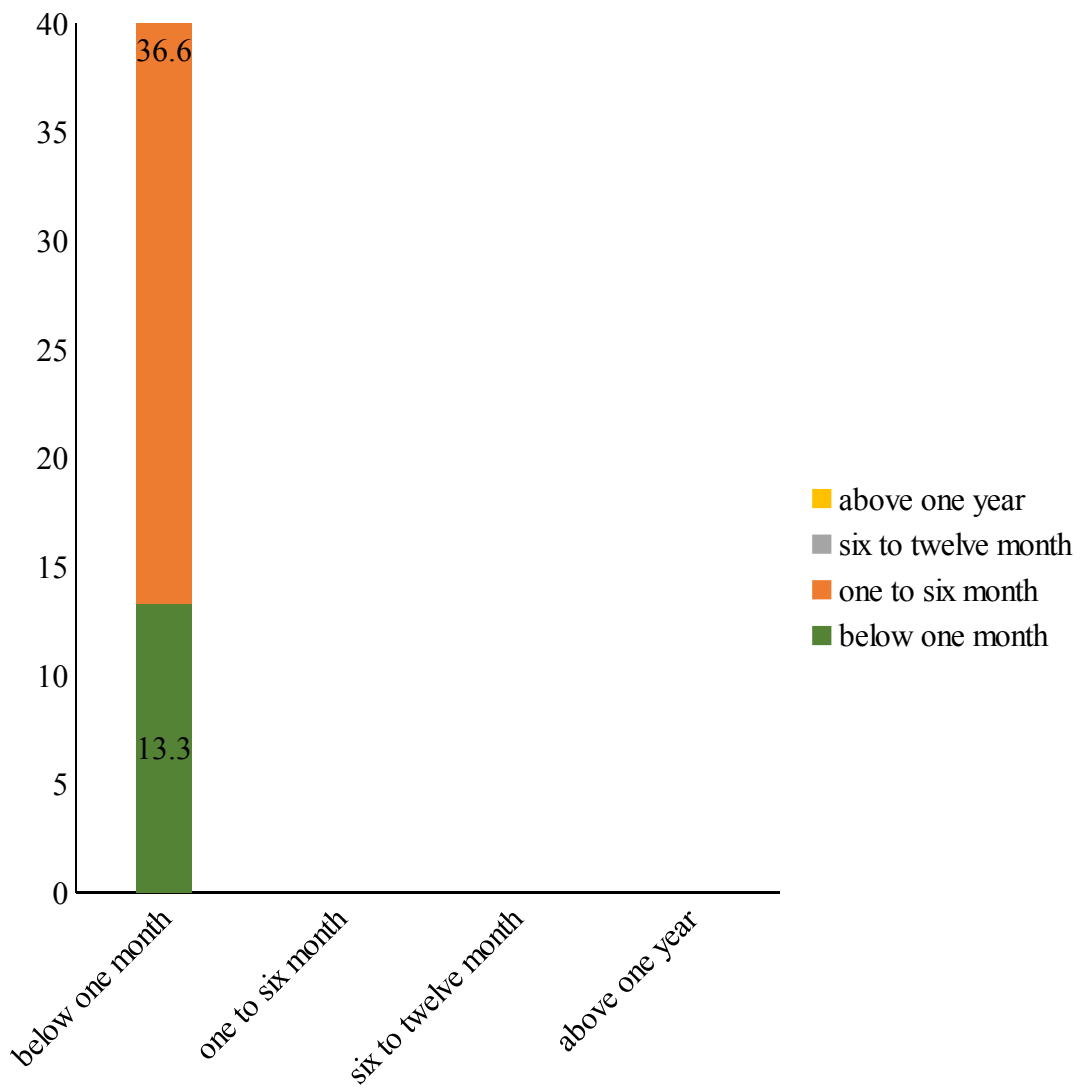
**Figure 9 :Distribution of Demographic Variables According to Marital Status**



