EFFECTIVENESS OF AROMA THERAPY MASSAGE ON ANXIETY AMONG ELDERS AT SELECTED OLD AGE HOME, MADURAI.

M.Sc (NURSING) DEGREE EXAMINATION

BRANCH - V MENTAL HEALTH NURSING

COLLEGE OF NURSING

MADURAI MEDICAL COLLEGE, MADURAI -20.

A dissertation submitted to

THE TAMILNADU DR.M.G.R. MEDICAL UNIVERSITY,

CHENNAI - 600 032.

In partial fulfillment of the requirement for the degree of

MASTER OF SCIENCE IN NURSING

APRIL - 2013

A STUDY TO EVALUATE THE EFFECTIVENESS OF AROMA THERAPY MASSAGE ON ANXIETY AMONG ELDERS AT SELECTED OLD AGE HOME, MADURAI-20.

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CERTIFICATE

This is to certify that this dissertation titled**, EFFECTIVENESS OF AROMA THERAPY MASSAGE ON ANXIETY AMONG ELDERS AT SELECTED OLD AGE HOME, MADURAI-20.** is a bonafide work done by **Mrs.G.JAYANTHI,** College of Nursing, Madurai Medical College, Madurai - 20 and it is submitted to the Tamilnadu Dr.M.G.R. Medical University, Chennai in partial fulfillment of requirements for the award of the degree of Master of Science in Nursing, Branch V, Psychiatric (Mental Health) Nursing Under our guidance and supervision during the academic period from 2010 - 2013.

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ACKNOWLEDGEMENT

"My grace is sufficient for you, for my power is made perfect in weakness."

Therefore I will boast all the more gladly about my weaknesses, So that Christ's power may rest on me. That is why, for Christ's sake, delight in weaknesses, in insults, in hardships, in persecutions, in difficulties. For when I am weak, then I am strong".

(II-Corinthians12:9, 10)

The satisfaction and pleasure that accompany the successful completion of any task would be incomplete without mentioning the people who made it possible, whose constant guidance and encouragement rewards, any effort with success. 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.

I wish to acknowledge my sincere and heartfelt gratitude to Almighty of God for continuous support, strength and guidance from the beginning to the end of this research study.

I extend my sincere thanks to **Dr.N.Mohan M.S., F.I.C.S., F.A.I.S.,** Dean, Madurai Medical College, for his acceptance and approval for the study.

I express my deep sense of gratitude and heartfelt thanks to **Mrs.S.Poonguzhali M.Sc (N), M.A, M.B.A, Ph.D** Principal I/C, College of Nursing, Madurai Medical College, Madurai for her guidance and suggestions to carry out the study.

I express my heartfelt and faithful thanks to **Mrs.S.Rajamani M.Sc (N), M.B.A, Ph.D** Head of Psychiatric and Mental Health Nursing department, College of Nursing, Madurai Medical College, Madurai for her hard work, efforts, interest and sincerity to mould this study in successful way, her easy approachability and understanding nature inspired me and she laid strong foundation on research. It is very

essential to mention her wisdom and helping nature had made my research a lively and everlasting one.

I wish to express my sincere heartfelt thanks and gratitude to **Dr.Prasanna Baby, M.Sc (N), PhD.** former Principal, College of Nursing, Madurai Medical College, Madurai for her guidance and suggestions to carry out the study.

I extend a special thanks to **Ms.Jenette Fernandez, M.Sc (N),** former Principal, College of Nursing, Madurai Medical College, Madurai for her advice and encouragement in completing the study.

I convey my special thanks to **Mr.M.Nithyananthum, M.Sc (N),** Faculty of psychiatric and mental health nursing for his valuable guidance, constant encouragement and moral support.

My deep sense of gratitude to **Dr. C.P.Rabindranath M.D, DPM, FIPS** Professor and Head of the psychiatric department, Government Rajaji Hospital, Madurai, for his timely help, encouragement and guidance.

I extend my sincere thanks to all the **Faculty Members** of College of Nursing, Madurai Medical College, and Madurai for their support and assistance.

I also thank to **Mr.S.Kalaiselvan, M.A., B.LI.S. D.C.A.,** Librarian, College of Nursing, Madurai Medical College, Madurai for his advice and suggestions.

I extend my sincere thanks to **Mr.Victer Devasakayam, MSc (N)** for his guidance and suggestions to carry out the study.

I also thank to **Mr.V.Mani, M.Sc (Bio-Statistics), M.Phil,** Bio-statistician, Aravind Eye Hospital Madurai for suggestions and statistical analysis.

I owe my sincere thanks to **Mr. Gnanavaram, president &** secretary of Old Age Homes, Madurai, for their co-operation and permitting me to conduct the study in old age home.

I give my thanks to **Mrs.J.Ramona Emma Rani. Tamil Pandit** for doing Tamil editing, and also thanks to **Mrs.S.Beulah,M.A.M.Ed , English teacher** for doing English editing of this study.

I also thank to **Mr.R.Rajkumar**, My Computer teacher, and **Master.Arockia Pravin IX std** for their timing help and support for this study.

I thank all the elders who participated in the study.

As a final note, my sincere thanks and gratitude to my sisters and their family, all my friends and relatives who directly or indirectly helped me to complete this study.

It has given me immense pleasure to express my affectionate thanks to my beloved parents, **Mr.S.Gnanamuthu. (late) and Mrs.G.Marygrace** and my brothers **Mr.G.Anbarasan**, **D.E.E.E**, **Mr.K.Sam, Service Engineer, and Mr.V.Sankara subramanian, M.A, (ECO) and My sisters G.Jayamani, Mrs.Victoria Manokaran Hanna trust and Mrs.S.Munniammal M.Sc (N)** for their loving support, encouragement, earnest prayer which enable me to accomplish this study.

My special and affectionate thanks to my husband **Mr.S.Johnson Theader Jacob,** my mother in law **Mrs.Saratha Sargunadoss** and my ever loving daughter **J.Rubanya Esther M.D(RUS).,** for their care, guidance, assistance and support throughout this study which cannot be expressed in words.

I dedicate this dissertation study to my Beloved father **Mr.S.Gnanamuthu.**

ABSTRACT

Effectiveness of aroma therapy massage on anxiety among elders at selected old age homes, Madurai-20.

Objectives: The main objective was to evaluate the effectiveness of aromatherapy massage on anxiety among elders at selected old age home. **Conceptual framework**: the conceptual frame work based on CIPP Model, this model was created by Daniel L. Stufflebeam. It is an acronym that stands for context evaluation, input evaluation, process evaluation and product evaluation. **Design:** This study employed a one group pre test and post test design and the samples were selected by using purposive sampling technique. **Setting of the study:** The study was conducted in selected old age homes (inba illam old age home) at Madurai. **Subjects:** The study was conducted with the total number of 30 subject aged above 60 years. **Intervention:** The selected sample received 10 minutes of aroma therapy massage as an individual session. Totally 15 sessions of aroma therapy massage was given. **Main outcome:** Pre and post test anxiety were measured using Aaron beck anxiety scale before and after aroma therapy massage. **Findings:** The aroma therapy massage proved that there is a difference between the pretest and posttest. It revealed that the calculated "t" value (17.743**) was much higher than the table value 2.05 at 0.05 level of significance. **Conclusion:** These findings support that the aroma therapy massage is an effective non pharmacological, Complementary and Alternative therapy to manage the anxiety among elders residing in old age home.

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CHAPTER - I

INTRODUCTION

"***Age is a slowing down of everything except fear and worries***"

(Mignon Mc Langhlin., 1960)

Aging is the Normal Process of time related changes, begins with birth and continues throughout life. The aging of population is a global phenomenon, the later years of life the conventionally seen as one where pathologic of body, minds and social relationship takes place.

According to Khmer Rouge (1979) Old age consists of ages nearing or surpassing the average life span of human beings, and thus the end of the human life cycle. Euphemisms and terms for old people include seniors (American usage), senior citizens (British and American usage) and the elders. Old people have limited regenerative abilities and are more prone to disease, syndromes, and sickness than younger adults.

World Health Assembly on aging (2001) Over the past few years, the world's population has continued on its remarkable transition path from a state of high birth and death rates to one characterized by low birth and death rates. At the heart of that transition has been the growth in the number and proportion of older persons. Such a rapid, large and omnipresent growth has never been seen in the history of civilization.

The current demographic revolution is predicted to continue well into the coming centuries. One out of every ten persons is now 60 years or above; by 2050, one out of five will be 60 years or older; and by 2150, one out of three persons will be 60 years or older. The older population itself is aging. They currently make up 11 percent of the 60+ age group and will grow to 19 percent by 2050.

In some developed countries today, the proportion of older persons is close to one in five. During the first half of the 21st century that proportion will reach one in four and in developing countries one in two. As the tempo of aging in developing countries is more rapid than in developed countries, developing countries will have

less time than the developed countries to adapt to the consequences of population of aging.

The impact of population of aging is increasingly evident in the old-age dependency ratio, the number of working age persons (age 15 - 64 years) per older person (65 years or older) that is used as an indicator of the 'dependency burden' on potential workers. Between 2000 and 2050, the old-age dependency ratio will double in more developed regions and triple in less developed regions. The potential socioeconomic impact on society that may result from an increasing old-age dependency ratio is an area of growing research and public debate.

More recently James sterling Ross (2004) commented “you do not heal old age” you protect it, and you promote it, life expectancy had increased in recent years. In 2011, Indian aging population is 96million, the percentage to the total population is 8.2%. In India the life expectancy projected in 2011, 2016 has been 67 years for male and 69 years for female, 21% of the Indian population will be above 60 years of age by the year 2050. Industrialization urbanization, education and exposure of western life style are bringing changes in values of life. The old age population has become vulnerable due to which they become distressed, anxiety and depression. Growing old in a society that has been observed with youth may have a clinical impact on the manual health of many people. The situation has series implication for psychiatric nursing.

The concept of “old” has changed drastically over the years. The Tamilnadu census in the year 2011 shows there are more than 580 million people over 60 years of age and their numbers are growing at over 11 million a year. More people are living to older ages, with higher proportions of most countries’ populations aged 60 years and above than at any time in history.

Aging can also be defined as a progressive functional decline or a gradual deterioration of physiological function with age, including a decrease in fecundity, or the intrinsic, inevitable, and irreversible age-related process of loss of viability and increase in vulnerability. Clearly, human aging is associated with a wide range of physiological changes that not only make us more susceptible to death but limit our

normal functions and render us more susceptible to a number of diseases. (Timiras, 2002.)

Functional aging is a more accurate measure of aging, since individual differences by age are considered. Functional aging reflects the relationship between biological maturation and deterioration and how well, if at all, an individual can adapt and perform specific physical, social, or cognitive tasks. (Phoenix 1990).

Chronological aging represents only an approximate measure of the normative development or changes within an individual or age cohort. There is great variation in physical, emotional, social, and psychological development within and between individuals. The chronological aging of an individual interacts with a societal history, with a personal history, and with a number of socio demographic factors (Arizona 1990).

Psychological aging involves the reaction to biological, cognitive, sensory, motor, emotional, and behavioral changes within an individual, as well as the reaction to external environmental factors that influence behavior and lifestyle.

Social aging involves patterns of interaction between the aging individual and the social structure. Many social positions are related to chronological age, and individuals are expected to conform to the age-based norms associated with these positions. Social aging is also influenced by the size and composition of the social structure as it changes over time, by change within a society and by cultural and subculture variations in attitudes toward aging and the aged.

The American geriatrics society (2005) reported that 82% of individuals 65 and older have at least one chronic condition and two thirds have more than one chronic condition and two thirds have more than one observed condition, emotional and mental illnesses increased over the life cycle.

A generalized expectation of danger occurs during the stressful condition known as anxiety. The anxious person experiences a state of heightened tension that Walter Cannon described in 1927 as readiness for "fight or flight". If the threat passes or is overcome, the person returns to normal functioning. Anxiety has therefore served

its purpose in alerting the person to a possible danger. Unfortunately, sometimes the alarm keeps ringing; the individual continues to behave as though in constant danger. Such prolonged stress can disrupt the person's life, distort relationships, and even produce life-threatening physical changes was the prospect of death the alarms that never stops ringing. Death anxiety the source of people's most profound uneasiness. Death anxiety a situational or abnormal reaction that occurs when coping skills are overwhelmed.

Elders often express concern about living "too long" and therefore becoming a burden on others and useless to themselves. Knowing a person's general level of anxiety, then, does not necessarily identify what it is that most disturbs a person about the prospect of death. The fact that most people report themselves as having a low to moderate level of death anxiety does not offer support for either Freud's psychoanalytic or Becker's existential theory. Respondents do not seem to be in the grips of intense anxiety, but neither do they deny having any death-related fears. Kirshenbaum's Edge theory offers a different way of looking at this finding. According to the theory, most people do not have a need to go through life either denying the reality of death or in a high state of alarm. Either of these extremes would actually interfere with one's ability both to enjoy life and cope with the possibility of danger. The everyday baseline of low to moderate anxiety keeps people alert enough to scan for potential threats to their own lives or the lives of other people.

At the perceived moment of danger, people feel themselves to be on the edge between life and death, an instant away from catastrophe. The anxiety surge is part of a person's emergency response and takes priority over whatever else the person may have been doing. People are therefore not "in denial" when, in safe circumstances, they report themselves to have a low level of death anxiety. The anxiety switches on when their vigilance tells them that a life is on the edge of total distraction. Signs of anxiety are more likely to be recognized and measures taken to help the patient feel at ease. These signs include trembling, restlessness, sweating, rapid heartbeat, difficulty sleeping, and irritability. Health care professionals can reduce the anxiety of terminally ill people by providing accurate and reassuring information using relaxation techniques, and making use of anxiolytics or antidepressants.

Reducing the anxiety, elders requires more than technical expertise on the part of physicians and nurses. They must also face the challenge of coping with their own anxieties so that their interactions with patients and family provide comfort rather than another source of stress. Family and friends can help to relieve anxiety (including their own) by communicating well with the terminally ill person.

The constant state of worry and anxiousness may seriously affect older people's quality of life by causing them to limit their daily activities and have difficulty sleeping. If untreated, generalized anxiety disorder may also lead to depression. Other conditions considered anxiety disorders include phobias, panic disorder, and obsessive compulsive disorder. With the months reported an overall improvement in symptoms and quality of life. "Anxiety in people over age 60 might have some similarities to anxiety in those younger, but it also has marked differences. We can't just assume that we can treat the two age groups the same," "We are decades behind where we need to be in terms of research and treatments for anxiety in this older age group."

Anxiety is something everyone experiences and it may vary from time to time and person to person. For most people, their anxiety is related to something concrete and passes when the event is past. When there is no apparent reason for "nervousness," and it becomes chronic, it is particularly hard for both the anxious person and those around her to live with anxiety in the elders were demonstrated by a variety of symptoms. We all know an older person who has an attack of "nerves" at the drop of every hat. Some hyper-anxious people experience tremors, blurred vision, diarrhea, shortness of breath, and even chest pain. "Not feeling well" and staying in bed to avoid an anxiety provoking event is common.

Eric J. Lenze, MD, (2006) quoted that "Studies have shown that generalized anxiety disorder is more common in the elders, affecting 7% of seniors. Surprisingly, there is little research that has been done on this disorder in the elders.

Old age was always a problem, not only in India but also around the world. Old age homes were alien in concept and elder abuse was considered a global problem. As life expectancy has increased from 41 years in 1951 to 64 years today, hundreds of old age homes have sprung up in India. Neglect of parents has become a

big issue, so that the Indian government has passed "The maintenance and welfare of parents and senior citizens bill 2006", which makes it imperative for adult children to look after their parents. As of 1998, there were 728 Old Age Homes in India. Detailed information about 547 of these is available. Out of these, 325 homes are free of cost while 95 old age homes are on pay & stay basis, 116 homes have both free as well as pay & stay facilities and 11 homes have no information. A total of 278 old age homes all over the country are available for the sick and 101 homes are exclusively for women. Madurai has nearly 31 old age homes among them the inba illam is a oldest old age home at Madurai. So the researcher interested to do the study at Inba illam.

Brittany Olivarez (2010) Old age is commonly accompanied by a decline in cognitive functioning. However, studies show that if elders stay active through exercise and mental stimulation it will help decrease cognitive decline. Cognitive decline in the elders can lead to anxiety as people try to cope with the changes associated with old age. A support system of friends, family members and caregivers can help with self-esteem and optimism. So can geriatric psychologists by providing therapy and support to elders. The research felt that age concern measures to break down the barriors of seeking help. Will modified the reluctant behavior of elders with anxiety. Since the elders stayed in old age home are left alone without their family members may aggregate the anxiety episodes.

Naomi Coleman (2005), Massage can be particularly useful for people suffering from anxiety and panic attacks because it helps them relax - often for the first time in their life, claim practitioners. Massage can be an important tool in helping to raise self worth in mental health patients.

Aromatherapy makes use of the herbs and the fragrant **essential oils** in order to promote the natural health and healing. The father of modern medicine, Hippocrates also believed in the use of the herbs in order to maintain one's health. Several of his prescriptions contain fragrant crushed herbs and **essential oils**. Till the tenth century, the books were being written in the Arabia, these books were devoted to the utilization and benefits of the specific aromas.

The term known as **Aromatherapy** is assigned to a French cosmetic chemist named **Rene Maurice Gattefosse**. In the early section of 1920, Modern day research

has shown that specific herbs and **essential oils** actually have the healing and therapeutic properties. Lavender is the oil that is till now being used for the burn victims and its scent is utilized in order to treat anxiety and depression commonly. **Aromatherapy** is now a part of many methods and treatments due to its high ratio of positive results.

1.1 NEED FOR STUDY

In this materialist world, traditional family systems are kept on changing. Joint family system is varnished and nuclear family system is aroused. The old age people are left in the old age homes. We witness old age homes are present in nuke end corners of the city.

Life seems to be meaningless. An individual slogs all through his life for the family and with a view that a day would come when he/she can just relax in his armchair and read his favorite book and tell tales of his youthful days to the younger generation.

