**ABSTRACT**

 **Back ground of the study**

Laughter therapy is the best remedy for stress. Not only does it help you cope with stress, but it also helps to strengthen your immune system and improves your overall stress-related health. Doing laughter every day will soon become a habit and it will reward you for the effort. Just as a king keeps control of his kingdom, so can we keep control of the vast territory of our mind. Humours and laughter therapy will lighten the load and help you bond with others. There are 15% of people over 65 with mental health problems in the general population, 25% in general practice and more than 30% in residential homes. Aging is a universal process that affects every human being on earth at various stages of their life. Physical, hormonal, psychological and social factors all play a role in the aging process. The purpose of this study is to evaluate the efficacy of laughter therapy in promoting mental health among the elderly.

 **Objectives of the study:**

The objectives of the study are:

 1. To assess the level of mental health among old age people

 2. To evaluate the effectiveness of laughter therapy on promotion of mental health among old age people

 3. To find out the association between the post-test level of mental health with their selected demographic variables.

**Hypothesis**

  **H1**-There will be significant difference between the pre-test and post-test level of mental health among old age people.

 **H2-**There will be a significant association between the post-test level of Mental Health with their selected demographic variables.

**Method**

The study design is pre-experimental one group pre-test and post-experimental post-test. Setting is St. Joseph old age home, Coimbatore. Sample size is 50 old age individuals. The tool consists of 13 items in section-A demography proforma and 28 items in section-B standardised general health questionnaire. The content validity of the tool is verified by subjecting it to experts in the field. The reliability of this tool is verified by using the split half technique. The value of this tool is 0.7. The collected data is analysed by both inferential method and descriptive statistical method. Evaluation of the efficacy of laughter therapy is done by using the paired 't' test

**Results**

The pre test results showed that out of 50 respondents, 26 (52%) had good mental health, 24 (48%) had poor mental health, and none (0) had good mental health. The post test result showed that 36 (72%) of respondents had good mental health; 14 (28%) had satisfactory mental health; and none had poor mental health (0) The mean mental health score of the respondents before the intervention was 54 (54.82) and the mean mental health score after the intervention was 84 (84.40). The difference in mental health level was 0.5 (0.5). The post-intervention mental health level was higher than the pre-intervention level, indicating the effectiveness of the laughter therapy. The comparison of pre-intervention and post-intervention old age people' mental health score showed that t = 24.2. The research hypothesis (H1) is accepted and null hypotheses are rejected. The analysis showed a significant relationship between the post-intervention and socio-demographic variables, such as religion and marital status. The obtained value was less that the table value at 0.05 level of significance. So the research hypothesis (H2) is accepted and the null hypothesis is rejected.

**Interpretation and conclusion**

 It can be inferred that the Mental Health level of old age people were poor during the pre-test and was increased after the administration of Laughter therapy. It is found that the Mental Health Level score were considerably more in the post-test itself.

**Key words**

 Effectiveness, Laughter therapy, Mental Health, Old age People.

**INTRODUCTION**

**“If taking vitamins doesn’t keep you healthy enough, try more laughter; the most wasted of all days is that on which one has not laughed”**

#  - Nicolas-Sebastian Chamfort

 The term gerontology comes from the Greek words “gero” which means “old age” and “ology” means the study of, so the gerontology means study of old age. Ageing is a lifelong process of growth and evolution from birth to death. Older people are a part of the whole. It brings fulfillment and self-actualization. How older adults adapt to changes of ageing varies from person to person. For some, adaptation and adjustment is easy, while for others, it may require support from family, friends and healthcare professionals.

 The number of elderly people is growing in almost all countries. Over the last 30 years, the elderly population in India has grown at twice the rate of the rest of population. By 2030, the elderly population is expected to make up 21.8 % of the population. The normal ageing process leads to visible changes in the body, but not all changes are caused by the normal ageing process. According to ICMR (2000), 31% of changes seen with advancing age are caused by disease, while 34% normal aging are caused by the variety of ways by which the older people express dissatisfaction and disappointment.

 The study on humor and laughter and its physiological and psychological effects on the human body is called “gerontology”. It is helpful to drop assumptions that ageing is stressful in itself or that elderly is difficult because of the inevitable decline in health and vigor. Mental disturbances are the most common experience by old age. It is a pathological mood disturbances characterized by feeling, attitudes and beliefs the person has about self and his environment, such as pessimism, lowspirits,defenseless, self-confidence and a guilt feeling. In the recent times more and more senior citizens hailing from the middle class background are seeking accommodation in the elderly homes. In India numerous elderly homes have sprung up across the length and breadth of the country.

 Laughter therapy is a type of exercise and laughter helps to reduce four neuroendocrine hormones associated with stress response. The World Laughter Day was created in 1998 by Dr. Madan Kataria, founder of the worldwide Laughter therapy exercise. The first World laughter Day gathering took place in Mumbai, India with 12,000 people joined together in a mega laugh session. We need to laugh more and seek stress reducing humor in our everyday lives. Laughter is the human gift for coping with stress. Laughter ringing, laughter pealing, laughter roaring, laughter bubbling Chuckling Giggling Snickering Snorting. These are the sounds of soul saving laughter which springs from our emotional core and helps us feel better. In today’s stressful world, we need to laugh much more.