**Figure 10: Distribution of Demographic Variables According to Relationship with the Patient**



**Figure 11 :Distribution of Demographic Variables According to Type of the Family**



**Figure 12 :Distribution of Demographic Variables According to Duration of Illness**

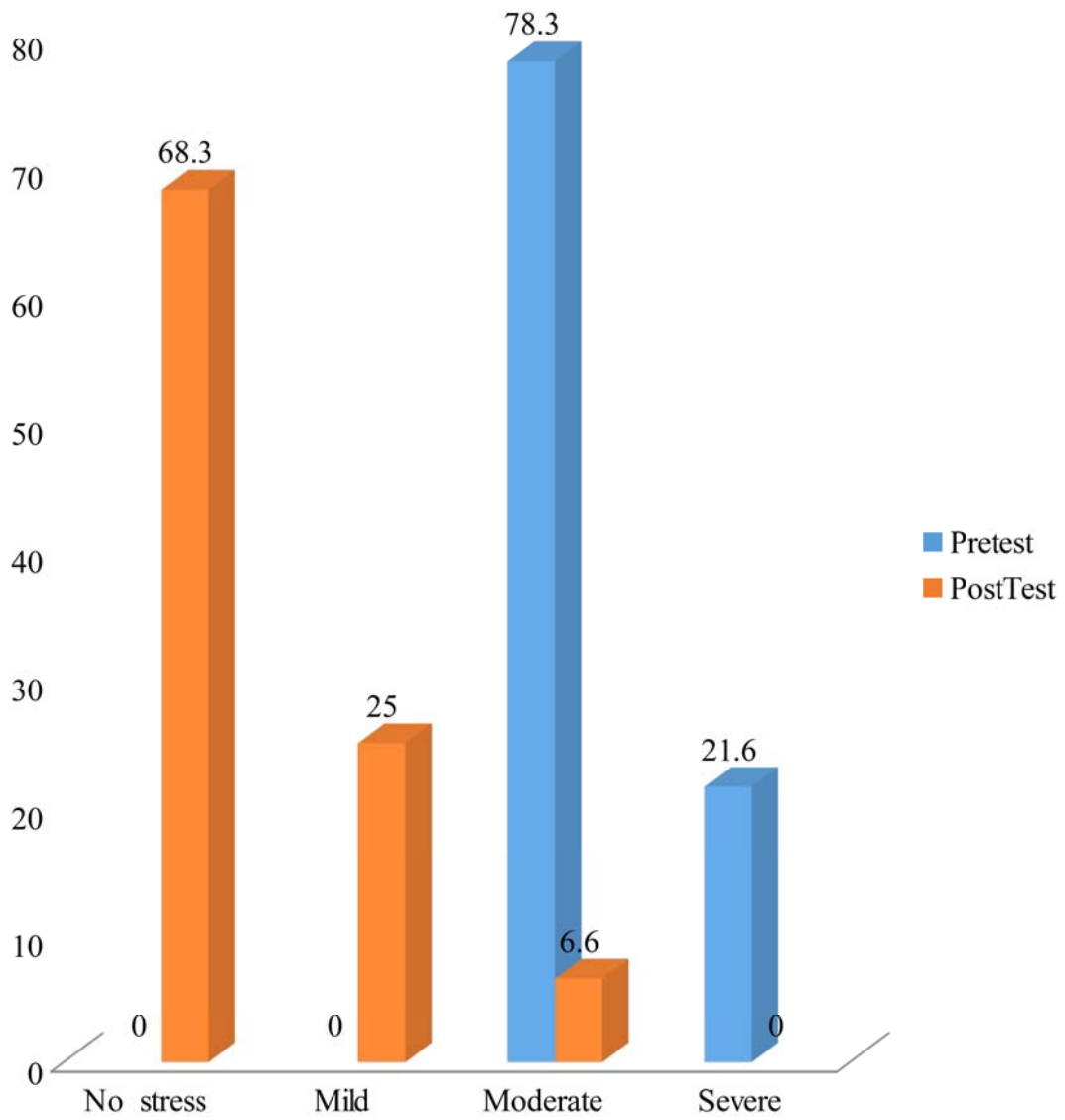
**Section B:Assessment of the Pretest and Posttest Level of Stress Among Caregivers of Mentally Ill Patients.**

**Table: 2 Frequency and Percentage Distribution of Pretest and Posttest Level of Stress.**

**N=60**

<b>SI. No</b>	<b>Level of Stress</b>	<b>Pretest</b>		<b>Posttest</b>	
		<b>Frequency</b>	<b>Percentage</b>	<b>Frequency</b>	<b>Percentage</b>
1	No Stress	-	-	41	68.3%
2	Mild	-	-	15	25%
3	Moderate	47	78.3%	4	6.6%
4	Severe	13	21.6%	-	-

**The table : 2** reveals the frequency and percentage distribution of pretest and posttest level of Stress among Caregivers of mentally ill patients, the pretest level of Stress, 78.3% of them had moderate Stress, 21.6% of them had severe Stress. The posttest level of Stress 68.3% of them had no Stress, 25% of them had Mild Stress, 6.6% of them had Moderate Stress and none of them had Severe Stress.



**Figure 13: Distribution of Percentage inPretest and Posttest Level of Stress**



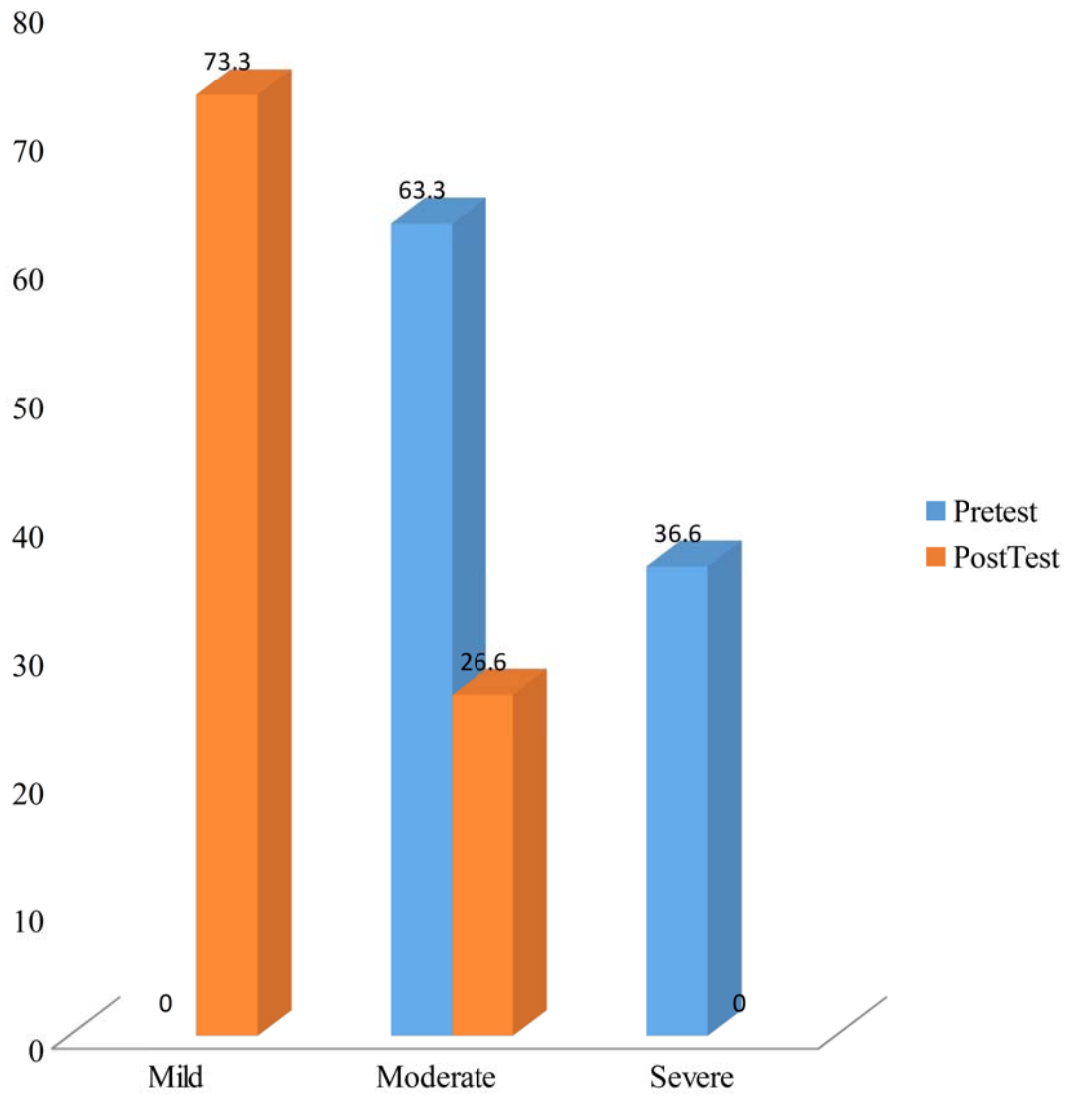
**Section C:Assessment of the Pretest and Posttest Level of Anxiety Among Caregivers of Mentally ill Patients.**