Vicissitudes of life have contributed to the misery of elders with none to depend on, no means of income, no emotional security making them destitute with a question, about how to carry on with their lives. The growing intolerance among youth, coupled with their inability to adjust with the elders, is just one of the prime reasons for the rise in the number of old age homes in India.

Recognizing an anxiety in an elders were posses several challenges. Aging brings with it a higher prevalence of certain medical conditions, realistic concern about physical problems, and a higher use of prescription medications. As a result, separating a medical condition from physical symptoms of an anxiety is more complicated in elders.

Brittany Olivarez (2010**)** Old age is commonly accompanied by a decline in cognitive functioning. However, studies show that if elders stay active through exercise and mental stimulation it will help decrease cognitive decline. Cognitive decline in the elders can lead to anxiety as people try to cope with the changes associated with old age. A support system of friends, family members and caregivers

can help with self-esteem and optimism. So can geriatric psychologists by providing therapy and support to elders.

The researcher felt that age concern measures to break down the barriors of seeking help Will modified the reluctant behavior of elders with anxiety. Since the elders stayed in old age home are left alone without their family members may aggregate the anxiety episodes.

A combination of anxiety and aroma therapy massage to enhance the relaxation of elders and to enable to improve their mental status and quality of life. The 21st century as aging one of the world's greatest challenges of the present century in the enormous increase in the absolute member and proportion of older person in the world. According to the united nation projection by the year 2015. The number of older persons is expected to be more than 3/4 from 60million to almost 2 billion. Out of India's more than 8% constitute elders population all this data indicates that India's aging population is on the rise. In India life expectancy has grown up from 20 years in the beginning to 62years today.

Irudayaraj.S, (2006) India is a second population largest population in the world and elders population also the same. The proportion of those who would be aged 60years and above is estimated to be 7.7% for the year 2020 and this expected to range 12.6% in 2050. The main problem among this anxiety. Considering prevalence of anxiety the researcher selected this study.

Many people find lavender aromatherapy to be relaxing and it has been reported to have anxiolytic effects. Overall, the evidence suggests a small positive effect, although additional data from well-designed studies are required before the evidence can be considered strong. Several human trials have assessed the effects of massage in patients with anxiety, including those with cancer or chronic illnesses.

Both medication and psychosocial therapies are used to treat anxiety in older persons, although clinical research on their effectiveness is progressing. Aromatherapy is one of the complementary and alternative medicines used to treat various symptoms because essential oils have many kinds of pharmacologic actions including anxiolytic anti-microbial, sedative, analgesic, and spasmolytic and estrogen or steroid hormone like effects etc.

Zhou, Zhenyu, (2011) Aromatherapy is one of the fastest growing and widely used complementary and alternative therapies in the world today. Nurses use aromatherapy both in their working and private life for many purposes. Many researches provided much evidence in the area. Zhou, Zhenyu, RN, RMN, BHSC (Nursing) said in her paper critically evaluates the current knowledge of aromatherapy and provides supportive evidences for nurses to incorporate aromatherapy into practice. Aromatherapy enhanced relaxation, reduced anxiety and promoted sleep, especially for the elders. It helped people to feel invigorated or rejuvenated, depending on the types of oil used. Some studies stated that aromatherapy only had transient effect. While other studies revealed massage had better effect than inhalation in reducing anxiety level and pain, but more research are required to support these therapeutic claims.

Aromatherapy promotes relaxation and reduces anxiety. More encouragingly, aromatherapy appears to be without the adverse effects of many conventional drugs. However, there is a need for more large scaled, well-designed, randomized control trial research to provide more detailed scientific evidence. Nurses need to be more initiated to analyze, investigate and evaluate the knowledge about aromatherapy before transforming it into clinical practice.

From the above evidence, it is learn that the elder's anxiety and it also increases the level of anxiety since they reside in the old age home, so the researcher adopts certain measures and needs of aromatherapy towards reducing the anxiety level of elders in old age home.

1.2 STATEMENT OF THE PROBLEM

A study to evaluate the effectiveness of aromatherapy massages on anxiety among elders at selected old age home, Madurai.

1.3 OBJECTIVES

- To assess the pre and post test level of anxiety among elders at selected old age home.
- To evaluate the effectiveness of aromatherapy massage on anxiety among elders
- To associate posttest score of anxiety among elders and selected demographic variables

1.4 HYPOTHESES

H_1 - The mean posttest score of anxiety will be significantly lesser than the mean pretest score of elders.

H_2 - There will be a significant association between the posttest score of anxiety among elders and selected demographic variables

1.5 OPERATIONAL DEFINITION

EFFECTIVENESS

In this study the effectiveness refers to a successful positive outcome on anxiety as an aroma therapy massage and is measured in term of significant positive values in the post test.

AROMATHERAPY MASSAGE

In this study the aroma therapy massage refers to a therapeutic technique of manipulating the muscles and soft tissues of the back of the body with using lavender oils mixed with base oil (sunflower) of plants in which the odor or fragrance plays an important part to reduce the level of anxiety.

ANXIETY

In this study the anxiety refers to an emotional response to anticipation of impending and dread accompanied by danger tension, uneasiness, persistence increased helplessness, restlessness, uncertainty, fear and distress perceived by elders, as measured by using Aaron beck anxiety scale.

ELDERS

In this study the elders refers to an older individual (or) aging individual between 60-80years of age.

OLDAGE HOME

In this study the old age home refers to the destitute of elders residing with free of cost in Inba Illam, Pasumalai at Madurai.

1.6 ASSUMPTIONS

- The study is based on the assumption that elders were residing at old age home having varying degree of anxiety.
- Aroma therapy massage is reducing anxiety among elders were residing at old age home.

1.7 DELIMITATION

- The study was delimited to elders residing in Inba Illam Old age home.
- The study was delimited for a period of 4 weeks duration.
- The study was delimited to elders between 60 - 80 years

1.8 PROJECTED OUTCOME

Aroma therapy massages work out its efficacy on anxiety and shallowness issues on elders. Massage can be an important tool in helping to raise self work of elders because that relieves pain and reduce stress, enhance relaxation, decrease the feeling of anxiety and increased general well being of elders.

CHAPTER – II

REVIEW OF LITERATURE

"A good day is one where I cannot just read a book, but write a review of it. Maybe today I'll be able to do that. I get for some reason somewhat stronger when the sun starts to go down. Dusk is a good time for me. I'm crepuscular."

Christopher Hitchens

A literature review is a body of text that aims to review the critical points of current knowledge including substantive findings as well as theoretical and methodological contributions to a particular topic. Literature reviews are secondary sources, and as such, do not report any new or original experimental work.

Most often associated with academic-oriented literature, such as a thesis, a literature review usually precedes a research proposal and results section. Its ultimate goal is to bring the researcher up to date with current literature on a topic and forms the basis for another goal, such as future research that may be needed in the area.

A well-structured literature review is characterized by a logical flow of ideas; current and relevant references with consistent, appropriate referencing style; proper use of terminology; and an unbiased and comprehensive view of the previous research on the topic.

The related literature was studied and reviewed to broaden the understanding and to gain insight into the problems under the study.

The literature review has been organized under following headings.

2.1. Literature related to anxiety among elders.

2.2. Literature related to effectiveness of aromatherapy massage.

2.3. Literature related to aromatherapy massage to reduce the anxiety among elders.

2.1. Literature related to anxiety among elders.

Amy, L. Byers, Kristine Gaffe, Kenneth ,E. Covinsky, Michael, B. Friedman, Martha, L. Bruce (2010). Psychiatric Epidemiology Surveys study was conducted twelve –months period at united states to know about prevalence of anxiety and mood disorder among older adult dwelling at community. the probability sampling method used for this study, sample size were 2575 among older below 55 and older in that 43%, 55-64 years;32%,65-75 years; 20%,75-84 years;5% >_85 years. The likelihood of having mood shown a pattern of declining with age (p,.o5). Disorders showed higher rates in women compared with men, a statistically significant trend with age. In addition, anxiety disorders were as 12% mood disorders 5% across age groups.

Amy, L. Byers, Kristine Yaffe, Kenneth ,E. Covinsky, Michael, B. Friedman & Martha L. Bruce (2010). Population-based study to determine nationally representative estimates of 12-month prevalence rates of mood, anxiety, and co morbid mood-anxiety disorders across young-old, mid-old, old-old, and oldest-old community-dwelling adults, Continental United States. they studied the 2575 participants 55 years and older who were part of NCS-R (43%, 55-64 years; 32%, 65-74 years; 20%, 75-84 years; 5%, ≥85 years). Twelve-month prevalence of mood disorders, anxiety disorders, and coexisting mood-anxiety disorder were assessed using *DSM-IV* criteria. Prevalence rates were weighted to adjust for the complex design to infer generalizability to the US population. The likelihood of having a mood, anxiety, or combined mood-anxiety disorder generally showed a pattern of decline with age ($P < .05$). Twelve-month disorders showed higher rates in women compared with men, a statistically significant trend with age. In addition, anxiety disorders were as high if not higher than mood disorders across age groups (overall 12-month rates: mood, 5% and anxiety, 12%). No differences were found between race/ethnicity groups.

Christina Bryant, Henry Jackson & David Ames (2007). A Cohort study Conducted from 1980–2007, University of Melbourne, Australia, to find out the prevalence of anxiety symptoms, anxiety disorder or specified anxiety disorders in adults aged > 60 in either community or clinical settings. The prevalence of anxiety in community samples ranges from 1.2% to 15%, and in clinical settings from 1% to 28%. The prevalence of anxiety symptoms is much higher, ranging from 15% to 52.3% in community samples, and 15% to 56% in clinical samples. These discrepancies are partly attributable to the conceptual and methodological inconsistencies that characterized this literature. Generalized Anxiety Disorder is the commonest anxiety disorder in older adults.

David, L. Streiner, John Cairney, Scott Veldhuizen, B.A (2006). The Canadian Community Health Survey on Mental Health and Well-Being, to determine the prevalence of mood, anxiety and other disorders in the population of Canadians aged 55 years and over. There was a linear decrease for all disorders after age 55 years. This was true for men and women; for Anglophones, francophone and allophones; and for both people born in Canada and people who immigrated to Canada after age 18 years. Consistent with previous research, the prevalence were higher for women than men. Immigrants reported fewer problems than nonimmigrant's, with the differences decreasing with age. Francophone of both sexes reported more mood disorder than Anglophones, but francophone men had less anxiety disorder than Anglophone men.

Gerstorf, D. Smith, J. & Baltes, P. B (2006). The Berlin Aging Study, to examine the distribution of anxiety symptoms and disorders in a representative community sample. A sample of 258 old (70 to 84 years) and 258 very old (85 to 103 years) subjects were examined. The raw score distributions of anxiety subscales obtained by this procedure are examined by age, gender, education, personal living situation, and psychiatric co morbidity. The weighted overall prevalence of anxiety in the elderly community is 4.5% (n = 17), including specified (n = 8) anxiety disorders according to the DSM-III-R and unspecified (n = 9) disorders. Prevalence rates in the younger old were 4.3% and in the older old 2.3%. Weighted prevalence rates for males were 2.9% and for females 4.7%.Indepentently of the nosological level, 52.3% reported one or more symptoms of anxiety. Factor analysis of anxiety-related symptoms yielded 5

independent subscales, reflecting hypochondrias is, panic, phobia, worries, and vegetative anxiety. There were more phobic symptoms in the younger age group ($P <$ .001).

Amal Chakraburtty, MD (2006). The epidemiological study conducted on generalized anxiety disorder among the elderly at Pittsburgh, Toronto. "Studies have shown that generalized anxiety disorder is more common in the elderly, affecting 7% of seniors, than depression, which affects about 3% of seniors. Surprisingly, there is little research that has been done on this disorder in the elderly,"

Heun, R. Papassotiropoulos,A. & Ptok,U (2006). A comparative study conducted the Department of Psychiatry, University of Bonn, Venus berg, Germany. The aims of the present study were to compare the current and lifetime prevalence for major and sub threshold affective disorders in elderly subjects in the general population, to assess the influence of demographic variables on prevalence rates, and to examine co-morbidity between these disorders. Major and sub threshold disorders were diagnosed in 286 subjects (aged ≥ 60 years). Four-point-nine percent of the subjects had a lifetime diagnosis of major depression, 31.8% either minor or recurrent brief depression, 6.6% a major anxiety disorder, and 18.5% a sub threshold anxiety disorder. The risk for current and lifetime sub threshold anxiety was higher in females than in males, the lifetime prevalence for sub threshold anxiety disorders was increased in elderly subjects and subjects with low professional levels. Increased co-morbidity between major and sub threshold depressive and anxiety disorders could not be observed. In the elderly, sub threshold depressive and anxiety disorders are frequent, more so than major affective disorders.

Kari Kvaal, Jurate Macijauskiene, Knut Engedal & Knut Laake(2005). Controlled cross-sectional study to examine the prevalence of anxiety symptoms in hospitalized geriatric patients. Ninety-eight geriatric in-patients and 68 healthy home-dwelling controls of similar age recruited from senior citizen centers. Anxiety measured as a current emotional state by Spielberger's State–Trait Anxiety Inventory .The geriatric patients scored significantly higher than the controls. Applying Spielberger's recommended cut-off of 39/40 on the State–Trait Anxiety Inventory sub score, 41% of the female and 47% of the male geriatric patients might be suspected of suffering from significant anxiety symptoms.

Le Roux, Hillary B.A, Gatz, Margaret, Wetherell & Julie Loebach (2005). The explorative study to find out the distribution and correlation of age-at-onset of late-life generalized anxiety disorder . Authors examined the distribution of age at onset in a sample of 67 older adults with GAD recruited for a psychotherapy study. They compared those with an early onset of symptoms (before age 50) to those with a late onset (after 50) on demographic variables and measures of psychopathology and health-related quality of life. There was a bimodal distribution of age at onset, with 57% reporting early onset and 43% reporting a late onset. Patients with an early onset of symptoms had a higher rate of psychiatric co morbidity and psychotropic medication use and more severe worry. Patients with a late onset of symptoms reported more functional limitations due to physical problems. Although older GAD patients report an onset in childhood or adolescence, almost half develop the disorder in late life. Older adults with an early onset of GAD appear to have a more severe course, characterized by pathological worry, than those with a later onset. Role disability may be a risk factor for onset of GAD in late life

Tomader Taha Abdel Rahman (2005). Cross sectional study was done among elders aged 60 -80yrs, to evaluate the prevalence of anxiety and depression thus who were living in the old age home and geriatric clubs Cairo at Egypt. .They are living at their own homes and going to geriatric clubs regularly as Elwaily, Elshams and Eltayaran (group I) or living at geriatric homes as Elsafa, Elmarwa and Oly Elalbab (group II). Sample size of at least 110 subjects from each group. The duration of survey was 6 months, Hamilton Anxiety Scale was used in this study. It consists of 14 items, each defined by a series of symptoms. Each item is rated on a 5-point scale, ranging from 0 (not present) to 4 (severe). The total score is 0 – 17 for normal individual, 18 – 24 for mild anxiety, 25 – 29 for moderate anxiety and ≥ 30 for severe anxiety. Data was coded for analysis test was used for categorical data. P-value < 0.05 was considered statistically significant.

Samuelsson, et al (2005). Described a longitudinal cohort study of 192 healthy subjects aged 67 years at first assessment; these subjects were followed up for up to 34 years. The cumulative probability for the development of clinical anxiety during follow up was 6%. No significant risk factor for anxiety was found.

Flint (2005). Reviewed the epidemiology of GAD in the elderly and concluded that, when present alone, this disorder has a period prevalence of about 1% in community-dwelling older people; In the National Co morbidity Survey Replication, 9282 English-speaking adult American subjects were interviewed. Among all disorders, anxiety disorders showed the highest lifetime prevalence: 28.8 % overall and 15.3 % in the elderly. Elderly subjects had a lower prevalence for each of the anxiety disorders relative to the rest of the population. The overall lifetime prevalence in the whole sample and in the elderly subjects, separately, were 5.7% and 3.6% for GAD, 4.7% and 2.0% for panic disorder, 1.4% and 1.0% for agoraphobia without panic, 12.5% and 7.5% for specific phobia, 12.1% and 6.6% for social phobia, 6.8% and 2.5% for posttraumatic stress disorder, and 1.6% and 0.7% for obsessive-compulsive disorder .

Schoever Robert,A.,Deeg, D. J.H., Tilburg & W., Beekman, A. T.F(2004). Explorative study conducted by Department of Psychiatry, VU University Medical Center, Amsterdam, The Netherlands to establish the natural course and risk-profile of depression, generalized anxiety disorder (GAD), and depression with co-existing GAD in later life. A total of 2,173 community-living elderly persons were interviewed at baseline, and at a 3-year follow-up. The course of pure depression, pure GAD, and depression with coexisting GAD was studied in 258 subjects with baseline psychopathology. The risk-profile for onset of pure depression, pure GAD, and the mixed condition at follow-up was studied in 1,915 subjects without baseline psychopathology. Remission rate at follow-up was 41% for subjects with depression-only, 48% for pure GAD, and significantly lower (27%) for depression with coexisting GAD. A pattern of temporal sequencing was established, with anxiety often progressing to depression or depression with GAD. Onset of pure depression and depression with co-existing GAD was predicted by loss events, ill health, and functional disability. Onset of pure GAD, and, more strongly, that of depression with coexisting GAD, was associated with longstanding, possibly genetic vulnerability.

Cheryl ,N. Carmin ,Jan Mohlman, Amy Buckley (2004). Contacted epidemiological studies have underscored the ubiquitous nature of anxiety disorders, with approximately 25% of adults being affected over the course of their lifetimes. Given the prevalence of anxiety disorders, it is not surprising that an increasing

amount of attention has been given to investigating the prevalence and treatment of these conditions. What is surprising, however, is how little attention has been given to anxiety disorders in what is the fastest growing segment of the population, namely the elderly. This article summarizes how the existing research literature informs us with respect to the epidemiology of anxiety disorders in the elderly and then examines the treatment outcome literature with regard to the individual anxiety disorders.