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# NEED FOR THE STUDY

 In the last 50 years, the global geriatric population has increased from 8% to 9.9% in the world between 1950 and 2000. Currently, the geriatric population is 30.2% of the total population. The percentage of geriatric population is expected to rise from 9.5% in 1955, to 14.5% in 2025. More than 50% of the geriatric population will live in developing countries. By 2020, 700 million geriatric people are expected to live in developing countries, while currently there are 671 million geriatric people in the world. Japan is projected to be the oldest country in the world by 2020, with a 31% geriatric population over 60 years. Italy is the second oldest country after Japan. India is a South East Asian country. In 2001, there were about 76 million geriatric population in India, which accounted for 7.7% of the country's population. Currently, there are about 9.8% geriatric people in India. By 2025, the percentage of geriatric people is expected to increase to 40%. In Karnataka, out of 5.5 crore population, eighteen percent are geriatric citizens.

 According to a study on global estimates of the geriatric population over 65 years of age, the number is expected to rise to 72 million by 2050. Currently, the geriatric population is 30.2%. The number of older persons in Asia is expected to rise from 1 million in 2003 to 7 million by 2050. The population of people 60 years of age or older is projected to rise to 18.4 percent of the population. According to a study, about 13.5 percent of newly admitted patients in elderly home care experienced a stress. Around 35.8 percent of the psychiatric disorders reported in elderly homes were related to a stress. Stress is the most common per cent of old age related psychiatric disorders.

 Depression in old age is linked to stress. About 1 in every 6 elderly suffer from late life depression. Out of 34 million elderly in the United States, around 5 million suffer from persistent depressive symptoms and 1 in every million suffer from major depression. Humor can be used as an effective therapeutic tool when caring for older adults if the appropriate source of humor is identified. Laughter is the body's response to perceived humor. Laughter releases the neurotransmitters catecholamine, adrenaline, and noradrenaline. This increases blood circulation, reduces inflammation, accelerates healing, and improves overall body health.

 Laughter also releases two neuropeptides: Endorphins and encephalon’s, which are natural pain relievers in the body. Laughter helps to relax muscle tension and soothes sympathetic nervous system stress. Laughter also helps to manage pain. Increased circulation helps to reduce pain. A research study looked at the effects of anticipation of laughter on three main stress hormones: adrenaline, noradrenaline, and epinephrine. When subjects expected to see the funny video, all three stress hormones decreased by 10 percent. High levels of stress hormones have a negative effect on income and cardio vascular systems.

 The investigator during the community and clinical experience found that many elderly people are suffering from illness. She also realized that there is an immense need of alleviation the stress of the elderly in order to maintain good physical and mental health. The investigator during her literature review found than laughter therapy provides good massage to all internal organs, reduces the stress hormones level, increase the circulation and relaxes the muscles. Hence the investigator felt that, it is necessary to assess the effectiveness of laughter to reduce the level of illness among elderly.

**CHAPTER-II**

**OBJECTIVES**

 This chapter deals with statement of the problem, objectives of the study, hypothesis, to meet the objective, limitations of the study and conceptual frame work which provides a frame of reference.

**Statement of the problem**

A study to assess the effectiveness of Laughter Therapy on Promotion of Mental Health among old age people residing at selected old age home, Coimbatore.

 **Objectives:**

 1. To assess the level of mental health among old age people.

 2. To evaluate the effectiveness of laughter therapy on promotion of mental health among old age people.

 3. To find out the association between the post-test level of mental health with their selected demographic variables.

**Hypothesis**

  **H1**-There will be significant difference between the pre-test and post-test level of mental health among old age people.

 **H2-**There will be a significant association between the post-test level of Mental Health with their selected demographic variables.

# Operational Definition

**Effectiveness**

 It refers to the outcome of laughter therapy in terms of promotion of mental health among old age people residing at old age home.

# Laughter Therapy

The one of humor refers to the use of humor to promote health and wellness. Its purpose is to utilise the natural physiological response of laughter to reduce stress or discomfort. For example, Tea Laughter, Milky Laughter and Welcome Laughter..

 Eg: - “Greeting Laughter” \_ Group of members can participate in welcome laughter, In that an individual will shake other individuals hand and simultaneously say Ha, Ha, He, He repeating the same for other individual.

# Promotion

 It refers to the improvement in the mind of the old age and helps to stimulate the development of mental health.

# Mental Health

 It refers to the psychological state of old age that is functioning at an optimum level of emotional and behavioral adjustment

# Old age people

 It refers to the person staying in old age home above 60 years of age.

**Old Age home**

It refers to the place where the old age people are sheltered for a long period.