**Table: 3 Frequency and Percentage Distribution Pretest and Posttest Level of Anxiety**

**N=60**

<b>SI. No</b>	<b>Level of Anxiety</b>	<b>Pretest</b>		<b>Posttest</b>	
		<b>Frequency</b>	<b>Percentage</b>	<b>Frequency</b>	<b>Percentage</b>
1	Mild	-	-	44	73.3%
2	Moderate	38	63.3%	16	26.6%
3	Severe	22	36.6%	-	-

**The table: 3** reveals the frequency and percentage distribution of pretest and posttest level of Anxiety among Caregivers of mentally ill patients, the pretest level of Anxiety, 63.3% of them had moderate Anxiety, 36.6% of them had severe Anxiety. The posttest level of Anxiety 73.3% of them had mild Anxiety, 26.6% of them had Moderate Anxiety and none of them had Severe Anxiety.



**Figure 14: Distribution of Percentage in Pretest and Posttest Level of Anxiety**

**Section D: Effectiveness of Relaxation Therapy on Stress and Anxiety Among Caregivers of Mentally Ill Patient.**

**Table 4 : Effectiveness of Relaxation Therapy on Stress and Anxiety Among Caregivers of Mentally ill Patient.**

**N=60**

S I	variables	Pretest		Posttest		T value	Mean difference
		Mean	Standar d deviation	Mean	Standard deviation		
1	Stress	51.9	7.6	23.4	7.29	20.26	28.5
2	Anxiety	51.3	6.16	26.3	5.62	21.36	25

df = 59    p < 0.05

**Table-4** reveals that pretest mean Stress score was 51.9 and Anxiety score 51.3. The posttest mean Stress score was 23.4 and Anxiety score was 26.3. the difference in mean for Stress and Anxiety were 28.5 and 25 respectively. The calculated t value of Stress and Anxiety were 20.26 and 21.36 which is significant to the table value, revealing that the Relaxation Therapy was effective in reducing the level of Stress and Anxiety.

**Section:E**

**Table 5 Association of Posttest Level of Stress and Anxiety Among Caregivers of Mentally ill Patients with their Selected Demographic Variable.**

**N=60**

SI	Demographic variables	Anxiety			Stress		
		df	$\chi^2$	Significance	df	$\chi^2$	Significance
1	Age in years	3	1.97	P>0.05	6	4.94	P>0.05
2	Sex	1	0.49	P>0.05	2	1.07	P>0.05
3	Educational status	3	3.84	P>0.05	6	3.66	P>0.05
4	Religion	2	0.53	P>0.05	6	3.15	P>0.05
5	Occupation	3	3.01	P>0.05	6	12.31	P>0.05
6	Family income per annum	3	0.74	P>0.05	6	13.74	P<0.05
7	Marital status	2	4.02	P>0.05	4	6.58	P>0.05
8	Relationship with the family members	4	3.38	P>0.05	8	4.42	P>0.05
9	Type of the family	1	0.09	P>0.05	2	5.69	P>0.05
10	Duration of illness	3	0.80	P>0.05	6	10.84	P>0.05

The above table explains that, for the demographic variables age the Stress df is 6 chi-square value is 4.94 and the table value is non significant at P = 0.05. The Anxiety df is 3 chi-square value is 1.97 and the table value is non significant at P = 0.05. Hence this demographic variable is not associated with the post test score.

With regard to sex the Stress df is 2 chi-square value is 1.07 and the table value is non significant at P = 0.05. The Anxiety df is 1 chi-square value is 0.49 and the table value is non significant at P = 0.05. Hence this demographic variable is not associated with the post test score.

In educational status the Stress df is 6 chi-square value is 3.36 and the table value is non significant at  $P = 0.05$ . The Anxiety df is 3 chi-square value is 3.84 and the table value is non significant at  $P = 0.05$ . Hence this demographic variable is not associated with the post test score.

In Religion the Stress df is 6 chi-square value is 3.15 and the table value is non significant at  $P = 0.05$ . The Anxiety df is 2 chi-square value is 0.53 and the table value is non significant at  $P = 0.05$ . Hence this demographic variable is not associated with the post test score.

In occupation the Stress df is 6 chi-square value is 12.31 and the table value is non significant at  $P = 0.05$ . The Anxiety df is 3 chi-square value is 3.01 and the table value is non significant at  $P = 0.05$ . Hence this demographic variable is not associated with the post test score.

In Family income per annum the Stress df is 6 chi-square value is 13.74 and the table value is significant at  $P = 0.05$ . The Anxiety df is 3 chi-square value is 7.81 and the table value is non significant at  $P = 0.05$ . Hence this demographic variable is associated with the post test score of Stress.

In Marital status the Stress df is 4 chi-square value is 6.58 and the table value is non significant at  $P = 0.05$ . The Anxiety df is 2 chi-square value is 4.02 and the table value is non significant at  $P = 0.05$ . Hence this demographic variable is not associated with the post test score.