Beekman, A.T. et al (2004). The Longitudinal Aging Study Amsterdam at Netherlands. The random sample size of 3107 older adults, stratified for age and sex, which was drawn from the community registries of 11 municipalities in three regions in Netherlands. Anxiety disorders were diagnosed using the Diagnostic Interview Schedule in a two-stage screening design. The overall prevalence of anxiety disorders was estimated at 10.2%. Generalized anxiety disorder was the most common disorder (7.3%), followed by phobic disorders (3.1%). Both panic disorder (1.0%) and obsessive compulsive disorder (0.6%) were rare. And also study about risk factors comprise vulnerability, stress and network-related variables.ti was evaluated by using bivariate and multivariate statistical methods. The Vulnerability factors (female sex, lower levels of education, having suffered extreme experiences) appeared to dominate, while stresses commonly experienced by older people (recent losses in the family and chronic physical illness) also played a part. Of the network-related variables, only a smaller size of the network was associated with anxiety disorders.

Pereira, et al (2002). Studied 698 geriatric patients attending a psychiatric hospital in Goa. They observed that nearly 9% of the patients had neurotic, stress-related, and somatoform disorders of these, a little over a third were diagnosed with mixed anxiety and depressions

Lenze, Eric, J (2001). Recent geriatric literature for studies associating late-life depression or anxiety with physical disability. Studies showed that Anxiety in late life was also found to be a risk factor for disability, although not necessarily independently of depression. Increased disability due to depression is only partly explained by differences in socioeconomic measures, medical conditions, and cognition. Physical disability improves with treatment for depression; comparable studies have not been done for anxiety. The authors discuss how these findings inform

current concepts of physical disability and discuss the implications for future intervention studies of late-life depression and anxiety disorders.

JORM, A.F.et al., (2000). Psychiatric Epidemiology Research study that examine the occurrence of anxiety, depression or general distress across the adult life span. at Australian National University, Canberra, Australia. A study had to involve a general population sample ranging in age from at least the 30s to 65 and over and use the same assessment method at each age. There was no consistent pattern across studies for age differences in the occurrence of anxiety, depression or distress. The most common trend found was for an initial rise across age groups, followed by a drop. Two major factors producing this variability in results were age biases in assessment of anxiety and depression and the masking effect of other risk factors that vary with age. When other risk factors were statistically controlled, a more consistent pattern emerged, with most studies finding a decrease in anxiety, depression and distress across age groups. This decrease cannot be accounted for by exclusion of elderly people in institutional care from epidemiological surveys or by selective mortality of people with anxiety or depression.

Forsell, Y(2000). The epidemiological follow-up study examined the predictors for Depression, Anxiety and psychotic symptoms in a population of very elderly persons. A total of 894 persons with a mean age of 84.5 years were examined twice using a 3-year interval. Physicians performed a structured psychiatric interview and persons with a current disorder or symptom were excluded. Persons who had a history of psychosis, were affected with Dementia and had an insufficient social network had an increased frequency of psychotic symptoms. A history of Depression/Anxiety increased the frequency of having Anxiety and Depression. An insufficient social network was associated with Anxiety. In this study Anxiety, Depression and psychotic symptoms in the very elderly seem to be linked to a lifetime psychological vulnerability, since all were related to a previous psychiatric history. Additionally, psychotic symptoms seemed to emerge due to structural brain damage, as seen in Dementia.

2.2. Literature related to effectiveness of aromatherapy massage

Lai, T.K (2011). This study employed a randomized control group pre- and post test design and included an aroma massage group, plain massage group, and control group. To evaluate the effect of aromatherapy, the degree of constipation was measured using a constipation assessment scale, severity level of constipation and the frequency of bowel movements. The score of the constipation assessment scale of the aroma massage group was significantly lower than the control group. Apart from the improvement in bowel movements, the results showed significantly improved quality of life in physical and support domains of the aroma massage group.

Serfaty,M (2011). A randomized controlled trial of aromatherapy massages versus Cognitive Behavior Therapy in patients with cancer; test and modify the intervention; determine whether changes in outcomes were consistent with published data. Patients at all stages of cancer, recruited from oncology outpatient clinics and screening eight or more for anxiety and/or depression on the hospital anxiety depression scale, were randomized to Treatment as Usual plus up to eight sessions weekly of either aromatherapy massage or cognitive behavior therapy, offered within 3 months Of those suitable, over 60% (39/63) participated (aromatherapy massage, n = 20; cognitive behavior therapy, n = 19) and over 90% (36/39) were followed up. Both packages were well received. The preference was for AM, with more sessions were taken up; (Mean number sessions aroma therapy massage = 7.2 (standard deviation 2.0) and cognitive behaviour therapy = 5.4 (standard deviation 3.1); $P<0.05$). Significant improvements in POMS (Total Mood, depression and anxiety scores) occurred with both interventions.

Diane, M. Welsh, L. Charles, E. Gessert, Colleen, M. & Renier, B.S (2009). Prospective study designed to examine the potential of massage to reduce agitation in cognitively impaired nursing home residents. Subjects were identified as susceptible to agitation by nursing home staff or by Minimum Data Set report. Data was collected during baseline (3 days), intervention (6 days), and at follow-up. Five aspects of agitation were Wandering, Verbally Agitated/Abusive, Physically Agitated/Abusive, Socially Inappropriate/Disruptive, and Resists Care. At each observation, agitation was scored 5 times during the 1-hour window of observation. Subjects' agitation was lower during the massage intervention than at baseline (2.05

vs. 1.22, $P < .001$), and remained lower at follow-up. Of the 5 agitated behaviors examined in this study, massage was associated with significant improvement for 4: Wandering (0.38 vs. 0.16, $P < .001$), verbally Agitated/Abusive (0.59 vs. 0.49, $P = .002$), Physically Agitated/Abusive (0.82 vs. 0.40, $P < .001$), and Resists Care (0.10 vs. 0.09, $P = .022$).

Cathy Wong (2009). A small study suggests that aromatherapy massage may help ease anxiety among people with breast cancer. The study involved 12 breast cancer patients, all of whom received 30-minute aromatherapy massages twice weekly for four weeks. Results revealed that aromatherapy massage could help reduce anxiety, as well as stimulate the immune system.

Yim, V.W.C. Adelina, K.Y. Hector, W.H. Tsang, & Ada ,Y. Leung (2009). A study conducted in the Department of Rehabilitation Sciences, Hong Kong Polytechnic University, Hong Kong. The review was conducted among five electronic databases to identify all peer-reviewed journal papers that tested the effects of aromatherapy in the form of therapeutic massage for patients with depressive symptoms the results were based on six studies examining the effects of aromatherapy on depressive symptoms in patients with depression and cancer. Some studies showed positive effects of this intervention among these three groups of patients. We recommend that aromatherapy could continue to be used as a complementary and alternative therapy for patients with depression and secondary depressive symptoms arising from various types of chronic medical conditions.

Muzzarelli, L (2006). A controlled, prospective study was done on anxiety prior to a scheduled colonoscopy a convenience sample of 118 patients. The "state" component of the State Trait Anxiety Inventory was used to evaluate patients' anxiety levels pre- and post aromatherapy. The control group was given inert oil (placebo) for inhalation, and the experimental group was given the essential oil, lavender, for inhalation. The STAI state anxiety raw score revealed that patients were at the 99th (women) and 96th (men) percentiles for anxiety. The intervention group and the control group had similar levels of state anxiety prior to the beginning of the study ($t [116] = .47$, $p = .64$). There was no difference in state anxiety levels between pre- and post placebo inhalation in the control group ($t [112] = .48$, $p = .63$). There was no statistical difference in state anxiety levels between pre- and post

lavender inhalation in the experimental group (t [120] = .73, p = .47). Although this study did not show aromatherapy to be effective based on statistical analysis, patients did generally report the lavender scent to be pleasant. Lavender is an inexpensive and popular technique for relaxation that can be offered to patients as an opportunity to promote pre procedural stress reduction in a hospital setting

Naomi Coleman (2005). Comparative study conducted the Royal Berkshire Hospital NHS Trust in Reading studied the effects of massage and massage using aromatherapy oils in the intensive care unit as a means of helping to alleviate anxiety and stress. Around 122 patients were selected to receive massage, aromatherapy massage, or bed rest. All of the patients were assessed before and after the therapy sessions. Results showed that the patients in the aromatherapy group were found to be less anxious and more positive immediately after the treatment.

Naomi Coleman (2005). A randomized controlled trial was conducted to assess the effects of aromatherapy and massage on post-cardiac surgery patients at the Royal Berkshire Hospital NHS Trust. Foot massages were given, with or without essential oils to the patients. Results showed that a significant psychological benefit was derived from both groups receiving massage, compared to those patients not receiving massage or aromatherapy massage.

Maddocks- Jennings,W. & Wilkinson ,J .M (2004). Most of the nursing literature related to the use of essential oils in low doses for massage or use of the oils as environmental fragrances. The paper reported a literature relating to the use of aromatherapy by nurses and critically evaluates the evidence to support this practice. A total of 165 articles have been included in this review. Nursing papers were published since 1990 were included, but some references from 1971 onwards relating to scientific research conducted on essential oils were also included. The review covers key professional issues and the principal areas of clinical practice where aromatherapy is used. Despite calls for more research in the 1980s and 1990s, there is still little empirical evidence to support the use of aromatherapy in nursing practice beyond enhancing relaxation.

Soden ,K(2004). This study was designed to compare the effects of four-week courses of aromatherapy massage and massage alone on physical and psychological

symptoms in patients with advanced cancer. There is good evidence that these therapies may be helpful for anxiety reduction for short periods, Forty-two patients were randomly allocated to receive weekly massages with lavender essential oil and inert carrier oil (aromatherapy group), inert carrier oil only or no intervention. Outcome measures included a Visual Analogue Scale of pain intensity, the Verran and Snyder-Halpern sleep scale, the Hospital Anxiety and Depression scale and the Rotterdam Symptom Checklist. Sleep scores improved significantly in both the massage and the combined massage (aromatherapy and massage) groups. There were also statistically significant reductions in anxiety and depression.

Jennifer Edge (2003). Conducted a pilot study in which she tested the effects of aromatherapy massages on mood, anxiety, and relaxation on eight subjects. Each subject was given a Hospital Anxiety and Depression Scale where these levels were tested both before and after completing the massage treatments. Every subject received an aromatherapy massage for one hour, once a week, for six weeks. The average improvement in relaxation and anxiety was 50% and mood was 30% after each individual massage. The subjects were each tested again with the HAD six weeks after the completion of their massages to measure their relaxation, anxiety, and mood scores. Six weeks post-massage their levels had dropped in all three areas but were still 30%, 10%, and 10% higher, respectively, than before the experiment started. Only one of the eight subjects did not show any improvement in any of the three areas. This study can conclude that aromatherapy massage does have positive effects in the short term with relaxation, anxiety, and mood but the effects drop off if the aromatherapy use is not persistent.

Moss, Cook, Wesnes, & Duckett (2003). The main findings were that the subjects assigned to the lavender group were less alert than those exposed to rosemary. Also, subjects in the control who received no aromatherapy treatment were unhappier than those who did. This indicates that aromatherapy can have positive effects on moods. A final finding of this experiment was that the aromatherapy produced a slower reaction time to memory and performance, most likely due to a higher state of relaxation.

Stiles, K.G (2002). Conduct a pilot study addressing the effect of aromatherapy massage on mood, anxiety, and relaxation in adult mental health was

conducted at the Lavender Day Hospital in West Sussex, UK. The study was carried out over an 8-month period. The subjects' levels of mood, anxiety and relaxation were recorded using a visual analogue before and after each massage and then again 6 weeks after the last massage. Comparison was made between the HAD Scale results for each client and also the visual analogue scale results for before and after massage and also first massage and 6 weeks post massage for the sample group. Improvements were shown in six out of eight subjects' HAD Scale results. Improvements were also shown in all areas when comparing the visual analogue scale results.

Hadfield, N (2001). Researcher wanted to find out whether aromatherapy massage reduces anxiety in patients with a primary malignant brain tumor attending their first follow-up appointment after radiotherapy. Eight patients were recruited to the study, which comprised three methods of data collection the measurement of physical parameters; the completion of Hospital Anxiety and Depression Scales; and semi-structured interviews. The results from Anxiety and Depression Scales did not show any psychological benefit from aromatherapy massage. However, there was a statistically significant reduction in all four physical parameters, which suggests that alternative medicine affects the autonomic nervous system, inducing relaxation. This finding was supported by the patients themselves, all of whom stated during interview that they felt relaxed after aromatherapy massage. Since these patients are faced with limited treatment options and a poor prognosis, this intervention appears to be a good way of offering support and improving quality of life.

Brian Cooke & Edzard Ernst (2000). Completed a systematic review of aromatherapy by compiling and studying the results of six experiments dealing with aromatherapy use. The general conclusions were that aromatherapy massage can be beneficial for short periods in reducing anxiety, stress, and increasing well-being. Five of the six experiments concluded that aromatherapy causes positive effects. Since six different experiments were conducted by six different researchers, none were exactly alike. Every experiment was conducted by health care officials to patients in a hospital setting. The participants were tested in performance by mostly completing written questionnaires. five of the six did prove that the well-being and stress levels of patients improved with aromatherapy use.

Aorn,J (2000). This article reviewed holistic caring-healing therapies that may decrease preoperative anxiety for the surgical patient, based on the philosophy and science of caring developed by Jean Watson, RN, PhD, Faan.Dr Watson reveals a new paradigm emerging in health care that blends the compassion and caring of nursing in harmony with the curative therapies of medicine. Hypnosis, aromatherapy, music, guided imagery, and massage are integrative caring-healing therapies that may minimize preoperative anxiety. Alternative therapies offer a high-touch balance when integrated with high-tech conventional surgical treatments.

2.3. A literature related to effectiveness of aromatherapy massage on anxiety among elders.

Eva, S. van deer Ploeg, Barbara Epping stall &Daniel, W. O'Connor (2010). Random cross-over study will be conducted in mainstream and psycho geriatric with moderate to severe dementia and associated behavioral problems living in aged care facilities in south-east Melbourne. to test the effectiveness of topically applied pure lavender oil in reducing actual counts of challenging behaviors in nursing home residents. Willing participants will be assigned in random order to lavender or placebo blocks for one week then switched to the other condition for the following week. In each week the oils will be applied on three days with at least a two-day wash out period between conditions. Trained observers will note presence of target behaviors and predominant type of affect displayed during the 30 minutes before and the 60 minutes after application of the oil. Nursing staff will apply 1 ml of 30% high strength essential lavender oil to reduce the risk of missing a true effect through under-dosing. The placebo will comprise of jojoba oil only. The oils will be identical in appearance and texture, but can easily be identified by smell. For blinding purposes, all staff involved in applying the oil or observing the resident will apply a masking cream containing a mixture of lavender and other essential oils to their upper lip. In addition, nursing staff will wear a nose clip during the few minutes it takes to massage the oil to the resident's forearms.

Brooker, *et al* **(2010).** A **Single case study to evaluated the effects of aromatherapy and massage on disturbed behavior in severe dementia.** Observed variable effects after treating four psycho geriatric patients for 10-minute periods on ten occasions each with lavender oil by vapor, massage with a neutral oil and

vaporized lavender oil combined with massage. When compared with 'no treatment' control sessions, only one participant benefited to a statistically significant degree and two became more agitated. Two other case series suggested that lavender promotes sleep in elderly people with dementia.

Rho,K.H.Han,S.H.Kim,K.S.Lee.M.S(2006). This study investigatedthe effect of aromatherapy massage onthe anxiety and selfesteem experiencedby Korean elderly women. A quasi-experimental, control group, pretest-posttest design was used. The subjects comprised 36 elderly females: 16 in the experimental group and 20 in the control group. Aromatherapy massage using lavender, chamomile, rosemary, and lemon was given to the experimental group only. Each massage session lasted 20 min, and was performed 3 times per week for two 3-week periods with an intervening 1-week break. The intervention produced significant differences in the anxiety and self-esteem and no significant differences in blood pressure or pulse rate between the two groups. These results suggest that aromatherapy massage exert positive effects on anxiety and self-esteem.

Edge, J (2003). This study was carried out with eight subjects specifically referred for aroma therapy; each received a standardized aroma therapy massage weekly for 6 weeks. The subjects' levels of anxiety and depression were measured using the Hospital Anxiety and Depression Scale prior to the first massage and after the final massage. The subjects' levels of mood, anxiety and relaxation were recorded using a visual analogue before and after each massage and then again 6 weeks after the last massage. Improvements were shown in six out of eight subjects' Hospital Anxiety and Depression Scale results. Improvements were also shown in all areas when comparing the visual analogue scale results. The study was carried out over an 8-month period. To date there have been few studies addressing the effect of aroma therapy massage on mood, anxiety relaxation. It is acknowledged that whilst this is a small pilot study a number of methodological issues are raised concerning research into the use of aromatherapy in this clinical field.

Smallwood (2001). A random controlled trial of the relaxing effects of an aromatherapy massage on disordered behavior in dementia was conducted. Twenty-one patients were randomly allocated into one of three conditions,

aromatherapy and massage, conversation and aromatherapy and massage only. Aromatherapy massage showed the greatest reduction in the frequency of excessive motor behavior of all three conditions. This reached statistical significance between the hours of three and four pm ($p < 0.05$). Post hoc analysis suggested that at this time of day the aromatherapy and massage consistently reduced motor behavior when compared with conservation and aromatherapy ($p = 0.05$). This provides preliminary evidence of a measurable sedative effect of aromatherapy massage on dementia within a robust scientific paradigm.

2.4 CONCEPTUAL FRAME WORK

A conceptual frame work is a theoretical approach to the study of problems that are scientifically based and emphases the selection, arrangement and classification of its concept. Concepts are words that depict objects, properties or events and are basic components of theory. The conceptual frame work is a general amalgam of all the related concepts in the problem area.

Conceptual frame work deals with abstraction or concepts that are assembled by virtue of their relevance to a common theme. Conceptualization is a process of forming ideas which is utilized and forms conceptual frame work for development of research design. It helps the researchers by giving direction to go about the entire research process.

A conceptual model or theoretical framework provides a coherent, amalgamated and orderly way of envisioning related events or processes relevant to a discipline. In research, a framework illustrates the overall conceptual design of the study. The terms 'conceptual model' and 'theoretical framework' are habitually used interchangeably, but a theoretical framework generally incorporates at least part of a specific theory as the basis for a study. In addition, a theoretical framework often includes propositional statements describing the relationships among variables and has received more testing than the more tentative conceptual model.

The most common use of conceptual models is to provide an organizing structure for the research design and methods. A second purpose is to guide the development and testing of interventions and hypotheses based on the canon of the theory. A third function is to explain the study results and place the findings within the context of science in a specific field of investigation. The interpretation of findings flows from the conceptualization represented by the framework,

In this study was aimed at to evaluate the effect of aromatherapy massage to reduce anxiety among elders.

Conceptual frame work is structures together in a meaningful way. Although relationships are to assume in conceptual frame work, frequently neither the direction nor the relationships made explicit for use in practice of for testing in a research project.

Here the conceptual frame work based on CIPP Model; this model was created by Daniel L. Stufflebeam. It is an acronym that stands for context evaluation, input evaluation, process evaluation and product evaluation. Context evaluations help prioritize goals, input evaluation assess different approaches, process evaluations assess the implementation of plans, and product evaluations assess the outcomes. The model is used to evaluate both formative and summative assignments. The CIPP Model advocated that the purpose is not to prove but to improve.

Context Evaluation*:* It highlighted the environment, surrounding from where the individuals engages and interact. In this study it included selected factors such as age, sex, religion, educational status, income, place of domicile, duration of residing, support system, and reason for residing. The setting of the study was inba illam, Pasumalai, Madurai.

Input evaluation*:* It specified the resources used in the process such as men, money, material. In this study it includes measuring pre test of anxiety level of the anxiety among elderly. .

Process evaluation*:* It referred to the evaluation of implementing process including the interaction between the client and care givers. In process the interaction is aroma therapy massage. Aroma therapy massage it is a technique by which the back of the recipient are held at various method, stroked gently and rhythmically to attain a relaxation response. The aroma therapy massage was done according to the steps stated in procedure for back massage.

Product evaluation*:* This information referred to the output as a result of the intervention. It included measuring post test of anxiety among elderly.

Feed back: Referred to the information sent backward from the product evaluation to the input and the process in order to gained understanding and modified or accepted the strategies.

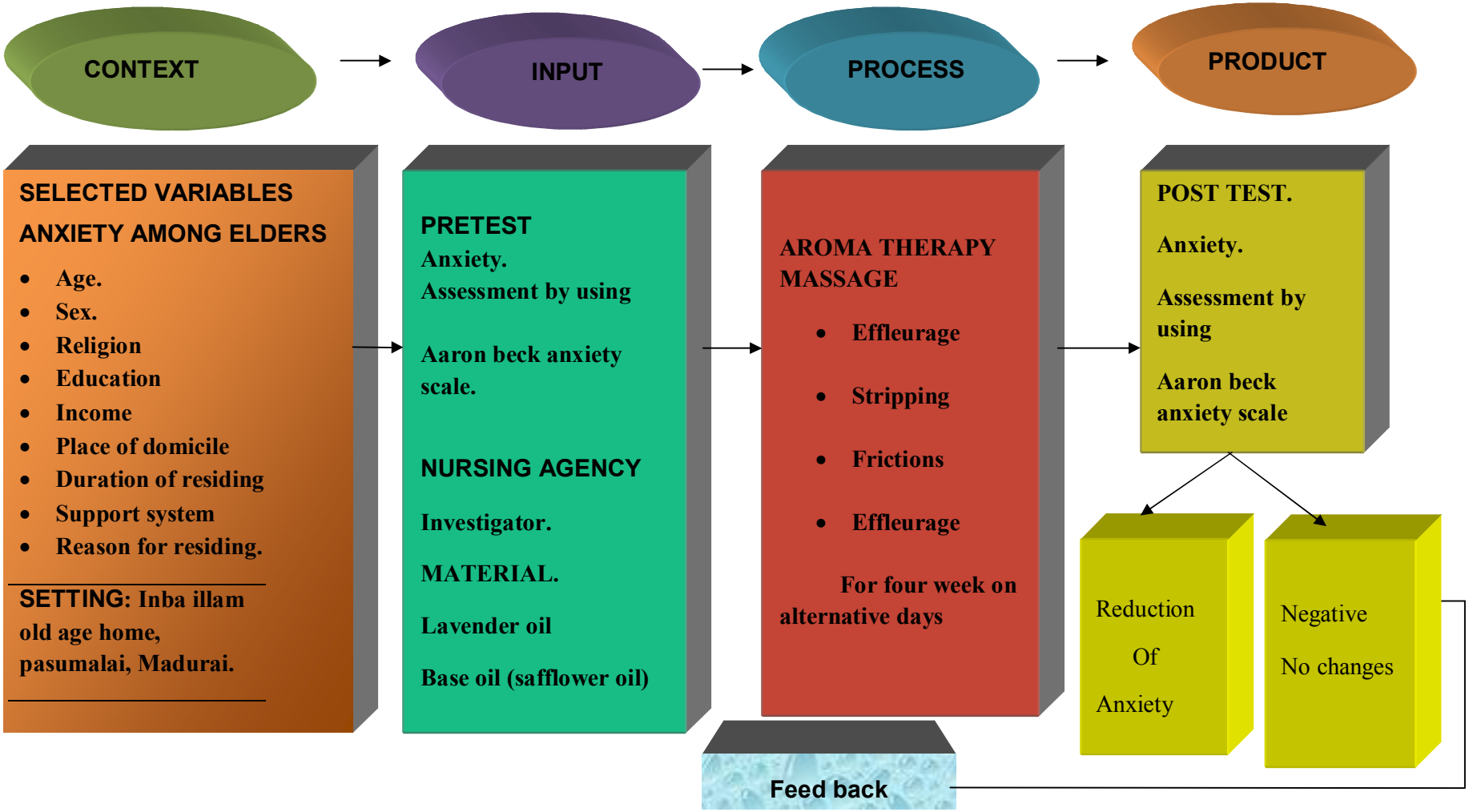

FIG- I DANIEL L. STUFFLEBEAM MODIFIED CIPP MODEL

CHAPTER - III

METHODOLOGY

"...the overall process of conducting evaluation research in health requires careful and detailed planning ... and a combination of tenacity and creativity to address the inevitable thorny methodological challenges... "

- ***Ahern, Patrick, Phalen and Neiley.***

The research methodology indicates the general pattern of budding or sanitization methods of obtaining, organizing or analyzing data for gathering valid and reliable data for investigation. This chapter includes research design, setting of the study, population, sample, and inclusion and exclusion criteria for selection of sample, development, and description of the tool, content validity, pilot study, data collection procedure and plan for data analysis.

3.1 RESEARCH APPROACH

In this study the researcher used Quantitative approach.

3.2 RESEARCH DESIGN

In this study the research design was a Pre experimental design. The Study emphasis no randomization, no control Group and Only manipulation.

Pretest	Intervention	Post test
O1	X	O2

O_1 - Pretest to assess the level of anxiety among elders before aromatherapy massage.

X - Aroma therapy massage on back of the body of an elder on alternative days for 4weeks.

O_2 - Posttest to assess the level of anxiety among elders after Aromatherapy massage.

3.3 RESEARCH VARIABLES

Independent variable : Aromatherapy massage

Dependent variable : Anxiety

3.4 SETTING OF THE STUDY:

The study was conducted at the old age home (Inba Ilam) at Pasumalai, Madurai. It was established in the year 1967, by Dr. Samuel Amirtham, the bishop of Kerala started it with mission of providing shelter to homeless, destitute, widows. It was registered under Indian society act on the same day. There are 8 inmates when it was started. Now the census is 50 inmates, 30 females and 20 males. It is the oldest home for elders in Madurai at Tamilnadu. It is 6 kilometer for away from our College of Nursing, Madurai Medical College, Madurai.

3.5 POPULATION

Target population

The individuals those who had anxiety among elders residing at old age home.

Accessible population

The study population comprised of anxiety among elders residing at Inba Illam, (old age home) Pasumalai, Madurai.

3.6 SAMPLE

It comprises of anxiety among elders residing at old age home who fulfill the inclusion criteria.

3.7 SAMPLE SIZE

The Sample size consisted of 30 subjects who had anxiety among elders residing at old age home.

3.8 SAMPLING TECHNIQUE

In this study the researcher selected the sample through purposive sampling technique. Purposive sampling is a non - probability sampling method in which the researcher selects participants based on personal judgment about who might be most representative or informative. It is also called as Judgmental Sampling.

3.9 CRITERIA FOR SAMPLING

INCLUSION CRITERIA:

- Elders between the ages of 60 -80 years residing at Inba Illam Pasumalai, Madurai.
- Elders who had mild to moderate anxiety.
- Elders who understand either Tamil or English.
- Elders who were willing to participate in the study.

EXCLUSION CRITERIA:

- Elders who were under prolonged medication.
- Elders who were having chronic illness
- Elders who were unable to walk.
- Elders who were having spinal problems.

3.10 DESCRIPTION OF THE TOOL:

The interview schedule was organized in 2 sections Part A and Part B.

Part A: Consisted of demographic variable of 9 items which included Age in years, sex, religion, education, income, place of Domicile, Duration of residing, support system, reason for residing.

Part B: Standardized Aaron beck anxiety scale consisted of 21items rated in 4 point scale to measure the presence of anxiety

3.11 SCORING KEY AS FOLLOWS

Part A: No scoring will be allotted for the demographic variables.

Part B: This is scoring key having 21 items was scored on a scale

0	(not at all)
1	(mild)
2	(moderate)
3	(severe)

With a total score range of 0-63, where after the patient has completed the test, add up the score for each of the 21questions and obtain the total score. The highest score for each of the twenty-one items is three; the whole test of the highest possible total score was sixty-three, if the elders marked any one of the number from 0 to 3 on all the questions. The lowest score for each item was zero, so the lowest possible score for the test was zero if the elder's person marked zero on each question. The following chart indicates the relationship between total score and level of anxiety.

Score level of anxiety and inference

Minimum score -0	**maximum score- 63**
Level of score	**total score**
Minimal	0-7
Mild	8-15
Moderate	16-25
Severe	26-63

3.12 TESTING OF THE TOOL

CONTENT VALIDITY:

The content validity was obtained from 4 psychiatric (mental health) Nursing experts and 1 Professor of Psychology at various institutions. Experts" suggestions were incorporated in the tool.

RELIABILITY

The reliability of the tool was assessed by test retest method. The reliability of a measuring instrument is a major criterion for assessing its quality and adequacy. Reliability was the consistency with which it measured the target attributes. The reliability was computed by spearman co efficient-correlation method r=0.853.Hence the tool was found to be reliable.

3.13 PILOT STUDY

Pilot study was conducted in old age home at Inba Ilam at Madurai, among 5 elders. The duration of study was one week period from 15.07.2011 to 21.07.2011to test the feasibility, relevance and practicability of the intervention after obtaining permission from ethical committee and content validity from 3 nursing personnel, 1 psychologist and one medical expert. The findings evidenced that there was significant difference in pretest and post test scores on anxiety among elders. It revealed that the study was feasible.

3.14 PROCEDURE FOR DATA COLLECTION

Prior to data collection necessary permission was obtained from ethical committee, Head of the department of Mental Health Nursing, College of Nursing and the secretary of old age home. Written consent was obtained from all the study subjects after self introduction and explanation regarding the nature of the study.

Data collection procedure was completed in two stages. First prior to nursing intervention (aroma therapy massage) and after the nursing intervention. Subjects were divided into two groups comprising of 15 subjects each group.

Session started with introduction of self, establishment of rapport, explanation regarding the purpose and nature of the study and the benefits of participating during the whole study programme. The pretest was conducted and selected the subjects of mild and moderate anxiety with inclusion criteria by Aaron Beck Anxiety Scale. The Aroma therapy massage on back of the elders (4ml of lavender oil mixed with 30ml of base oil[safflower oil]) was given to the subject regularly 10 minutes duration on alternative days for 4 weeks to each group after 4weeks the posttest was conducted.

3.15 PLAN FOR DATA ANALYSIS

The analysis of the data was done by following methods.

Descriptive statistics

1. Demographic variables of the clients were analyzed using frequency and percentage distribution

2. Mean and standard deviation were used to analyze changes in the level of anxiety among elders

Inferential Statistics

1. Student's' test was used to determine the effectiveness of Aroma therapy massage in changing the level of anxiety among elders.

2. Chi-square test was used to find out the association between the level of anxiety and selected demographic variables among elders.

3.16PROTECTION OF HUMAN RIGHTS

"Injustice anywhere is a threat to justice everywhere." - Martin Luther King

The research proposal was approved by the Ethical Committee of Government Rajaji Hospital, Madurai -20 for conduct in the pilot study and main study. The permission for the pilot study and Main study were obtained from the secretary, Inba illam, Pasumalai, Madurai. An informed written consent was obtained from each study subject before starting the data collection. Confidentiality and anonymity was maintained throughout the study.

SCHEMATIC REPRESENTATION OF THE STUDY

CHAPTER – IV

DATA ANALYSIS AND INTERPRETATION

This chapter deals with the analysis of data is a process, the researcher inspecting, cleaning, transforming, and modeling data with the goal of highlighting useful information, suggesting conclusions, and supporting decision making. Data analysis has multiple facets and approaches, encompassing diverse techniques under a variety of names, in different business, science, and social science domains.

Data mining is a particular data analysis technique that focuses on modeling and knowledge discovery for predictive rather than purely descriptive purposes. Data analysis focuses on discovering new features in the data and analysis on confirming or falsifying existing hypotheses. Predictive analytics focuses on application of statistical or structural models for predictive forecasting or classification, while text analytics applies statistical, linguistic, and structural techniques to extract and classify information from textual sources, a species of unstructured data.

Data integration is a precursor to data analysis, and data analysis is closely linked to data visualization and data dissemination. The term data analysis is sometimes used as a synonym for data modeling

The objectives of the study was

- To assess the pre and post test level of anxiety among elders at selected old age home, Madurai.
- To evaluate the effectiveness of aromatherapy massage on anxiety among elders at selected old age home, Madurai.
- To associate post-test score of anxiety among elders and selected demographic variables.

In this chapter the data collected were compiled, edited, coded, classified, tabulated, described and interpreted the findings it was arranged the following sections:

Section – I Frequency and percentage distribution of demographic variables of anxiety among elders

Section--II Frequency percentage of anxiety in the pre test and post level of elders.

Section – III Comparison of mean and standard deviation between pre- test and post- test measurement of anxiety among elders.

Section – IV Comparison of anxiety before and after aroma therapy massage

Section – V Association of posttest level of anxiety among elders with selected demographic variables.

SECTION – I

DISCRIPTION OF DEMOGRAPIC VARIABLES

TABLE –I

Frequency and percentage distribution of elders according to their demographic variables **n=30**

DEMOGRAPHIC VARIABLE		Frequency(f)	Percentage (%)
AGE	60-65 yrs	4	13
	65-70 yrs	12	40
	70-75 yrs	10	34
	75-80 yrs	4	13
SEX	Male	15	50
	Female	15	50
RELIGION	Hindu	22	73
	Christian	8	27
	Muslim	-	-
	Others	-	-
EDUCATION	No formal education	1	3
	Primary	18	60
	Middle	-	-
	High school	11	37
	Post high school	-	-
	Graduate	-	-
	Profession	-	-
INCOME	No income	30	100
	Pensions	-	-
PLACE OF DOMICILE	Urban	25	83
	Rural	5	17
DURATION OF RESIDING	0-1 yrs	-	-
	1-3 yrs	1	3
	3-6 yrs	9	28
	6 and above	20	69
SUPPORT SYSTEM	Children	3	10
	Spouse	-	-
	Siblings	27	90
REASON FOR RESIDING	Disaster	-	-
	Family negligence	30	100

The above table revealed that the frequency and percentage distribution of demographic variables of the study participants majority 12 (40%) were the age group of 65-70 years and 10 (34%) were belonged to 70-75years, and 4 (13%) of the participants were belonged to 60-65 years and 75-80years.According to age distribution of the study subjects Males and females were equally distributed. Based on religion 23 (73%) of the elders were belonged to Hindu religion, 8 (27%) of the elders were belonged to Christian none of them were belonged to Muslim and any other religion. According to education the study subjects 18(60%) of them were belonged to primary education, 11 (37%) of the study subjects were belonged to high school education, 1 (3%) of them were belonged to no formal education; none of them had graduate and professionals. In the study all participants 30(100%) were belonged to no income group. Among the study participants 25 (83%) were came from urban 5 (17%) of them came from rural. In this Research the subjects 20 (69%) of the elders were in the old age home residing more than 6 years and 9 (28%) of them were residing within 3-6years and 1 (3%) of them were residing with in 1-3 years none of them were residing within one year. In the study participants 27 (90%) of them were supported by their siblings, 3 (10%) of them were supported by their children none of them supported by their spouse. According to the reason for the residing 100% of the elders came for the reason of family negligence.