In Relationship with the family members the Stress df is 8 chi-square value is 4.42 and the table value is non significant at  $P = 0.05$ . The Anxiety df is 4 chi-square value is 3.38 and the table value is non significant at  $P = 0.05$ . Hence this demographic variable is not associated with the post test score.

The type of Family the Stress df is 2 chi-square value is 5.69 and the table value is non significant at  $P = 0.05$ . The Anxiety df is 1 chi-square value is 3.84 and the table value is non significant at  $P = 0.05$ . Hence this demographic variable is not associated with the post test score.

In Duration of Illness the Stress df is 6 chi-square value is 10.84 and the table value is non significant at  $P = 0.05$ . The Anxiety df is 3 chi-square value is 0.80 and the table value is non significant at  $P = 0.05$ . Hence this demographic variable is not associated with the post test score.

### **Summary**

This chapter dealt with data interpretation in the form of statistical values based on the objectives. Frequency and percentage distribution was found out on level of Stress and Anxiety in caregivers of mentally ill patients with the selected demographic variables. The paired t test was used to determine the effectiveness of Relaxation Therapy among caregivers of mentally ill patients. The chi-square analysis was used to find out the association of posttest level of Stress and Anxiety among caregivers of mentally ill patients with their selected demographic variable.

## **CHAPTER –V**

### **DISCUSSION**

This pre-experimental study was done to determine the effectiveness of Relaxation Therapy on Stress and Anxiety in caregivers of mentally ill patients in Sneka Mind Care Centre, Thirunelveli. Pre experimental - one group pre testpost test design was adopted for the study. The result and discussion of the study are based on the findings obtained from the statistical analysis.

**The first objective of the study was to assess the level of Stress and Anxiety among the caregivers of mentally ill patients before giving Relaxation Therapy.**

In pretest among 60 samples, 47(78.37%) of them had Moderate level of Stress and 13 (21.6%) of them had severe Stress, None of them had No Stress or Mild Stress.

In pretest among 60 samples 38 (63.3%) of them had moderate Anxiety and 22 (36.6%) of them had severe Anxiety. None of them had Mild Anxiety or no Anxiety.

The study findings is also congruent with a study conducted by Rammohan,A;(2002). This comparative cross-sectional study assessed family burden among caregivers of patients with OCD and schizophrenia in an Indian setting. Findings shows Indian families experience significant degrees of burden in the care of their relatives with OCD and schizophrenia. Relatives' demographic characteristics did not influence burden severity. Illness severity and patients' disability had a direct positive relationship with perceived family burden. This study suggests to develop local needs based support programme for families of patients with psychiatric disorders in India.

From the statistical values of both studies, it is concluded that caring for mentally ill patients can add a significant degree of family burden to caregivers and leads to high level of stress and anxiety to caregivers.

**The second objective of the study was to assess the effectiveness of Relaxation Therapy among caregivers of mentally ill patients after giving Relaxation Therapy.**

In post test among 60 samples, 41(68.3%) of them had No Stress, 15(25%) of them had Mild Stress, and 4(6.6%) of had moderate Stress, None of them had severe Stress. On assessing anxiety, among 60 samples 44(73.3%) of them had mild anxiety, 16 (26.6%) of them had moderate anxiety and none of them had severe anxiety.

In pretest Mean Stress score was 51.9 and the Anxiety score was 51.3. The post test Mean Stress score was 23.4 and the Anxiety score was 26.3. The period 't' value at  $p < .001$  level for Stress and Anxiety were 2.265 and 21.36 respectively, which shows that the Relaxation Therapy was effective in reducing the Stress and Anxiety in caregivers of mentally ill patients.

The study findings is also congruent with the following studies,

Ms.PalakPatel(2014). A Study to Assess the Effectiveness Of Progressive Muscle Relaxation Therapy on Stress among Staff Nurses Working In Selected Hospitals at Vadodara City. Pre experimental one group pre - test and post -test research design was adopted to achieve the goal of the study by using instrument i.e demographic data and Stress assessment scale among 30 staff nurses. The findings of the study revealed that in pre test most of the nurses 53.3% had moderate Stress, 40.0% had mild Stress and 6.7% had severe Stress. In post test most of the nurses had mild Stress 73.3 % and no Stress 26.7 % . It is concluded that Progressive Muscle Relaxation Therapy is effective in reducing the Stress level of the staff nurses.



Febu Elizabeth Joy(2014). An exploratory study to identify the adolescents with social Anxiety and teach the JPMR technique to those who would score high on social Anxiety scale. The data were collected from 193 high school adolescents using Demographic Proforma, Social Anxiety Scale for Adolescent and Tool to Assess the Associated Factors of Social Anxiety. The JPMR technique was administered to the adolescents with moderate to severe social Anxiety. The study found that 52(27%) adolescents were having moderate social Anxiety and there was significant association ( $F = 15.297, p < 0.05$ ) between age of the adolescents and social Anxiety. The Jacobson's Progressive Muscle Relaxation Technique was found to be effective ( $t = 10.646, df = 39, p = 0.001$ ) in reducing the social Anxiety. Social Anxiety is common among adolescents and many modifiable factors related to parents and teachers are associated with it. Appropriate interventions in an early time may help them to reduce it.

The results of above studies indicates that progressive muscle relaxation technique is effective in reducing Stress and Anxiety

**The third objectives of the study was to find out the association between Stress and Anxiety among caregivers of mentally ill patients with their selected demographic variables.**

The result shows that, In caregivers Stress assessment scale there was significant association between the level of Stress with demographic variables family income per annum and all other variables are non significant. In beck Anxiety inventory scale There is no significant association in the level of Anxiety with their selected demographic variables. Hence the research hypothesis ( $H_2$ ) rejected.

## CHAPTER-VI

### SUMMARY AND RECOMMENDATION

This chapter consist of four section. In the first two section, the summary and conclusion are presented and in the next two sections, implication for nursing practice and recommendations for further research are presented.