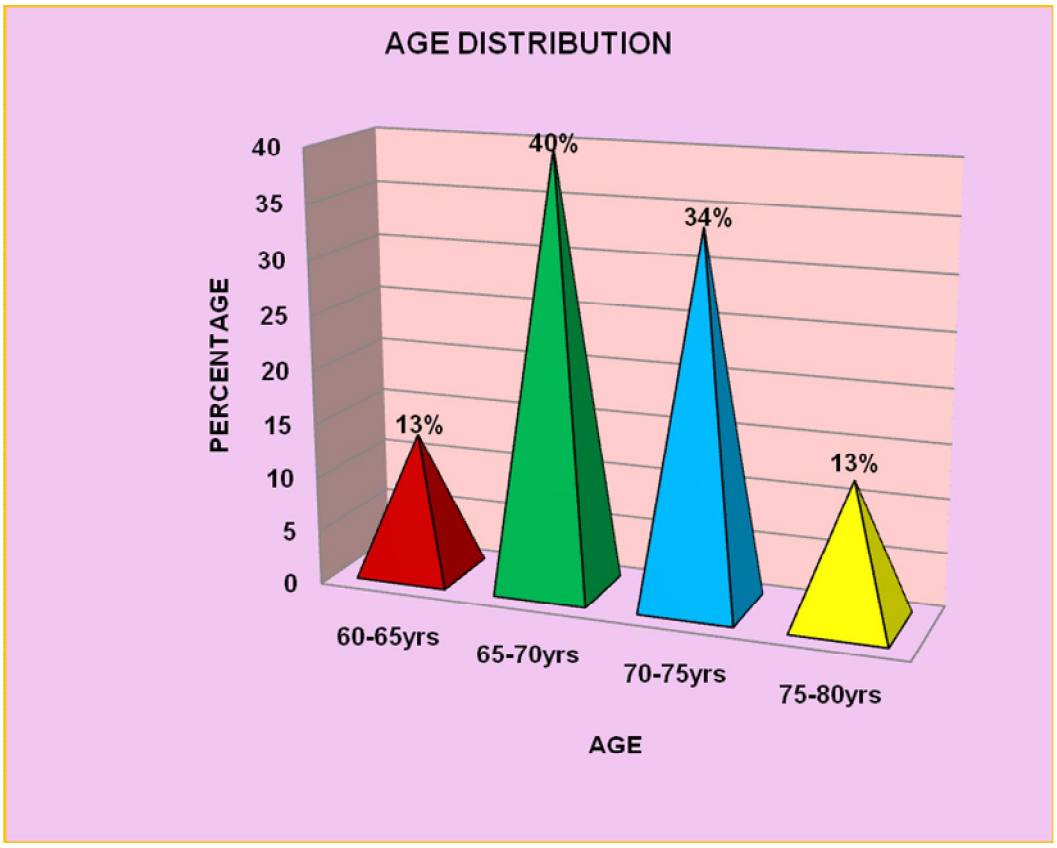

FIG-2. DISTRIBUTION OF SUBJECTS ACCORDING TO THEIR AGE

The above figure showed that the study participants 40% of them were the age group of 65-70years, 34% of the participants were belonged to 70-75years, 13% of the participants were belonged to 60-65 years and 75-80years.

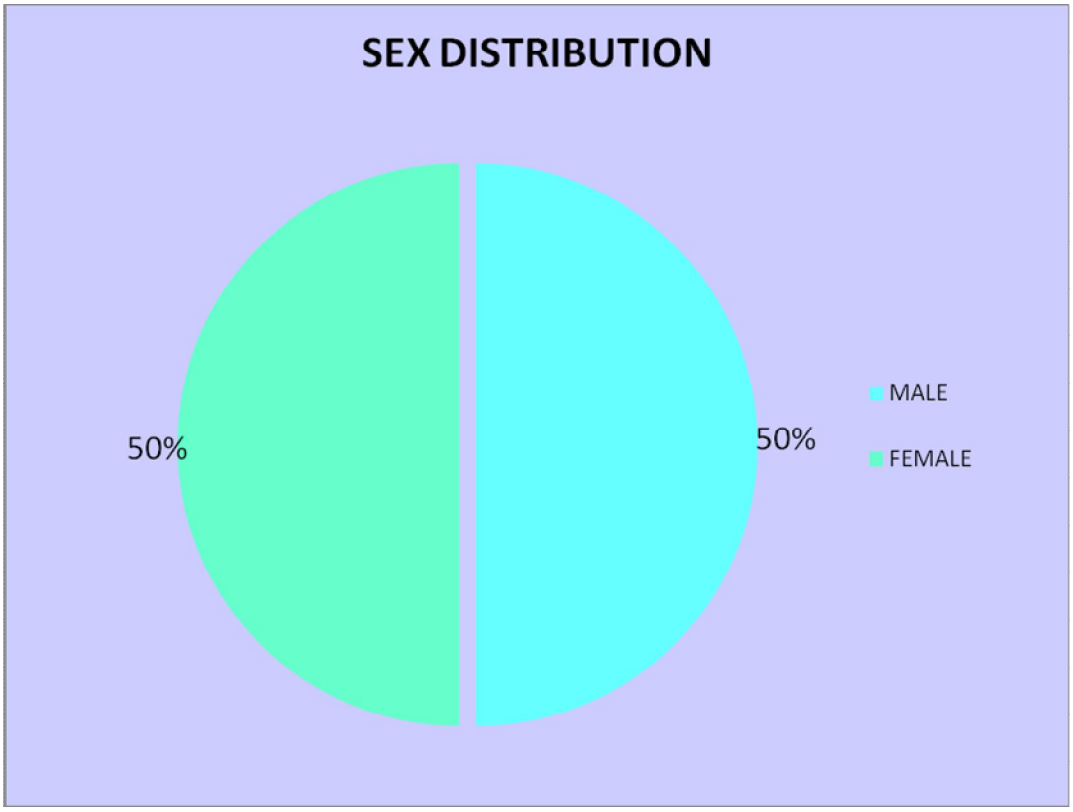

FIG - 3 DISTRIBUTIONS OF SUBJECTS ACCORDINGTOTHEIR SEX

The above The above pie chart showed that the age distribution of the study subjects Males and females were equally distributed.

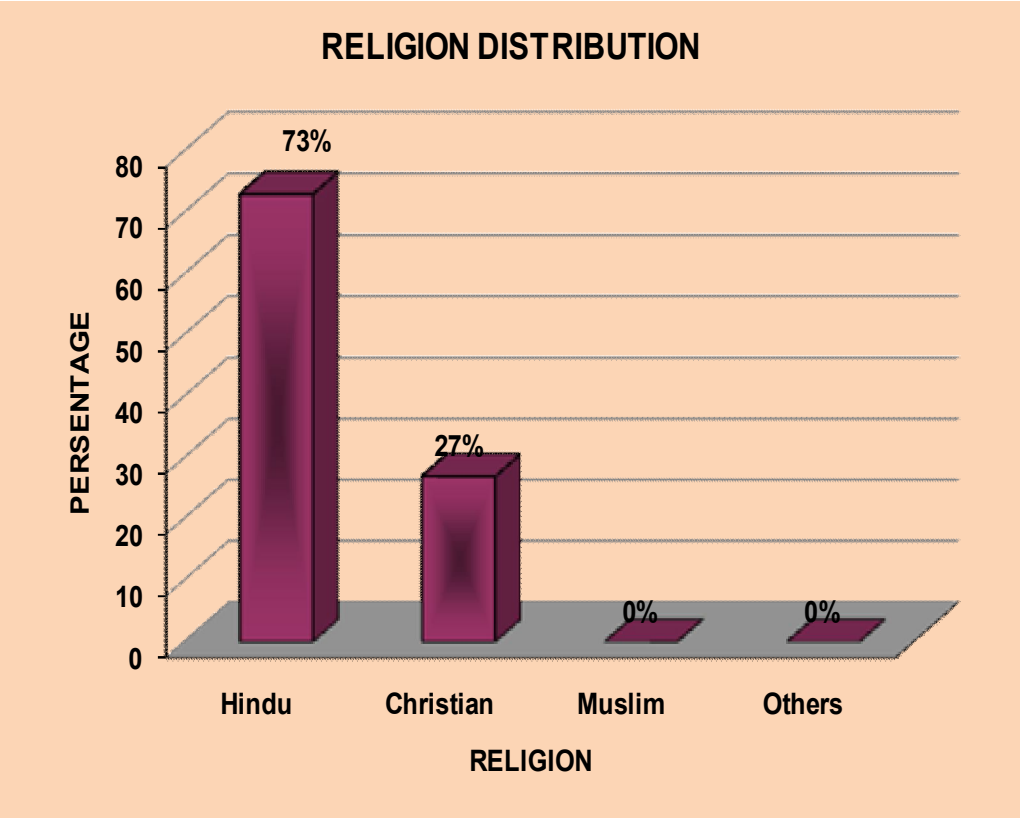

FIG - 4 DISTRIBUTIONS OF SUBJECTS ACCORDING TO THEIR RELIGION

The above figure showed that the study participants in this research Based on religion there were 73% of the elders belonged to Hindu religion, 27% of the elders were belonged to Christian none of the participants were belonged to Muslim and any other religion.

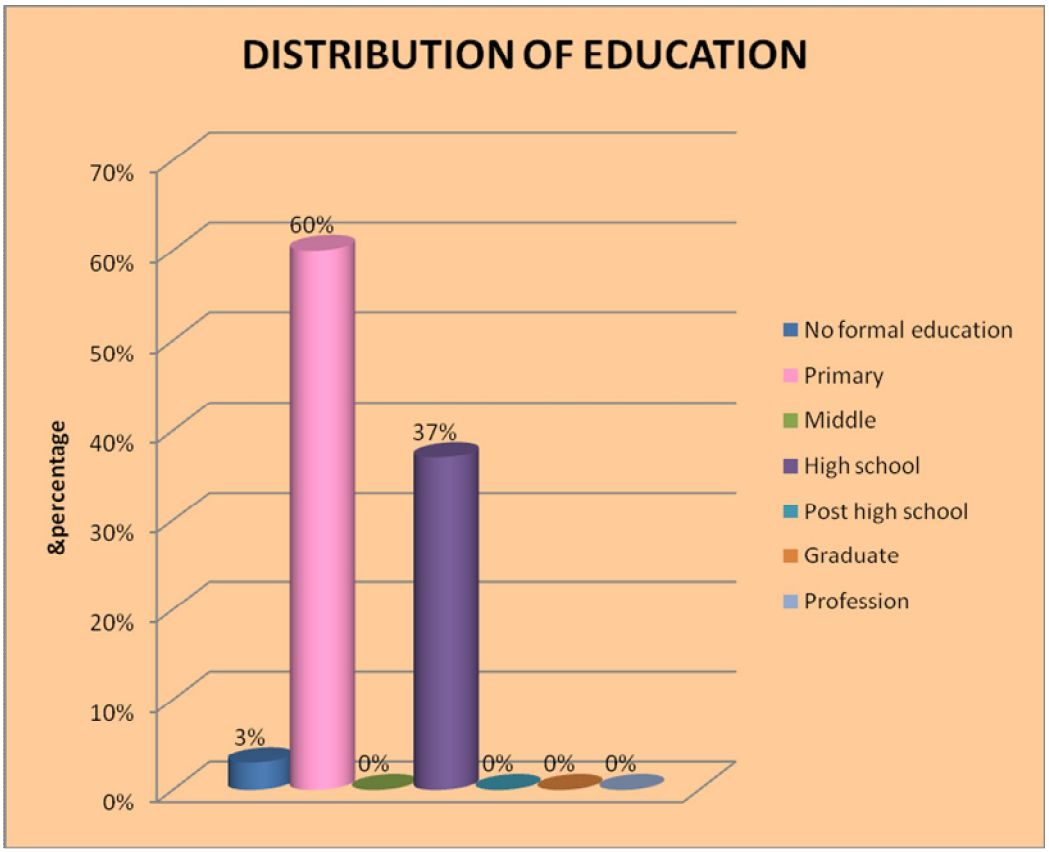

FIG – 5 DISTRIBUTIONS OF SUBJECTS ACCORDING TO THEIR EDUCATION

The above figure showed that the study subjects 60% of them were belonged to primary education, 37% of the study subjects were belonged to high school education, 3% of them were belonged to no formal education; none of them had graduate and professionals.

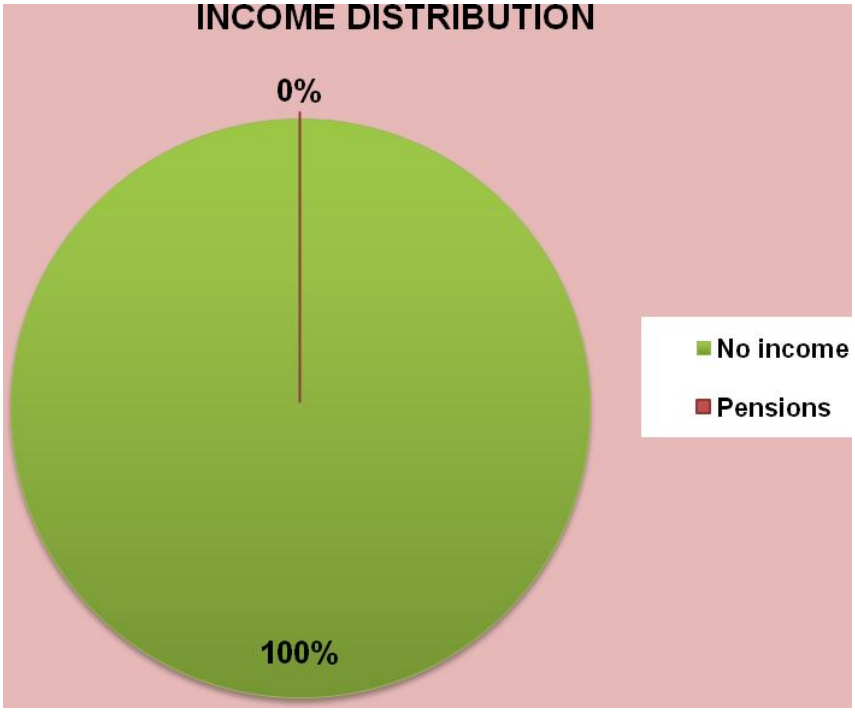

FIG – 6 DISTRIBUTIONS OF SUBJECTS ACCORDING TO THEIR INCOME

The above figure showed that the study participants 100% of the elders were belonged to no income groups.

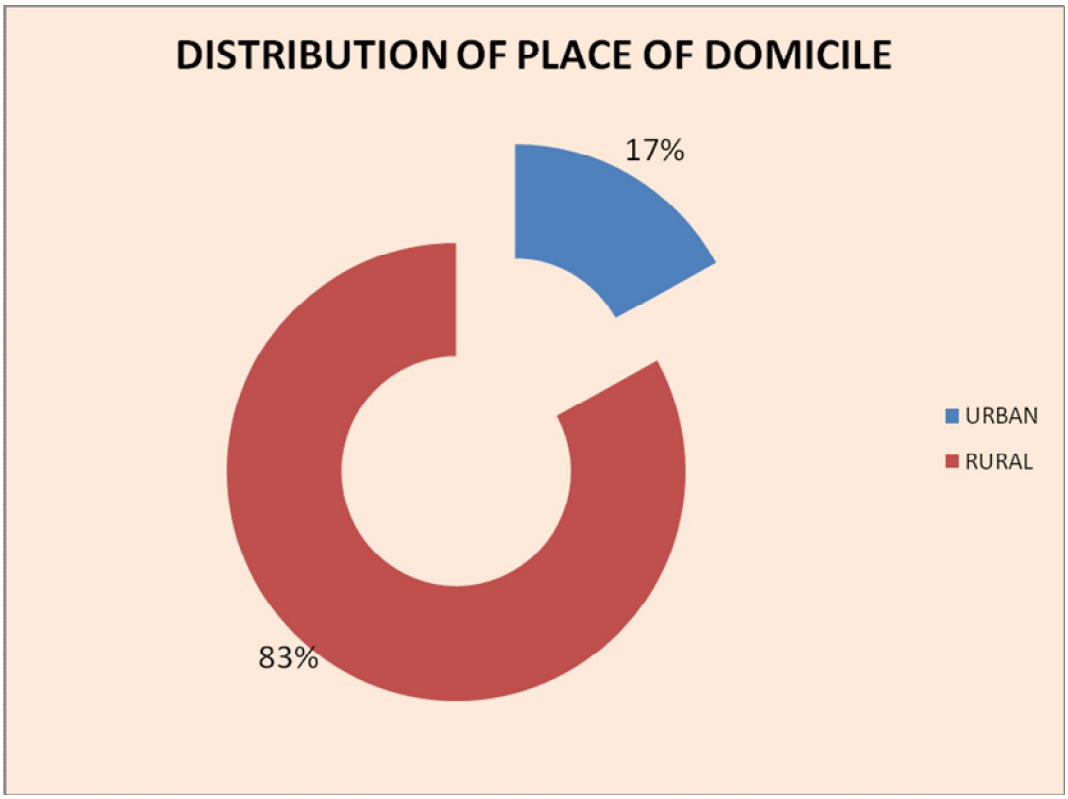

FIG – 7 DISTRIBUTION OF SUBJECTS ACCORDING TO THEIR PLACE OF DOMICILE

The above figure showed that the study participants of this research, 83%of the elders were came from urban 17% of them were came from rural.

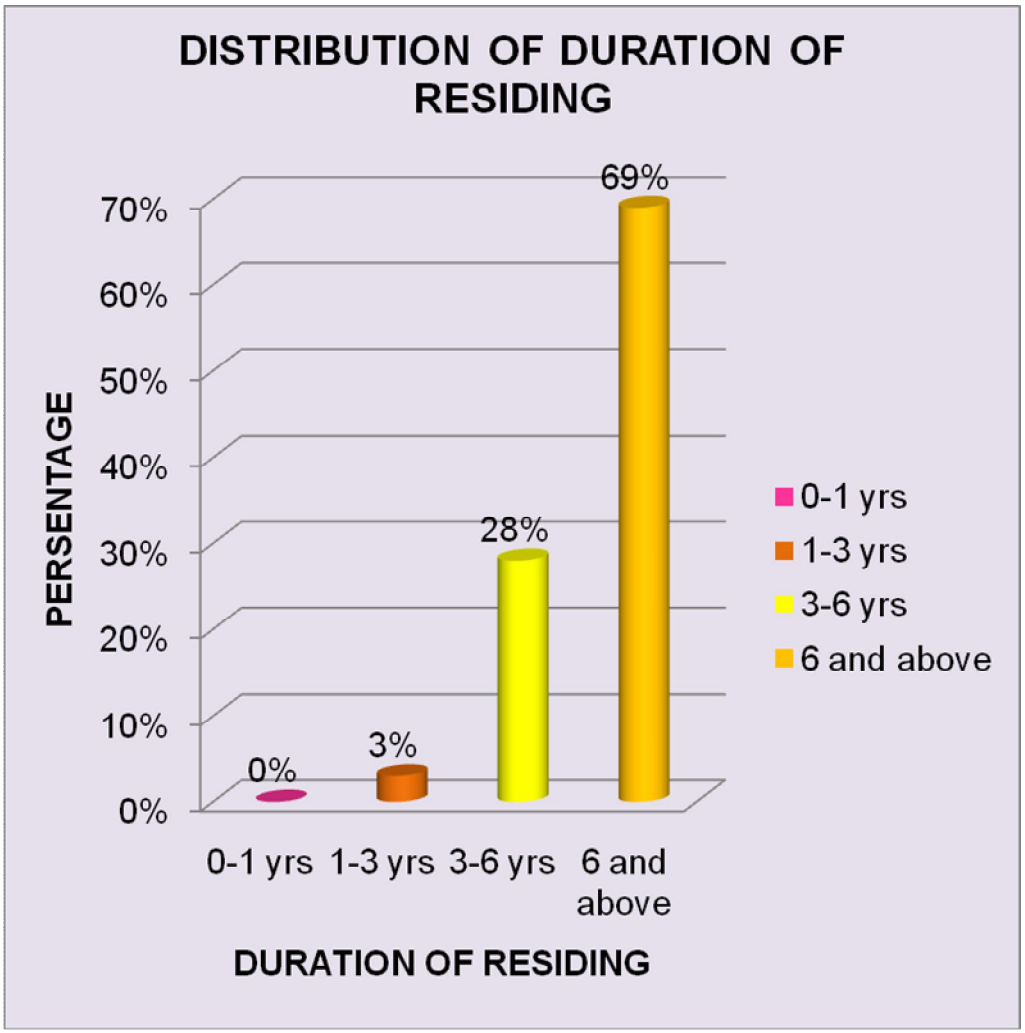

FIG – 8 DISTRIBUTIONS OF SUBJECTS ACCORDING TO THEIR DURATION OF RESIDING

The above figure showed that the study subjects of this research, 69% of them were residing in the old age home for 6 years and above 28% of the subjects were residing within 3-6years, 3% of the subjects were residing within 1-3 years; none of them were residing within one year.

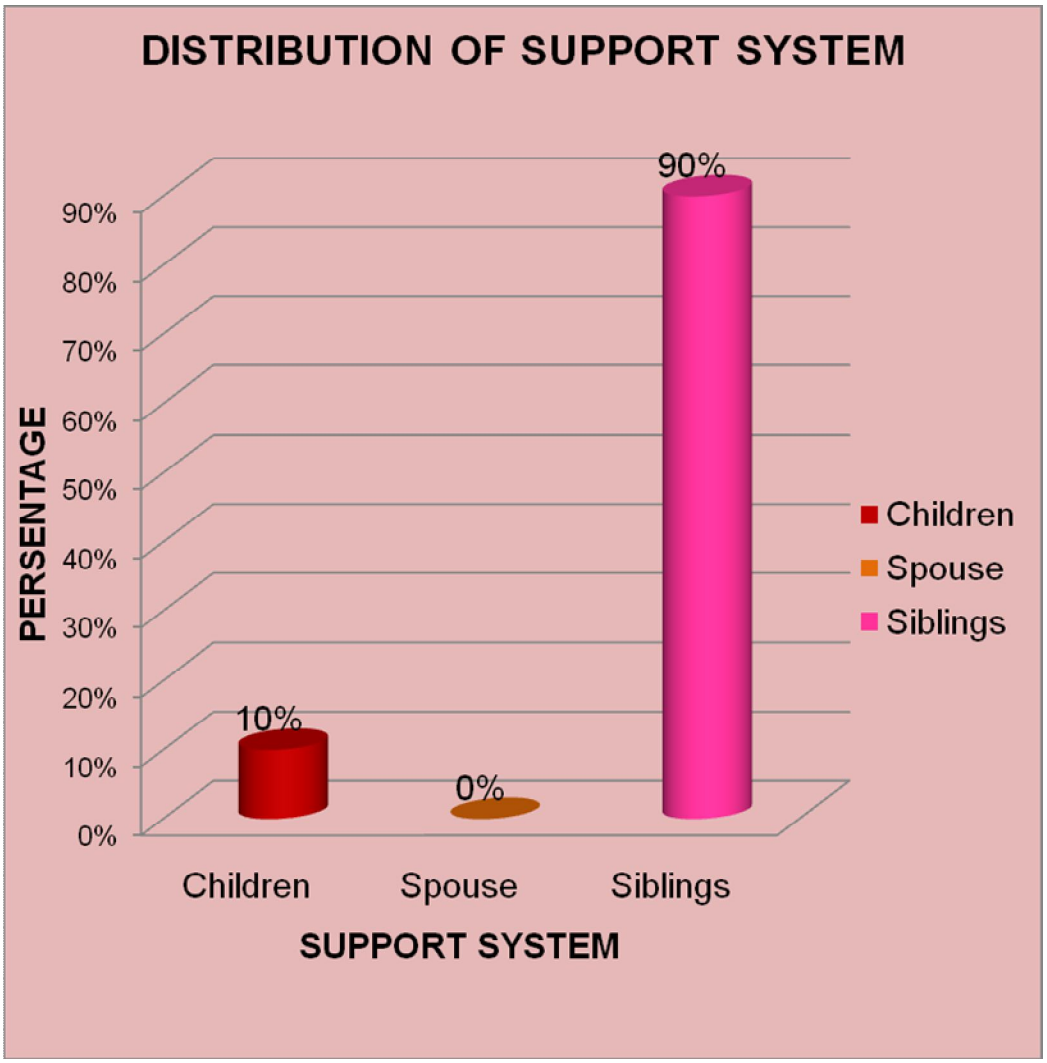

FIG -9 DISTRIBUTIONS OF SUBJECTS ACCORDING TO THEIR SUPPORT SYSTEM

The above figure showed that the research participants 90% of them were support from their siblings, 10% of the elders were support from their children, none of them were supported by their spouse.

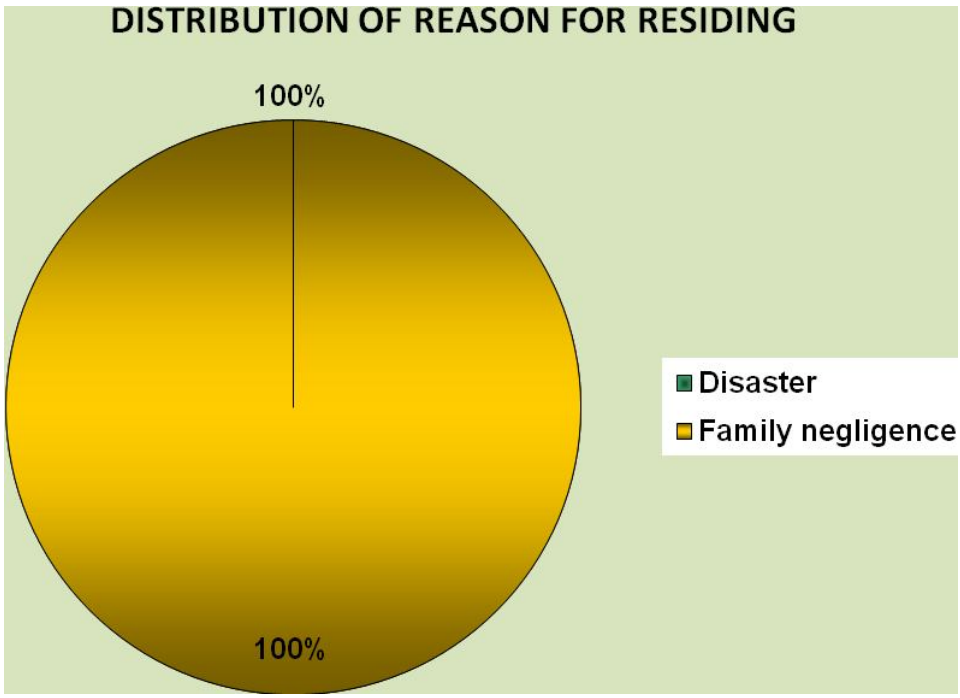

FIG -10 DISTRIBUTIONS OF SUBJECTS ACCORDING TO THEIR REASON FOR RESIDING

The above figure showed that the study participants of this research, 100% of the elders were came for the reason of family negligence.

SECTION II

ANXIETY AMONG ELDERS IN THE PRE AND POST TEST LEVEL

TABLE - 2

Frequency and percentage Distribution of the elders according to the level of anxiety in the pre test and post test

n= 30

LEVEL OF ANXIETY	PRE TEST		POST TEST	
	f	%	f	%
Minimal anxiety 0-7	-	-	18	60
Mild anxiety 8-15	7	23	12	40
Moderate anxiety 16-25	23	77	-	-
Severe anxiety 26-63	-	-	--	--

The above table showed that the study participants of this research, most of the elders 23(77%) were assessed to have moderate level of anxiety **(**score 16-25) and 7 (23%) were assessed to have mild level of anxiety (score 8-15) in the pretest which is reduced to 12(40%) were mild anxiety and 18(60%) were minimal anxiety in the posttest and there is no moderate level of anxiety.

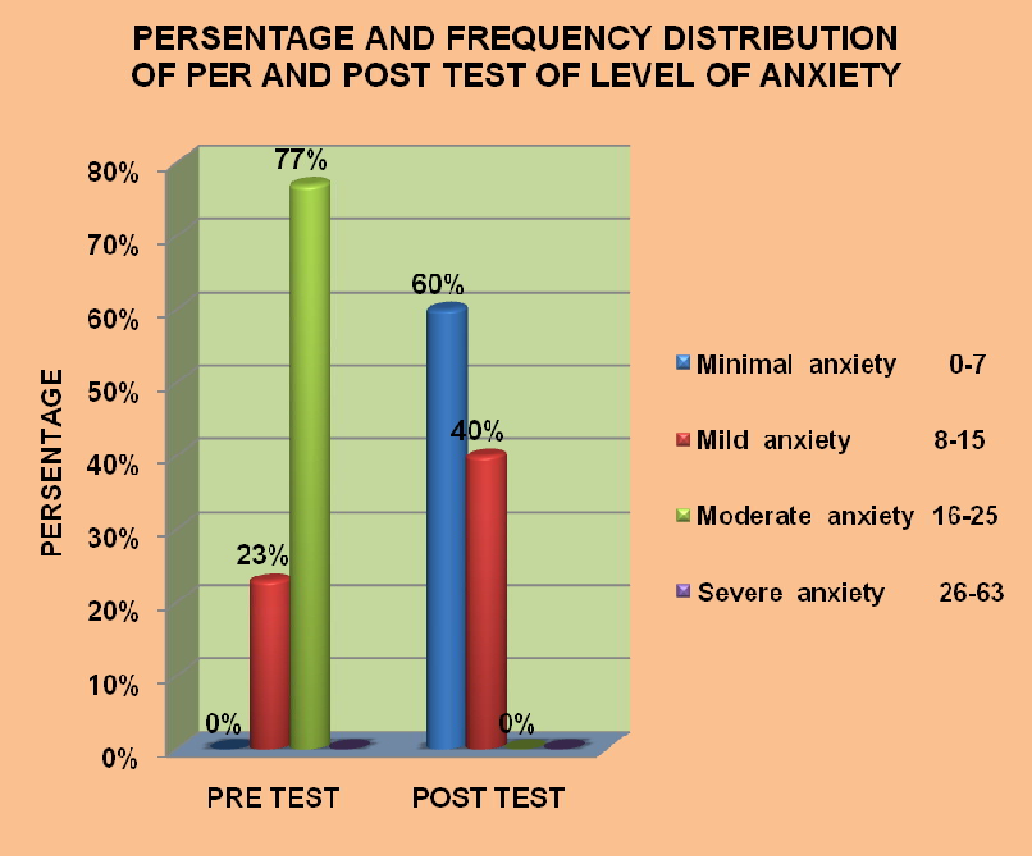

FIG – 11 DISTRIBUTIONS OF SUBJECTS ACCORDING TO THE PRE AND POST LEVEL OF ANXIETY

The above figure showed that most of the elders were 23 (77%) assessed to have moderate level of anxiety (score 16- 25) in the pretest which is reduced. Mild level of anxiety (score 8-15) in the pretest 7 (23%) was found increase to 12 (40%) in the posttest. This revealed that aromatherapy massage great impact in reducing anxiety score.

SECTION-III

MEAN AND STANDARD DEVIATION BETWEEN PRE- TEST AND POST- TEST MEASUREMENT

TABLE.3

Comparison of mean and standard deviation between pre- test and post- test measurement of anxiety among elders.

VARIABLE	MEAN	MEAN DEFERENCE	STANDARD DEVIATION
Pre test	19.23	11.80	4.59
Post test	7.43		2.11

The above table showed that the mean score of anxiety among study participants was 19.23 in the pre test, and mean score of anxiety among study participants was 7.43 in the posttest the mean deference was 11.80 and the standard deviation of anxiety among study participants in the pre test was 4.59, and 2.11 in the post test. Hence the report revealed that the aroma therapy massage had significant effect on reduction of anxiety level of elders at selected old age home, Madurai.

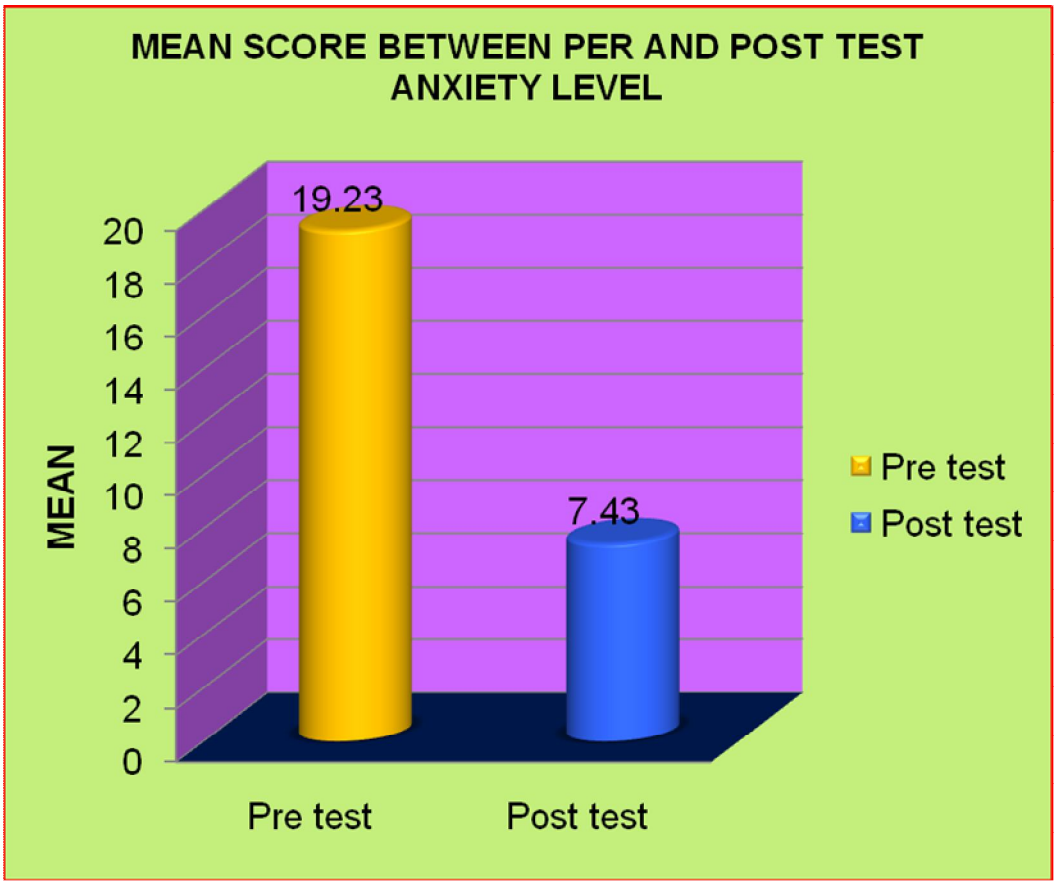

FIG - 12 COMPARISONS OF MEAN SCORE BETWEEN PRE- TEST AND POST- TEST MEASUREMENT OF ANXIETY AMONG ELDERS.

The above figure showed that the mean score of anxiety among study participants was 19.23 in the pre test, and mean score of anxiety among study participants were 7.43 in the posttest.

SECTION – IV

COMPARISON OF ANXIETY BEFORE AND AFTER AROMATHERAPY MASSAGE

TABLE -4

Paired‘t’-test for pre and post test of aromatherapy massage on anxiety among elderly residing at selected old age home, Madurai.

VARIABLE	MEAN	MEAN DEFERENCE	SD	Calculated ‘t’ value	Table “t”value
Pre test	19.23	11.80	4.59	17.743***	2.05
Post test	7.43		2.11		

(df=29, table value =2.05 at p=0. 05) calculated value 17.743*highly significant)**

The above table represented that the study participants of this research had highly significant reduction of level of anxiety in the post test. The paired “t” test value conformed that aroma therapy massage significantly reduced the level of anxiety among elders residing at selected old age home, Madurai.

SECTION- V

ASSOCIATION OF POST TEST LEVEL OFANXIETY AMONG ELDERS WITH SELECTED DEMOGRAPHIC VARIABLES

TABLE-5

Association between post test aromatherapy massage on anxiety among elders residing at selected old age home with their selected demographic variable.