#### Summary

The study was conducted to find out the effectiveness of Relaxation Therapy on Stress and Anxiety among Caregivers of mentally ill patients in Sneka Mind Care Centre at Thirunelveli.

#### Objectives of the Study

- To assess the level of Stress and Anxiety among the Caregivers of mentally ill patients before giving Relaxation Therapy.
- To assess the effectiveness of Relaxation Therapy among Caregivers of mentally ill patient after giving Relaxation Therapy .
- To find out association between Stress and Anxiety among caregivers of mentally ill patient with their selected demographic variables.

#### Hypotheses of the Study

This study attempts to examine the following hypotheses.

- **H<sub>1</sub>**: There is a significant difference between the level of Stress and Anxiety among Caregivers of mentally ill patients after Relaxation Therapy.
- **H<sub>2</sub>**: There is no association between the level of Stress and Anxiety among Caregivers of mentally ill patients with their selected demographic variables.

Pre – experimental (one group pretest and posttest ) research design was used to determine the effectiveness of Relaxation Therapy to reduce Stress and Anxiety among caregivers of mentally ill patients . The tool used in this study consisted of two sections. Section one was demographic variables, section two was caregivers Stress assessment scale and modified Beck Anxiety inventory to assess the level of Stress and Anxiety among Caregivers of mentally ill patients. Convenience sampling technique was used to select the samples and data was collected from 60 caregivers of mentally ill patients, in Sneka Mind Care Centre at Thirunelveli.

The data were collected and analysed using descriptive and inferential statistics. To test the hypothesis, independent t test and chi square test were used. The level of significance was assessed by  $p < 0.05$  to test the hypothesis.

### **Study Findings**

- ❖ Demographic profile of the sample, the Majority 22(36.6%)of samples belonged to the age group of 46-60years, 33 (55%) of them were Male, 25(41.6%) were under graduate, 22 (36.6%) of them were Christian religion, 26 (43.3%) were unemployed, 26(43.3%) samples had a per annum family income of above 1,00,000, Majority of the sample 48 (80%) were Married, 23 (38.3%) of the samples were spouse, Most of them belongs to 43 (71.6) Nuclear family, 22(36.6%) of the samples are the Caregivers of mentally ill patients with the duration of illness of one to 6 months.
- ❖ In pretest, among 60 samples,47 (78.3%) of them had moderate level of Stress and 13(21.6%) of them had severe Stress, none of them had mild or no Stress. In pretest among 60 samples 38 (68.3%) of them had moderate Anxiety and 22 (36.6%) of them had severe Anxiety None of them had Mild Anxiety or no Anxiety.
- ❖ The pretest Mean Stress score was 51.9 and the Anxiety score was 51.3. The post test Mean Stress was 23.4 and the Anxiety score was 26.3. The paired ‘t’ value at  $p < 0.001$  level for Stress and Anxiety were 2.265 and 21.36, respectively which shows, that the Relaxation Therapy was effective in reducing the Stress and Anxiety in Caregivers of mentally ill patients.
- ❖ In caregivers Stress assessment scale there was significant association between

the level of Stress with demographic variables family income per annum and all other variables are non significant. In beck Anxiety inventory scale There is no significant association in the level of Stress and Anxiety with their selected demographic variables. Hence the research hypothesis (H<sub>2</sub>) rejected.

### **Nursing Implications**

The researcher has derived the following implications from the study results which adds greater value to the field of nursing service, nursing administration, nursing education, and nursing research. By Assessing the effectiveness of Relaxation Therapy to reduce the level of Stress and Anxiety among caregivers of mentally ill patients, we get a clear picture regarding different steps to be taken in all fields, to improve the standard of nursing profession and implement evidence based practice in health set up.

### **Nursing Practice**

In the field of nursing, Ideally professionally accountable nurses should base many of the nursing intervention as possible on research findings Relaxation Therapy can be used as a nursing intervention in reducing the level of Stress and Anxiety among caregivers of mentally ill patients among.

- ❖ Relaxation Therapy is an effective Measure to reduce the Stress and Anxiety. Nurses can make this Relaxation Therapy as an effective Measure to enhance the coping strategies of caregivers of mentally ill patients.
- ❖ Nurses can plan the goal of nursing management of psychiatric patients and enhance their self concept, coping strategies and sense of well being through the development of mutually agreed goals.
- ❖ Relaxing by progressive muscle relaxation, decrease the Stress and Anxiety among patients as well as the caregivers.
- ❖ Student nurses can use this intervention to boost the withdrawn patients.

## **Nursing Education**

A Nurse educator is not primarily to teach, but to promote learning and provide the environment conducive to learning and create the teachable moment rather than first waiting for it to happen

- ❖ Nurse educator can train and encourage the student nurses to utilize Relaxation Therapy as an alternative complimentary therapy to reduce Stress and Anxiety among caregivers of mentally ill patients
- ❖ This study can motivate student nurses to explore new strategies for effective reduction of Stress and Anxiety among caregivers of mentally ill patients
- ❖ Student nurses can be trained to assess the level of Stress and Anxiety of the patient and their relatives.
- ❖ Student nurses can be educated in order to enhance their self esteem by using various The nurse educators need to be equipped with adequate knowledge regarding Relaxation Therapy.
- ❖ Nursing educators can conduct conferences to strengthen the curriculum in such a way, in-service education and work shop to encourage nurses to learn about various alternative therapies to reduce Stress and Anxiety among caregivers of mentally ill patients

## **Nursing Administration**

A Nurse administrator manages the client care and the delivery of specific nursing services within a health care agency.

- ❖ The nurse administrator co-ordinate her activity along with the curative aspects of care among caregivers of mentally ill patient by participating, practicing and supervising the Relaxation Therapy.
- ❖ Nursing administrator can organize in service education programmers regarding the effectiveness of Relaxation Therapy on Stress and Anxiety for staff nurses.

## **Nursing Research**

The research implication of the study lies in the scope for expanding the quality of nursing service. In the era of evidence based practice, publication of these studies will take nursing to new horizon.