DEMOGRAPHIC VARIABLE		MINIMAL ANXIETY	MILD ANXIETY	χ^2 value	p-value
AGE	60-65 yrs	4	0	8.056**	0.045
	65-70 yrs	4	8		
	70-75 yrs	8	2		
	75-80 yrs	2	2		
SEX	Male	5	10	8.89**	0.003
	Female	13	2		
RELIGION	Hindu	13	9	0.028	0.866
	Christian	3	2		
	Muslim	5	3		
	Others	-	-		
EDUCATION	No formal education	1	0	1.969	0.373
	Primary	12	6		
	Middle	-	-		
	High School	-	-		
	Posthighschool	5	6		
	Graduate	-	-		
	Professional	-	-		
INCOME	No income	18	12	0	1
	Pensions	-	-		
PLACE OF DOMICILE	Urban	15	10	0	1
	Rural	3	2		
DURATION	0-1 yrs	-	-	4.167	0.125

DEMOGRAPHIC VARIABLE		MINIMAL ANXIETY	MILD ANXIETY	χ^2 value	p-value
OF RESIDING	1-3 yrs	1	0		
	3-6 yrs	3	6		
	6 and above	14	6		
SUPPORT SYSTEM	Children	1	2	0.987	0.32
	Spouse	-	-		
	Siblings	17	10		
REASON FOR RESIDING	Disaster	-	-	0	1
	Family negligence	18	12		

The above table showed that the demographic variables such as age, sex, have significant association with post test score of anxiety level. The demographic variables of the study participants recording age, the calculated chi square value was 8.056**, df=3, table value =7.82, $p<0.05$ level of significant. It revealed that the calculated value greater than tabulated value at $p<0.05$ significance. so the report revealed that the significant association between age of the study participants and aroma therapy massage, and also the sex variables of the study participants calculated χ^2 value was 8.89**,df=1, table value =3.84,$p<0.05$ level of significant. It revealed that the calculated value greater than tabulated value at $p<0.05$ level of significance. and other demographic variables such as religion, education, income, place of domicile, duration of residing, support system and reason for residing, doesn't have any significant association with level of anxiety and aromatherapy massage since the calculated value is lower than table value at 0.05 level of significance.

CHAPTER - V

DISCUSSION

The chapter discusses about the result of the study interpreted from the statistical analysis the effort of this study was to evaluate the effectiveness of aroma therapy massage on anxiety among the elders residing in a selected old age home at Madurai.

DEMOGRAPHIC VARIABLES OF ELDERS

The findings revealed that the frequency and percentage distribution of demographic variables of the study participants majority 12 (40%) were the age group of 65-70years and 10 (34%) were belonged to 70-75years, and 4 (13%) of the participants were belonged to 60-65 years and 75-80years.

According to age distribution of the study subjects Males and females were equally distributed. Based on religion 23 (73%) of the elders were belonged to Hindu religion, 8 (27%) of the elders were belonged to Christian none of them were belonged to Muslim and any other religion.

According to education the study subjects 18(60%) of them were belonged to primary education, 11 (37%) of the study subjects were belonged to high school education, 1 (3%) of them were belonged to no formal education; none of them had graduate and professionals.

In the study all participants 30(100%) were belonged to no income group. Among the study participants 25 (83%) were came from urban 5 (17%) of them came from rural. In this Research the subjects 20 (69%) of the elders were in the old age home residing more than 6 years and 9 (28%) of them were residing within 3-6years and 1 (3%) of them were residing within 1-3 years none of them were residing within one year.

In the study participants 27 (90%) of them were supported by their siblings, 3 (10%) of them were supported by their children none of them supported by their spouse. According to the reason for the residing 100% of the elders came for the reason of family negligence.

DISCUSSION OF THE STUDY IS BASED ON OBJECTIVES

The first objective of this study was to assess the pre and post test level of anxiety among elders at selected old age home.

The findings revealed that the total number of 30 participants level of anxiety were assessed by using beck anxiety scale, most of the elders 23(77%) were assessed to have moderate level of anxiety **(**score 16-25) and 7 (23%) were assessed to have mild level of anxiety (score 8-15) in the pretest which is reduced to 12(40%) were mild anxiety and 18(60%) were minimal anxiety in the posttest and there is no moderate level of anxiety after aroma therapy massage..

This finding was consistent with the study done by Amy, L. Byers., Kristine Gaffe., Kenneth. E., Covinsky., Michael, B. Friedman., Martha ,L. Bruce., (2010) Psychiatric Epidemiology Surveys study was conducted 12 months period at united states known about prevalence of anxiety and mood disorder among older adult dwelling at community. the probability sampling method used for this study, sample size were 2575 among older below 55 and older in that 43%, 55-64 years;32%,65-75 years; 20%,75-84 years;5% >_85 years. The likelihood of having mood shown a pattern of declining with age (p,>.o5). Disorders showed higher rates in women compared with men, a statistically significant trend with age. In addition, anxiety disorders were as 12% mood disorders 5% across age groups.

The findings were similar to the study conducted by Christina Bryant., Henry Jackson., David Ames .(2007) to find out the prevalence of anxiety symptoms, anxiety disorder or specified anxiety disorders in adults aged > 60 in either community or clinical settings. The prevalence of anxiety in community samples ranges from 1.2% to 15%, and in clinical settings from 1% to 28%. The prevalence of anxiety symptoms is much higher, ranging from 15% to 52.3% in community

samples, and 15% to 56% in clinical samples. Generalized Anxiety Disorder is the commonest anxiety disorder in older adults.

An study conducted by Amal Chakraburtty, MD. (2006) on generalized anxiety disorder among the elderly at Pittsburgh, Toronto. "Studies have shown that generalized anxiety disorder is more common in the elderly, affecting 7% of seniors, than depression, which affects about 3% of seniors.

A one more study conducted by Tomader Taha Abdel Rahman MD. Geriatric Medicine (2005**)** among elders aged 60 -80yrs, to evaluate the prevalence of anxiety and depression thous who were living in the old age home and geriatric clubs Cairo at Egypt. Hamilton Anxiety Scale was used in this study. The total score is 0 – 17 for normal individual, 18 – 24 for mild anxiety, 25 – 29 for moderate anxiety and ≥ 30 for severe anxiety. Data was coded for analysis test was used for categorical data. P-value < 0.05 was considered statistically significant.

.**The second objective to this study was to evaluate the effectiveness of aroma therapy massage on anxiety among elders.**

The findings revealed that the aromatherapy massage had greatly decreased the anxiety level of the subjects. In the inferential statistical method proved that the difference in the post means score show a significant change the level of anxiety with in "t" value 17.743. The investigator believed that the difference was due to aroma therapy massage.

This finding was consistent with the study done by Serfaty, M., (2011) aromatherapy massages versus Cognitive Behavior Therapy in patients with cancer outpatient clinics and screening eight or more for anxiety and/or depression on the hospital anxiety depression scale, were randomized to Treatment as Usual plus up to eight sessions weekly of either aromatherapy massage or cognitive behavior therapy, offered within 3 months Of those suitable, over 60% (39/63) participated (aromatherapy massage, n = 20; cognitive behavior therapy, n = 19) and over 90% (36/39) were followed up. Both packages were well received. The preference was for AM, with more sessions were taken up; (Mean number sessions aroma therapy massage = 7.2 (standard deviation 2.0) and cognitive behaviour therapy = 5.4

(standard deviation 3.1); P<0.05). Significant improvements in POMS (Total Mood, depression and anxiety scores) occurred with both interventions.

The findings were similar to the study conducted by Diane, M. Holliday-Welsh, (2009) to examine the potential of massage to reduce agitation in cognitively impaired nursing home residents. Data was collected during baseline (3 days), intervention (6 days), and at follow-up. At each observation, agitation was scored 5 times during the 1-hour window of observation. Agitation was lower during the massage intervention than at baseline (2.05 vs. 1.22, $P < .001$), and remained lower at follow-up. Of the 5 agitated behaviors examined in this study, massage was associated with significant improvement for 4: Wandering (0.38 vs. 0.16, $P < .001$), verbally Agitated/Abusive (0.59 vs. 0.49, $P = .002$), Physically Agitated/Abusive (0.82 vs. 0.40, $P < .001$), and Resists Care (0.10 vs. 0.09, $P = .022$). Hence the hypothesis-I stated that The mean post test score of anxiety will be significantly lesser than the mean pretest score of elders.

The third objectives to associate post test score of anxiety among elders and selected demographic variables.

The finding of the study revealed that the level of anxiety was significantly associated with demographic variables such as age and sex .Regarding age χ^2 value = 8.056**(table value=7.82) and sex the χ^2 value = 8.89**(table value=3.84).at p<o.o5 level of significance.

The other demographic variables such as religion, education, income, place of domicile, duration of residing, support system and reason for residing, were not significantly associated with a post test score of anxiety. Hence the hypothesis -2 stated that there is a significant association between the pos-test score of anxiety among elders and selected demographic variables.

CHAPTER -VI

SUMMARY, IMPLICATION AND RECOMMENDATION

This chapter deals with the summary of the study recommendation implementation and conclusions drawn from the data analysis the study focuses on the implication and recommendations. The recommendation presented for different areas like nursing practice nursing education, nursing administration and nursing research.

6.1 SUMMARY OF THE STUDY

The Present study was to aimed at evaluating the effectiveness of aroma therapy massage on anxiety among elders at selected old age home, Madurai.

The objective of the study was

- To assess the pre and post level of anxiety among elders at selected old age home.
- To evaluated the effectiveness of aroma therapy massage on anxiety among elders.
- To associate post test score of anxiety among elders and selected demographic variables.

The following hypothesis were tested

H_1 - The mean post test score of anxiety will be significantly lesser than the mean pretest score of elders.

H_2 - There is a significant association between the post test score of anxiety among elders and selected demographic variables.

The conceptual frame work for this study was based on CIPP Model; this model was created by Daniel L. Stufflebeam.it is an acronym that stands for context evaluation, input evaluation, process evaluation and product evaluation.

A pre experimental design was used in this study. The independent variables were aroma therapy massage and depended variables were anxiety. This study was

conducted at the old age home at Pasumalai, Madurai. The assessable population of the study was elders who were residing at old age home at Pasumalai, Madurai.

The study subjects were selected using purposive sampling technique is a non – probability sampling method in the researcher select the participant based o n the personal judgment about which one will be most representative or informative. The sample size was 30, the data collection tools used were

1. *Demographic data.*
2. *Aaron beck anxiety scale-21 items scale*

The reliability of the anxiety scale found to be reliable, content validity was obtained from four experts specialized in psychiatric mental health nursing and one expert in psychology. Pilot study was conducted on 5subjects to find out the feasibility of the study and it did not show any major flaw in the design of the study.

Data collection was carried out for four weeks from 01.10.3011 to 31.10.2011. Based on the objectives and hypotheses, the data collected were analyzed by using descriptive and inferential statistics.

MAJOR FINDINGS OF THE STUDY

- Majority the study participants 12 (40%) were in the age group of 65-70years
- The equal distribution of the male and female were had anxiety.
- Among the elders majority73% of them were belongs to Hindu religion.
- None of them had graduate and professional education. 60% of them were primary education and 37% of them were secondary education.
- All of the study participants' 30(100%) were belonged to no income group.
- Most of the elders came from urban 83%. Only 17% of them were come from rural.
- Most of the elders were 69% were residing in the old age home above 6 years.
- 90% of the elders were supported by their siblings

- The reason for admission in old age home was due to the family negligence for the all elders.
- 77% of the elders had moderate level of anxiety.
- The mean anxiety score in the pre test was reduced from 19.23 to 7.43 in post test. This reduction was statistically highly significant with paired t test (t=17.743 and p,<001).
- A significant association was noted between the age and the level of anxiety among elders in the post test level x2=8.056,p=0.045 with 3 degree of freedom.
- A significant association was noted between the gender and the level of anxiety among elders in the post test x2=8.89,p=0.003 with 1degree of freedom.

6.2 CONCLUSION

According to the result of this study the elders who were in 10minits aroma therapy massage with lavender oil mixed with base oil (safflower) had a statistically significant reduction in level of anxiety because aroma therapy massage was effective for the reduction of anxiety among elders. The aroma therapy massage was less cost effective non invasive, free from major side effects and highly feasible the researcher concluded that it can be used as an effective intervention to reduced the anxiety among elders were residing in the old age home.

6.3 IMPLICATIONS

The Psychiatric mental health nurse plays a vital role in the provision of massage therapy. The nurse in the psychiatric area knows that anxiety is a baseline cause for mental disorder. Massage can be an important tool in helping to raise self worth in mental health patients. In cancer and chronic illnesses patients the aromatherapy massage is a single complementary therapy and easy way of handling the anxiety. It can be including our nursing practice therefore this study has important implication in the following aspects of nursing

i. Nursing Practice

ii. Nursing Education

iii. Nursing Administration

iv. Nursing research

NURSING PRACTICE

The nurses must be trained to assess the anxiety level of the elders who were residing in the old age home and in the hospital setting and community area.

- The nurses must have an understanding regarding the need to provide Complimentary and Alternative therapy to improve the quality of life and psychological effects.
- In the clinical area nurses should practice massage with using aroma oil as the findings of the study clearly state that the effectiveness in reduction of level of anxiety.

NURSING EDUCATION

A well organized therapy training on aroma that focuses on Complementary and Alternative therapies which include aroma therapy massage can be conducted as an in service programme for all nursing personnel.

NURSING ADMINISTRATION

- Anxiety provoking team can be formed to assist the anxious patient and elders by implementing intervention that maintain restore a sense of well being.
- The administrator can motivate, supervise and guide the nurses in the assessment of anxiety for the elders were are admitted in the ward.
- Administrator can encouraged the nurses to practice the massage technique with using aroma oil in their routine care in the morning.

NURSING RESEARCH

- Nurse's researcher should motivate the clinical nurse to apply research findings and can bring out new innovation procedure to reduced anxiety of the elders those who were alone.

- Researcher should encourage clinical nurse to conduct further research studies on the aroma therapy massage on other aspect like, postoperative pain, cancer pain, and constipation.

- This study can be used as a base line for the further studies to build upon.

6.4 RECOMMENDATIONS

1. A similar study can be replicated with a large sample size for better generalization.

2. A comparative study can be done between aroma therapy massage and other complimentary alternative therapies to evaluate the effectiveness in reducing anxiety level.

3. A study can be conducted to assess the current knowledge, attitude and practice of Nursing staff on Complimentary and Alternative therapy for the management of anxiety before surgical procedure, chemotherapy, and heamodialysis.

4. The effort of aroma therapy massage with using lavender oil can be assessed in combination of other rosemary oil, It's also having similar effect..

6.5 LIMITATIONS

The Limitations for the study was

- As the sample size of the study participants was 30 in number caution must be taken in generalization of its findings.

- Responses were based on their self report and hence the degree of truth was not assured.

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APPENDIX - A

SECTION—A

DEMOGRAPHIC DATA

1. Age in years ☐

a) 60-65 years

b) 65-70 years

c) 70-75 years

d) 75-80years

2. Sex ☐

a) Male

b) Female

3. Religion ☐

a) Hindu

b) Christian

c) Muslim

d) Others

4. Education ☐

a) No formal education

b) Primary

c) Middle

d) High school

e) Post high school

f) Graduate

g) Profession

5. Income ☐

a) No income

b) Pensioner

6. Place of domicile ☐

a) Urban

b) Rural

7. Duration of residing ☐

a) 0-1yrs

b) 1-3yrs

c) 3-6yrs

d) 6 and above

8. Support system ☐

a) Children

b) Spouse

c) Siblings

9. Reason for residing ☐

a) Disaster

b) Family negligence

SECTION-B

BECK ANXIETY INVENTORY

Please choose the answer which one is applicable for you which is 0, 1, 2, or3 it indicates how much the statement applied to you over the past week. There is no right or wrong answer .Do not spends too much time on any statement.

The rating scale is as follows:

0 - Not at all

1 - Mild

2 - Moderate

3 - Severe

1.	Feeling hot	0	1	2	3
2.	Muscle numbness or tingling	0	1	2	3
3.	Feeling unable to relax	0	1	2	3
4.	Dizzy or light headed	0	1	2	3
5.	Feeling wobbly in the legs	0	1	2	3
6.	Feeling unsteady	0	1	2	3
7.	Heart racing or pounding	0	1	2	3
8.	Nervousness	0	1	2	3
9.	Chocking feeling	0	1	2	3
10.	Trembling hands	0	1	2	3
11.	Unsteadiness	0	1	2	3
12.	Terror or fear	0	1	2	3
13.	Afraid of losing control	0	1	2	3
14.	Indigestion	0	1	2	3
15.	Flushed face	0	1	2	3
16.	Hot or cold sweats	0	1	2	3
17.	Feeling scared	0	1	2	3
18.	Having laborious breathing	0	1	2	3
19.	Feeling the fear of dying	0	1	2	3
20.	Feeling like the worst is happening	0	1	2	3
21.	Feeling faint	0	1	2	3

THE SCORING KEY ARE AS FOLLOWS

Lowest score -0 **highest score- 63**

LEVEL OF SCORE	**TOTAL SCORE**
Minimal	0-7
Mild	8-15
Moderate	16-25
Severe	26-63

பிரிவு - அ

தனிநபர் விபரம்

1. வயது ☐

அ. 60 முதல் 65 வரை

ஆ. 65 முதல் 70 வரை

இ. 70 முதல் 75 வரை

ஈ. 75 முதல் 80 வரை

2. பாலினம் ☐

அ. ஆண்

ஆ. பெண்

3. வருமானம் ☐

அ. வருமானம் இல்லாதவர்

ஆ. ஒய்வூதியம் பெறுபவர்

4. கல்வித்தகுதி ☐

அ. அனுபவக்கல்வி

ஆ. தொடக்கக்கல்வி

இ. நடுநிலைகல்வி

ஈ. உயர்நிலைக்கல்வி

உ. மேல்நிலைக்கல்வி

ஊ. பட்டப்படிப்பு

எ. தொழிற்கல்வி

5. மதம் ☐

அ. இந்து

ஆ. கிறிஸ்தவர்

இ. முஸ்லீம்

ஈ. பிற மதத்தவர்

6. வசிப்பிடம் ☐

அ. நகரம்

ஆ. கிராமம்

7. முதியோர் இல்லத்தில் வசிக்கும் கால அளவு ☐

அ. 0 முதல் 1 வருடம் வரை

ஆ. 1 வருடம் முதல் 3 வருடங்கள் வரை

இ. 3 வருடங்கள் முதல் 6 வருடங்கள் வரை

ஈ. 6 வருடங்களுக்கு மேல்

8.சார்ந்திருக்கும் நிலை ☐

அ. குழந்தைகள்

ஆ. கணவன் அல்லது மனைவி ஆதரவு

இ. உடன் பிறந்தவர்

9. முதியோர் இல்லத்திற்கு வந்த காரணம் ☐

அ. பேரிழப்பு

ஆ. குடும்பத்தாரால் புறக்கணிப்பு

BECK ANXIETY INVENTORY

1	உஷ்ணமாக உணர்கிறீர்களா?	0	1	2	3
2	தசைகள் மரமரத்துப் போன மாதிரி இருக்கிறதா?	0	1	2	3
3	ஓய்வு எடுக்க முடியவில்லையே என்று உணர்கிறீர்களா?	0	1	2	3
4	தலை சுற்றுவது போல் உள்ளதா?	0	1	2	3
5	கால் தடுமாற்றம் ஏற்படுகிறதா?	0	1	2	3
6	தல்லாடுவது போல் உணர்கிறீர்களா?	0	1	2	3
7	இதயம் பட பட என்று அடிப்பது போல் உணர்கிறீர்களா?	0	1	2	3
8	நரம்பு தளர்ச்சியாக உள்ளதா?	0	1	2	3
9	தொண்டை அடைப்பது போல் உணர்கிறீர்களா?	0	1	2	3
10	கை நடுக்கம் ஏற்படுகிறதா?	0	1	2	3
11	தடுமாறுகிறீர்களா?	0	1	2	3
12	பய உணர்ச்சி உங்களை அச்சுறுத்துகிறதா?	0	1	2	3
13	கட்டுப்பாடு இல்லையே என்று பயப்படுகிறீர்களா?	0	1	2	3
14	செரிமானம் அடைகிறதா?	0	1	2	3
15	முகம் சிவப்பாகிவிடுகிறதா?	0	1	2	3
16	வியர்த்துப்போகிறதா?	0	1	2	3
17	அதிர்ச்சி உண்டாவது போல் உணர்கிறீர்களா?	0	1	2	3
18	மூச்சு திணறல் ஏற்படுகிறதா?	0	1	2	3
19	சாவை நினைத்து பயப்படுகிறீர்களா?	0	1	2	3
20	ஏதாவது அசம்பாவிதம் நடந்து விடுமோ என்று உணர்கிறீர்களா?	0	1	2	3
21	மயக்கம் வருவது போல உணர்கிறீர்களா?	0	1	2	3

மதிப்பீட்டு அளவுகோல் பின்வருமாறு

குறைந்த பட்ச அளவுகோல் -0 **அதிக பட்ச அளவுகோல்- 63**

அளவு நிலை	மொத்த அளவு
குறைந்த	0-7
மிதமான	8-15
நடுநிலையான	16-25
கடுமையான	26-63

APPENDIX - B

TIPS FOR THERAPEUTIC BACK MASSAGE

Required equipment for therapeutic back massage:

1. Warm, quiet, relaxed environment.
2. Firm comfortable surface such as a (firm) bed, massage table or floor mat.
3. Massage Oil. Lavender oil 4drops and mixed with base oil 30ml, it was fine for anxiety reduction.
4. Towels: to lie on and also to cover the body.
5. Cushions or pillows.

Massage tips:

1. Massage oil decreases the friction created on the skin and prevents the pulling of hairs. Don't use too much: The less oil, the greater the friction and the deeper the pressure.
2. Use slower movements for a soothing or calming response.
3. When applying pressure with finger or thumb, provide support with the other fingers and thumbs.

Massage patient comfort:

1. If the patient is uncomfortable in the lower back, ankles, neck or shoulders, place cushions as required under the whole length of the torso, and/or under the ankles, the shoulders, or the side of the head. In pregnancy, the patient can lie on her side.
2. Cover any parts of the body not being worked on with a warm towel.
3. Pour the massage oil onto your hands first, and then apply once the massage is started, keep a hand on the person at all times, so that there are no surprises.
4. Avoid direct pressure on bony processes.
5. **(Important!) - Ask the patient for feedback:** Are you warm enough? Are you comfortable? How's that feel?

Massage warnings:

1. Minimal direct pressure on bony processes.
2. Avoid broken skin, blisters or areas of possible infection.

Massage benefits:

1. Relaxation, releasing of tight muscles.
2. Emotional comfort and stress management.
3. Increased body awareness.
4. Improved circulation, and improved lymphatic drainage for release of toxins.

Therapeutic back massage technique tips:

Lie the partner on their belly on a firm, comfortable surface (see diagrams below). Make sure you can reach their whole back without straining your own.

BACK MASSAGE TECHNIQUE

Whole hand effleurage

Warm the massage oil in your hands, and apply a modest amount with whole hand "effleurage" (**definition** - smooth rhythmic stroking): Use the whole surface of both hands .Stroke reasonably firmly upwards from the lower back all the way up to the neck, then (gentler pressure), circle around and back to the lower back region (2 minutes).

Effleurage using heel of the hand

There is a smaller area of contact, so the pressure is deeper. Both hands work in circles - start at the lower back. Move in a circle, first outward, then upward and return to the center. Gradually progress to the upper back (1 minutes).

Effleurage using reinforced fingers

Stand on the opposite side to the one that you are working on. I suggest you stand on the right side first. Push with the flats of your fingers (one hand on top of the other) away from the center line, and then glide back toward the spine. Start at the lower back, and work up to the upper back (1 minutes).

Stripping, using the reinforced thumb

Glide with deep sustained pressure up the full length of the "sausage shaped" muscles either side of the spine. Back off the pressure a little as you cover the neck. Move slowly and deliberately, feeling for knots or sensitive spots as you glide from lower to upper back. Three times each side; alternate with a couple of minutes of effleurage , and repeat the string.(2minutes)

Frictions, using the reinforced middle finger:

Firm deep movements either side of each spinous process. Start to the side of the lower spine and move upward. Apply 5 frictions at each spot (2 minutes)

"Effleurage" using forearms

Apply firm downwards pressure, and move the arm closest to the head up to just below the shoulder blades. 6 strokes. (1minute)

Finishing with effleurage

Apply effleurage (stroking moves) with supported fingers, then effleurage with the heel of the hand, then full handed effleurage. (1 minute) Then leave the patient quiet for a few minutes.

APPENDIX - C

LETTER SEEKING PERMISSION FOR CONTENT VALIDITY FOR TOOL

From

G.JAYANTHI.

I Year M.Sc. (Nursing)

Department of mental health nursing,

College of Nursing, Madurai Medical College, Madurai.

To

MRS. JANCY RACHEL DAISY. M.SC (N)

Reader in nursing,

C.S.I.College of Nursing, Madurai.

Through: The proper channel.

Respected madam

SUB: Requesting opinion and suggestion of expert for content validity of "a study to evaluate the effectiveness of aroma therapy massage on anxiety among elders at selected old age home, Madurai".

I am I year master degree student of College of Nursing, Madurai Medical College, Madurai. In partial fulfillment of master degree in Nursing. I have selected the topic for the research project to submit to the Dr.M.G.R. Medical University, Chennai. I have requested you to kindly validate the tool and give your opinion and suggestion for necessary modification and also I would be very grateful if you would refine the problem of statement and the objectives.

Forwarded
S.P—T—
7/4/11

Enclosure:

Protocol presentation

Research tool

1. Demographic data
2. beck anxiety inventory

Thanking you,

Date:

yours sincerely,

Place:

(G. JAYANTHI)

CONTENT VALIDITY CERTIFICATE

This is to certify that the tool developed by Mrs. G.Jayanthi. M.Sc II Year nursing student of college of Nursing, Madurai Medical College, Madurai doing her dissertation study under the Dr.M.G.R. Medical University, Chennai. The statement of the problem in this study is "a study to evaluate the effectiveness of aroma therapy massage on anxiety among elders at selected old age home, Madurai" I have gone through the tool for construct, content and criterion validity. I certificate that this tool could be used for the above mentioned study.

SIGNATURE : G.Gomathy

NAME & SEAL : G.Gomathy
Asst Professor
Apollo College of Nursing
Madurai

CONTENT VALIDITY CERTIFICATE

This is to certify that the tool developed by Mrs. G.Jayanthi. M.Sc II Year nursing student of college of Nursing, Madurai Medical College, Madurai doing her dissertation study under the Dr.M.G.R. Medical University, Chennai. The statement of the problem in this study is "a study to evaluate the effectiveness of aroma therapy massage on anxiety among elders at selected old age home, Madurai" I have gone through the tool for construct, content and criterion validity. I certificate that this tool could be used for the above mentioned study.

R. Janey

SIGNATURE OF THE EXPERT

NAME: R. Janey Rachel Daisy

DESIGNATION: Reader.

DATE: 12.4.11

CONTENT VALIDITY CERTIFICATE

This is to certify that the tool developed by Mrs. G.Jayanthi. M.Sc II Year nursing student of college of Nursing, Madurai Medical College, Madurai doing her dissertation study under the Dr.M.G.R. Medical University, Chennai. The statement of the problem in this study is "a study to evaluate the effectiveness of aroma therapy massage on anxiety among elders at selected old age home, Madurai" I have gone through the tool for construct, content and criterion validity. I certificate that this tool could be used for the above mentioned study.

SIGNATURE OF THE EXPERT
NAME: R. NUZIBA BEGUM
DESIGNATION: ASST PROF
DATE: 15/4/11

CONTENT VALIDITY CERTIFICATE

This is to certify that the tool developed by Mrs. G.Jayanthi. M.Sc II Year nursing student of college of Nursing, Madurai Medical College, Madurai doing her dissertation study under the Dr.M.G.R. Medical University, Chennai. The statement of the problem in this study is "a study to evaluate the effectiveness of aroma therapy massage on anxiety among elders at selected old age home, Madurai" I have gone through the tool for construct, content and criterion validity. I certificate that this tool could be used for the above mentioned study.

SIGNATURE OF THE EXPERT
NAME: Dr. G.K. Sellakumar
DESIGNATION: Professor in Psych
DATE: 18/4/11 & Research methods

Dr. G. K. SELLAKUMAR, Ph. D.,
Professor in Psychology
Sri Ramakrishna Institue of Paramedical Sciences
Coimbatore - 641 044.

CONTENT VALIDITY CERTIFICATE

This is to certify that the tool developed by Mrs. G.Jayanthi. M.Sc II Year nursing student of college of Nursing, Madurai Medical College, Madurai doing her dissertation study under the Dr.M.G.R. MEDICAL University, Chennai. The statement of the problem in this study is "a study to evaluate the effectiveness of aroma therapy massage on anxiety among elders at selected old age home, Madurai" I have gone through the tool for construct, content and criterion validity. I certificate that this tool could be used for the above mentioned study.

Name M. BASKARAN

Signature M. Baskaran

ASSISTANT PROFESSOR
DSG COLLEGE OF NURSING
PEELAMEDU, COIMBATORE-641 004

Seal

Date 06/02/2012.

APPENDIX -D

ETHICAL COMMITTEE APPROVAL TO CONDUCT THE STUDY

Ref.no.23339/E4/3/09 dt 09.05.11. Govt. Rajaji Hospital, Madurai – 20.

Institutional review board / independent ethics committee

Govt Rajaji hospital and Madurai Medical Collage, Madurai 625020.

Proceedings and recommendations of the IRB/ IEC meeting held on31.03.2011

The Institutional Review Board/ Independent Ethics Committee of the Govt. Rajaji Hospital and Madurai Medical College, Madurai 625020 met on the 31.03.2011 at 12 noon, when the following members were present.

---

1. Dr.S.M.Sivakumar, M.S (Gen. Surgery) M.S,	Govt. Rajaji Hospital, Madurai.	Convener
2. Dr.N.Vijayasankaran, M.Ch(Uro.)	Sr.ConsultantUrologist Madurai Kidney Centre, Sivagangai Road, Madura.	Chairman
3. Dr.T.Meena, MD or Dean I/c (MMC)	Professor of Physiology, Madurai Medical College	Member
4. Dr.Moses K.Daniel MD (Gen.Medicine)	Professor of Medicine Madurai Medical College	Member
5. Dr.M.Gobinath, MS (Gen. Surgery)	Professor of Surgery Madurai Medical College	Member
6. Dr.B.K.C.MohanPrasad, M.ch, (Surg. Oncology)	Professor of Surg.Oncology Madurai Medical College	secretary -
7. Shri.M.Sridher, B.Sc.B.L.	Advocate, 623-B.ll.Floor, East II Cross, K.K.Nagar, Madurai.20.	Member
8. Shri.O.B.D.Bharat, B.sc.,	Businessman Plot No.588, K.K.Nagar.Madurai.20.	Member
9. Shri.S.Sivakumar, M. A (Social) M.Phil	Sociologist, Plot No.51 F.F, K.K Nagar, Madurai.	Member

The Committee considers the 45 dissertations / research / study Proposal submitted by PG students / Non Medical students from outside the institution as per agenda. After discussion, the following dissertations I records / study proposals are approved.

G.JAYANTHI	Second Batch M.Sc Nursing M.M.C Madurai.	A study to evaluate the effectiveness of aroma therapy massage on anxiety among elders at selected old age home, Madura-20.

Medical Superintendent

APPENDIX -E

LETTER SEEKING PERMISSION TO CONDUCT STUDY

From

G.Jayanthi

I Year M.Sc. (Nursing)

Department of mental health nursing,

College of Nursing, Madurai Medical College,

Madurai.

To

The secretary/president

Inbaillam,

Pasumalai,

Madurai.

Through: The principal i/c College of Nursing, Madurai Medical College, Madurai.

Respected sir

Sub: requesting permission to conduct the study.

I would like to bring to your kind notice that I Mrs G.Jayanthi I M.Sc, nursing student of college of nursing, Madurai medical college, Madurai has to submit my dissertation in my specialty mental health nursing to the Tamil Nadu Dr.M.G.R. Medical University, Chennai, as a part of my requirement.

My subject of dissertation is "a study to evaluate the effectiveness of aroma therapy massage on anxiety among elders at selected old age home, Madurai".

I would like to conduct my study at your esteemed Trust. Hence I request you to kindly grant me permission to conduct the pilot study and the main study at your esteemed institution.

Thanking you.

Yours faithfully,

31.01.2011

Madurai-20.

Principal
COLLEGE OF NURSING
Madurai Medical College
Madurai-20.

PASUMALAI MADURAI

APPENDIX - F

THE VALLIAMMAL INSTITUTION (TVI)

11/6 B.B. Road 2nd St., Pankajam Colony , Madurai-625 009.

98942 49630 email: ananthibetsy@rediffmail.com

Certificate Course in Counselling and Aromatherapy

Reg. No. PCC/19/July 2011/145 Date: 10/07/2011

This is to certify that **Ms. G. JAYANTHI**

has completed our **CERTIFICATE COURSE IN COUNSELLING AND AROMATHERAPY** *(24hrs Part-time Education Programme designed and offered by experts) by effectively particpating in theory & practical classes and successfully completing all the exercises. She has been placed in* **FIRST CLASS**

THE VALLIAMMAL INSTITUTION (TVI) 11/6 B.B. Road 2nd Street, Pankajam Colony, Madurai-625 009.

Prof. Dr. S. Jeyapragasam M.Sc.,M.A.,M.A.,Ph.D.,
Director
Rajarajan Institute of Science (RISE)

Dr. B. Ananthi M.Sc.,M.A.,M.Phil.,Ph.D.,
Director & Secretary
The Valliammal Institution (TVI)

APPENDIX - G

ஒப்புதல் அறிக்கை

பெயர்: நாள்:

எனக்கு இந்த செவிலிய ஆய்வினை பற்றிய முழு விவரம் விளக்கமாக எடுத்துரைக்கப்பட்டது. இந்த ஆய்வில் பங்கு கொள்வதில் இருந்த நன்மைகள் பற்றி முழுமையாக புரிந்து கொண்டேன். இந்த ஆய்வில் தானாக முன்வந்து பங்கு பெறுகிறேன். மேலும் எனக்கு இந்த ஆய்வில் இருந்து எந்த சமயத்திலும் விலகிக் கொள்ள முழு அனுமதி வழங்கப்பட்டுள்ளது. என்னுடைய விவரங்களை பார்வையிட்டு அதை ஆய்வில் பயன்படுத்தி கொள்ள முழு அனுமதி அளிக்கிறேன். என்னுடைய பெயர் மற்றும் அடையாளங்களை இரகசியமாக வைத்து கொள்ளப்படும் என்றும் எனக்கு உறுதியளிக்கப்பட்டுள்ளது.

இப்படிக்கு

APPENDIX- H

CERTIFICATE OF ENGLISH EDITING

TO WHOM SO EVER IT MAY CONCERN

This is to certify that the dissertation "a study to evaluate the effectiveness of aroma therapy massage on anxiety among elders at selected old age home, Madurai" done by Mrs.G.Jayanthi M.Sc., Nursing II Year student, college of nursing, Madurai medical college, Madurai-20 has been edited for English language appropriateness.

Name: S. BEULAH P.G. ASST TEACHER

Designation: M.A. M.Ed.

Institution: UNION CHRISTIAN H.S.S. MADURAI

Signature

UNION CHRISTIAN HIGHER SECONDARY SCHOOL
Date.....
MADURAI.

CERTIFICATE OF TAMIL EDITING

TO WHOM SO EVER IT MAY CONCERN

This is to certify that the dissertation "a study to evaluate the effectiveness of aroma therapy massage on anxiety among elders at selected old age home, Madurai" done by Mrs.G.Jayanthi M.Sc., Nursing II Year student, college of nursing, Madurai medical college, Madurai-20 has been edited for Tamil language appropriateness.

J. Ramona Emma Rani.
Signature

Name: J. RAMONA EMMA RANI

Designation: TAMIL PANDIT

Institution: U.C. HR. SEC. SCHOOL
MADURAI - 1.

ST JAN HIGHER SECONDARY
Date.....
MADURAI

APPENDIX - I

PHOTOGRAPHS


R.K's
Aroma
Safflower
(Carthamus tinctorius)
Vegetable Oil
Dt. of Mfg. : 01/2012
Batch No. : SAF/010112
M.R.P. : Rs.207/-
(Inclusive of all taxes)
Use before 2 years from the date of mfg.
Store under 30°C
For External use only.
Aroma Sh
AROMA THERAPY
Lavender