- ❖ Nursing research to be done to find out the various innovative Methods to improve the coping skills and to decrease the level of Stress and Anxiety.
- ❖ The findings of the study would help to expand the scientific body of professional knowledge upon which further research can be conducted.
- ❖ Large scale study can be conducted on Relaxation Therapy.
- ❖ Teachers can direct and motivate the nursing researchers. So that they can conduct research in the same and different specialties and thereby professional independence can be achieved

## **Limitations**

- ❖ Since there were very few studies done on the effectiveness in national level, the investigator had a difficulties in collecting the study materials for the review.
- ❖ The sampling size was only 60
- ❖ The data collection period was only one month
- ❖ Since the study was conducted among the old age people, the investigator had difficulties in assembling caregivers of mentally ill patients

## **Recommendations**

- ❖ Similar study can be conducted as comparative between caregivers male client and female client in different settings.
- ❖ Study can be conducted as comparative study between Nurses and caregivers of patients in family.
- ❖ A study can be conducted with large sample size to generalize the results of the study.

- ❖ The study can be carried out for a longer period of time.
- ❖ The study can be carried to assistive quality of life among caregivers of Mentally ill patients.

## **Conclusion**

Level of Stress and Anxiety is high among the Caregivers of mentally ill patients. They require some interventions to reduce the level of Stress and Anxiety. The finding of the study reveals that, there is no significant association between demographic variables and level of Stress and Anxiety among caregivers of Stress and Anxiety. The post test 't' value of Stress were 20.26 and the Anxiety were 21.36 which is higher than the table value at ( $p < 0.05$ ) level which shows that there is significant reduction in Stress and Anxiety level after Relaxation Therapy among caregivers of mentally ill patients. It is an effective intervention to reduce the level of Stress and Anxiety among caregivers of mentally ill patients.

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## THASIAH COLLEGE OF NURSING

(Approved by Govt. of Tamilnadu, TN-Nurses & Midwives Council  
Indian Nursing Council & Affiliated to Dr. M.G.R. Medical University)

Marthandam, Vellivilagam, Viricode - 629 165  
Kanyakumari District, Tamil Nadu, India.

Phone : 04651 - 270996, 9487251600

web : www.tcnursing.net, email : info@tcnursing.net

**Mr.C.Thasian**

From  
Chairman  
The Principal,  
Thasiah College of Nursing,  
Marthandam.

To  
Dr.C.Panner Selvan M.D., (Psych)  
Consultant Psychiatrist  
Sneka Mind Care Centre,  
Thirunelveli.

Respected Madam/Sir,

Miss. Sreeja is a student of M.Sc (N) Programme from the clinical speciality Mental Health Nursing in our college. She is conducting a study on **"A Study to assess the effectiveness of relaxation therapy on stress and anxiety among Care givers of mentally ill Patients in Sneka Mind Care Centre at Thirunelveli"**.

This is for the research project to be submitted to 'The Tamilnadu Dr.MGR Medical University ' in the partial fulfillment of university requirement for the award of M.SC(N) Degree and will be beneficial in understanding and improving the health of the Caregivers.

As a part of her study, She need to observe the level of Stress and anxiety of caregivers of Mentally ill Patients in your Hospital, and to implement the selected intervention progressive Muscle Relaxation therapy to the target population (Care givers of Mentally ill Patients) in your hospital. So permission may kindly be granted for her to conduct the study at your esteemed hospital. She will abide by the rules and regulations of your hospital.

Thanking You,

Thirunelveli,  
22/05/2014.

*Pamitheep*

*Dr. C. Panner Selvan*  
Dr. C. PANNEER SELVAN M.D. (Psych), M.M.A.M.  
Consultant Psychiatrist  
Sneka Mind Care Centre  
12, South Bye Pass Road,  
TIRUNELVELI - 627 005.



*Princy*  
PRINCIPAL,  
Thasiah College of Nursing  
Marthandam - 629 165

## **LETTER SEEKING EXPERTS OPINION FOR THE VALIDITY OF THE TOOL**

From,  
Mrs. Sreeja. V,  
M.Sc. Nursing II year,  
Thasiah college of Nursing,  
Marthandam.

To,

Respected Sir/ Madam,

Sub: Requisition to seek expert opinion and suggestion for the content validity.

I Sreeja. V, M.Sc. Nursing II year student of Thasiah College of Nursing, marthandam, have selected the following topic, **“A study to assess the effectiveness of relaxation therapy to reduce stress and anxiety among care givers of mentally ill patients in sneka mind care centre at Thirunelveli”**, for my dissertation to be submitted to Tamilnadu Dr. M.G.R. Medical University in the partial fulfillment of the requirement for award of Master of Science in Nursing.

I request you to go through the items and give your valuable suggestions and opinion to develop the content validity of the tool. Kindly suggest modifications, addition and deletions if any in the remarks column.

Thanking you,

Place: Marthandam.

Date:

Sreeja. V

Yours sincerely,

## **LIST OF EXPERTS WHO VALIDATED THE TOOL**

**1. Dr.C. PaneerSelvanM.D(PSYCH)”NIMHANS**

Consultant Psychiatrist  
Sneka Mind Care Centre  
12, South bypass road  
Thirunelveli

**2. Dr. satheesakumaran Nair**

MM AND SP .PhD . Dip Edu. Couns.  
Cerp.nutrition and mental health  
Clinical psychology  
GOVT . MHC HOSPITAL TVM

**3. Mrs. Picthai.AMsc(N)**

Lecturer  
C.S.I. College of Nursing  
Karakonam

**4. Mrs.P, JegajuliatMsc(N)**

Lecturer  
ChristainCollege of Nursing  
Neyoor

**5. Mrs. Femaila.AMsc(N)**

Lecturer  
Christain college of Nursing  
Neyoor

## **CRITERIA CHECK LIST FOR VALIDATION OF THE TOOL**

**Instruction:**

Kindly give your suggestions regarding the accuracy, relevance and appropriateness of the content. Kindly (✓) against specific columns.

### **SECTION: A**

#### **Validation of demographic variables.**

<b>Item</b>	<b>Very relevant</b>	<b>Relevant</b>	<b>Need for modification</b>	<b>Not relevant</b>	<b>remarks</b>
1					
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### **SECTION: B**

#### **Validation of care giver stress- Assessment scale.**

<b>Item</b>	<b>Very relevant</b>	<b>Relevant</b>	<b>Need for modification</b>	<b>Not relevant</b>	<b>remarks</b>
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**SECTION: C**  
**Validation of Modified Beck Anxiety Inventory.**

<b>Item</b>	<b>Very relevant</b>	<b>Relevant</b>	<b>Need for modification</b>	<b>Not relevant</b>	<b>remarks</b>
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## EVALUATION CRITERIA CHECKLIST FOR VALIDATION

### Instructions;

The expert is requested to go through the following criteria for evaluation. Three columns are given for responses and a column for remarks.

Interpretation column:

Column I – Meets the criteria

Column II – Partially meets the criteria

Column III – Does not meet the criteria

S. NO	CRITERIA	1	2	3	REMARKS
1	Scoring Adequacy . Clarity. Simplicity.				
2	Content Logical sequence. Adequacy. Relevance.				
3	Language Appropriate. Clarity. Simplicity.				
4	Practicability Easy to score Precise Utility				

Any other suggestion:

SIGNATURE:

NAME:

DESIGNATION:

ADDRESS:

## TOOL FOR DATA COLLECTION

### SECTION: A

Dear participants you are requested to answer all items. This information will be treated as confidential. Kindly put a (✓) mark next to answer to which you respond.

1. Age in years

- a) 18 – 30
- b) 31 – 45
- c) 46 – 60
- d) Above 60

2. Sex

- a) Male
- b) Female

3. Educational status

- a) illtrate
- b) up to 12<sup>th</sup> standard
- c) Under graduate
- d) Post graduate

4. Religion

- a) Hindu
- b) Christian
- c) Muslim
- d) Others

5. Occupation

- a) Private employees
- b) Government employees
- c) Unemployed
- d) Others

6. Family income per annum

- a) Below 25,000
- b) 26,000 to 50,000
- c) 51,000 to 100,000
- d) Above 100,000

7. Marital status
  - a) Married
  - b) Single
  - c) Separated
  - d) Widowed
- 8 . Relationship with the patient
  - a) Daughter
  - b) Son
  - c) Spouse
  - d) parents
  - e) Others
9. Type of the family
  - a) Joint family
  - b) Nuclear family
10. Duration of illness
  - a) Below one month
  - b) One to six month
  - c) Six to twelve month
  - d) Above one year.

**SECTION: B**  
**CAREGIVER STRESS -ASSESSMENT**

(Dr. Steven Zarit, modified version)

**Instructions:**

. Dear participant, this section is to evaluate the level of stress and you are requested to respond correctly. Your answers will be kept confidential.

<b>QUESTIONS:</b>	<b>0 Never</b>	<b>1 Rarely</b>	<b>Sometimes</b>	<b>Quite Frequently</b>	<b>Nearly Always</b>
1. Do you feel that your loved one asks for more help than he/she needs?					
2. Do you feel that you don't get enough time for yourself due to spending more time with your loved one?					
3. Do you feel stressed by caring for your loved one and meeting other family needs or work responsibilities?					
4. Do you feel embarrassed over your loved one's illness?					
5. Do you feel angry when you are around your loved one?					
6. Do you feel that caring for your loved one currently affects your relationship with other family members or friends in a negative way?					
7. Do you feel afraid of what the future holds for your loved one?					

8. Do you feel your loved one is dependent on you?					
9. Do you feel your health has suffered because of your involvement in caring for your loved one?					
10. Do you feel that you don't have as much privacy as you would like because of your loved ones illness?					
11. Do you feel that your social life has suffered because of you are caring for your loved one?					
12. Do you feel uncomfortable about having friends over because you are caring for your loved one?					
13. Do you feel that your loved one seems to expect you to take care of him/her as if you were the only one he/she could depend on?					
14. Do you feel that you don't have enough money to care for your loved one in addition to the rest of your expenses?					
15. Do you feel that you will be unable to take care of your loved one much longer?					
16. Do you feel you have lost control of your life due to caring					

for your loved one?					
17. Do you feel you want to leave the care of your loved one to someone else?					
18. Do you feel you should be doing more for your loved one?					
19. Do you feel you could do a better job in caring for your loved one?					
20. Do you feel burdened by caring for your loved one?					

### **SCORING AND INTERPRETATION**

0-20 = Little/No Stress (0-25%)

21-40 = Mild Stress ( 26.2 % - 50%)

41-60 = Moderate Stress( 51.2 % - 75%)

61-80 = Severe Stress( 76.2% - 100%)

**SECTION: C**  
**MODIFIED BECK ANXIETY INVENTORY (MBAI)**

**Instructions:**

Dear participant, this section is to evaluate the level of anxiety and you are requested to respond correctly. Your answers will be kept confidential.

<b>SI NO</b>	<b>CONTENT</b>	• NO not at all <b>(0)</b>	YES, but it did not bother me much <b>(1)</b>	YES, and it was very unpleasant, but I could stand it. <b>(2)</b>	YES and I could barely stand it <b>(3)</b>
1	I am unable to relax				
2	I am easily frightened				
3	I have difficulty in remembering				
4	I feel afraid of being left alone				
5	I feel I am losing control				
6	I am easily irritated				
7	I am afraid of my future				
8	I have difficulty in concentration				
9	I worry a lot				
10	I have less interest in activities				
11	I have numbness in my extremities				
12	I have hot and cold flashes				
13	I have dry mouth				
14	I have palpitation				
15	My muscles are aching				
16	I experience shortness of breath				
17	I experience twitching,				

	trembling				
18	I feel like fainting				
19	I am unable to sleep				
20	I feel tired				
21	I have to empty my bladder frequently				
22	I feel tensed				
23	I feel indigestion				
24	I have neck pain				
25	My hands are trembling				

### **SCORING AND INTERPRETATION**

Mild anxiety : 0 - 25 (0 - 33.3%)

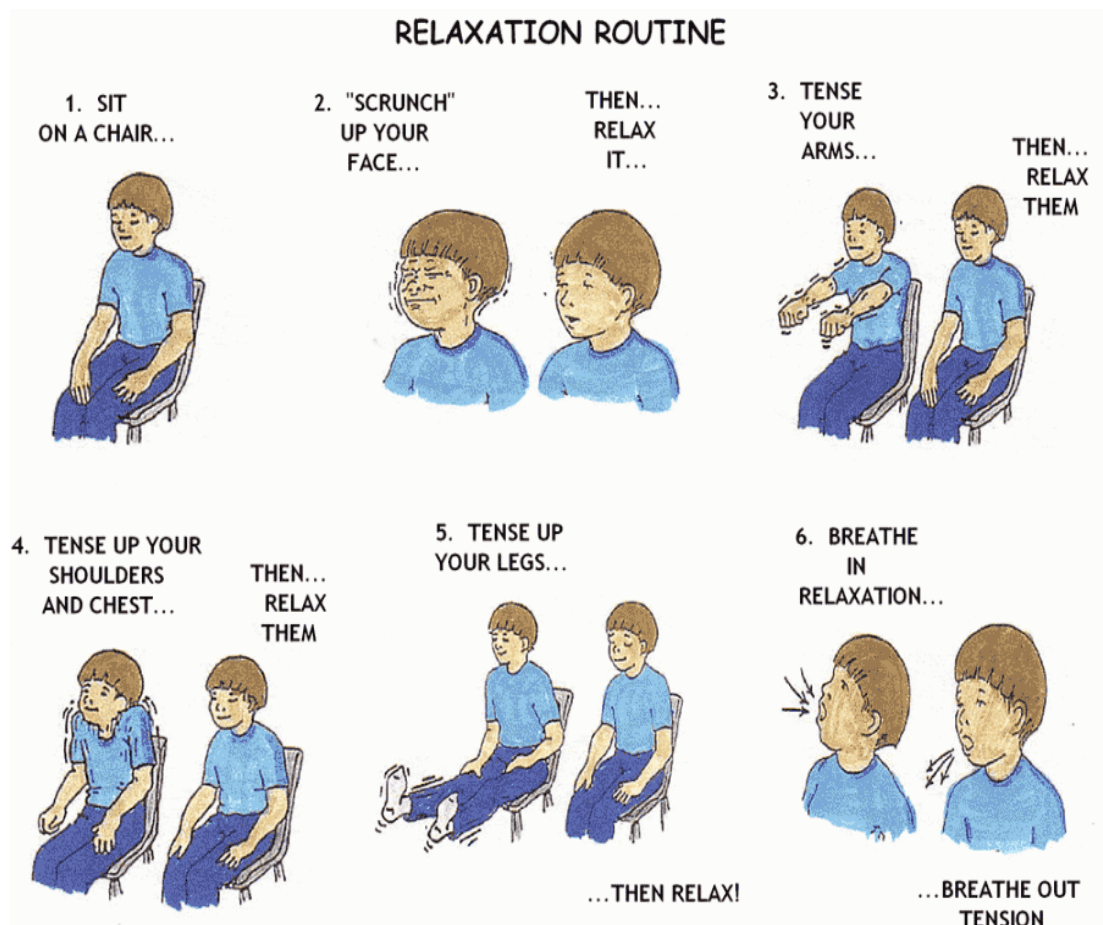
Moderate anxiety : 26 – 50 ( 34.6% - 66.6%)

Severe anxiety : 51 – 75 ( 68% - 100%)



## PROCEDURE OF PROGRESSIVE MUSCLE RELAXATION

Progressive muscle relaxation is a technique that involves tensing specific muscle groups and then relaxing them to create awareness of tension and relaxation. It is termed progressive because it proceeds through all major muscle groups, relaxing them one at a time, and eventually leads to total muscle relaxation.



**Step 1.** Assume a comfortable position. You may lie down; loosen any tight clothing, close your eyes and be quiet.

**Step 2.** Assume a passive attitude. Focus on yourself and on achieving relaxation in specific body muscles. Tune out all other thoughts.

**Step 3.** Tense and relax each muscle group as follows:

- Forehead - Wrinkle your forehead, try to make your eyebrows touch your hairline for five seconds. Relax.
- Eyes and nose - Close your eyes as tightly as you can for five seconds. Relax.
- Lips, cheeks and jaw - Draw the centers of your mouth back and grimace for five seconds. Relax. Feel the warmth and calmness in your face.
- Hands - Extend your arms in front of you. Clench your fists tightly for five seconds. Relax. Feel the warmth and calmness in your hands.
- Forearms - Extend your arms out against an invisible wall and push forward with your hands for five seconds. Relax.
- Upper arms - Bend your elbows. Tense your biceps for five seconds. Relax. Feel the tension leave your arms.
- Shoulders - Shrug your shoulders up to your ears for five seconds. Relax.

- Back - Arch your back off the floor for five seconds. Relax. Feel the anxiety and tension disappearing.
- Stomach - Tighten your stomach muscles for five seconds. Relax.
- Hips and buttocks - Tighten your hip and buttock muscles for five seconds. Relax.
- Thighs - Tighten your thigh muscles by pressing your legs together as tightly as you can for five seconds. Relax.
- Feet - Bend your ankles toward your body as far as you can for five seconds. Relax.
- Toes - Curl your toes as tightly as you can for five seconds. Relax.

**Step 4.** Focus on any muscles which may still be tense. If any muscle remains tense, tighten and relax that specific muscle three or four times.

**Step 5.** Fix the feeling of relaxation in your mind. Resolve to repeat the process again.

Remember, people respond differently to various activities. Some feel pleasant or refreshed, and others feel calm and relaxed after an activity like this one. Some people notice little change the first time, but with practice, their control increases - as well as the benefits. If you practice this activity, your relaxation should increase.