**CHAPTER-III**

**REVIEW OF LITERATURE**

**“The human race has one really effective weapon, and that is laughter”**

# Mark Twain

 Review of literature review is an important step in the development of any research project. It helps the investigator to analyze what is already known about the topic and to describe methods of inquiry used in earlier work including the success and shortcoming. In the present study an extensive literature survey has been made to collect the facts and findings over the years to select work.

 The chapter deals with the information collected with relevance to the present study from published materials. These publications were the foundation to carry out the research work. Highly extensive review of literature pertaining to research topic was dome to collect maximum information for laying foundation of the study.

**Review of literature was organized as follows**

 **A.**Studies Related to mental health problems of old age people.

 **B.** Studies Related to laughter therapy.

 **C**. Studies related to the effectiveness of laughter therapy on promotion of mental health among old age people

 **Andreoletti,C., et.al., (2006) Many people** In the developed countries, many people live to be 70 years old or older. The age structure in the developed countries is such that the number of elderly people is constantly increasing. In India, the Indian population aged over 60 in 2001 accounted for 7.7 % of the total population area. Emotional disorders are caused by maladaptation. The ability to adjust to aging is essential for a man's happiness in life. Failure to adjust can lead to bitterness, inner withdrawal and stress, depression, fatigue of life and even suicidal ideation. Mellor, D.,et.al., (2008) conducted a survey of elderly people living in senior residences in Pondicherry. The results of the survey showed that a large majority of the elderly people suffer from memory loss and lack of sleep. The psychological maximum number of the elderly people feel isolated, frustrated and stress.

 Muninarayanappa, N. (2002) studied 196 individuals over 60 years of age in Mumbai. Based on a sample size of 196 participants, 49.5 % were reported to have stress and 57.8 % were reported to be female. Significant factors associated with stress included poor socio-economic status; marital status; non-working/dependency; and illiteracy; stressed elderly were more likely to engage in substance abuse; 58.13 % had disturbed sleep; and mostly had acute or chronic disease.

 Gupt., et.al. (2007) performed a randomised, controlled trial comparing yoga and relaxation for reducing stress and anxiety. The goal of the trial was to compare the treatment of subjects with yoga and relaxation at 10- and 16-weeks from the study baseline to see if either of the modalities reduced the subject's stress, anxiety or blood pressure and improved quality of life; the results of the study indicated that yoga appears to provide comparable benefits to relaxation in terms of stress reduction, anxiety reduction and improvement in health status.

 Khasky, AD., et.al.(2009) conducted a randomised controlled trial involving 114 participants in Chicago for stress reduction, relaxation states and creativity. Participants practiced for 25 minutes of progressive muscles relaxation, stretching, imaginary, or a control task. First the participants were assessed by Smith R – state inventory which measures the relaxation related states disengagement, bodily relaxation, mind relaxation, strength and awareness, joy, love and thankfulness, prayerfulness). Both yoga stretching and imaginary trainees displayed higher scores on self – reported physical relaxation than the controls. Progressive muscles relaxation trainees had lower scores on somatic stress than control.

 Wittink,MN.,et.al.,(2009) was conducted in AIIMS New Delhi, in the year2002 on life events and depression in elderly. The sample of 31 elderly subjects was diagnosed as depression based on International Classification of Disease -10. The results revealed that elderly depressed patients experienced significantly higher number of stressful life events.

 Streete,CC.,et.,(2006) done to assess yoga asana session increase brain GABA levels. The aim of study was to compare changes in brain GABA levels. Associated with an acute yoga session Verus reading session. This study looked at the effects of an individual yoga session on brain GABA levels. The study was conducted at a medical school affiliated center. The sample consisted of 8 yoga practitioners, and 11 comparison subjects. After the yoga session, the yoga practitioner group had an increase in GABA levels of 27% (0.20m mol/kg). The control group had a similar effect. Further studies should be conducted to compare yoga to other forms of exercise to determine if yoga alone has an effect on GABA levels

# Studies Related to Laughter Therapy

Hohnson, et.al., (1990) conducted a study on Wellness through comprehensive laughter therapy in 103 adults. The participants were given a 6-week intensive program of laughter therapy, and related Practices, to be practiced daily for 6 weeks. During the same period, the control group was told to relax each day in an armchair. The Stress Scale measured the level of stress, and the Stress and Energy Test evaluated an individual's energy and stress-related experiences. Participants in the laughter group, but not those in the control group, had lower levels of stress, as well as increased levels of optimism.

#  Martin,RA.,et.al.,(1998) conducted on effect of laughter therapy based on lifestyle intervention on stress in AIIMS, New Delhi. The aim of the study was to assess the short-term impact of a comprehensive but brief lifestyle intervention, based on laughter therapy, on stress levels in normal and diseased subjects. The subjects had history of physical and psychiatric disorders like depression, anxiety, and stress. The intervention consisted of laughter therapy and relaxation techniques. The outcome measures were stress scores, taken on the first and last day. The stress scores were significantly reduced. The observations suggest that a short educational program for lifestyle modification and stress management leads to remarkable reduction in the stress scores within a period of 10 days.

 Wood,C.,et.al.,(2008) Conducted done to evaluate the effects of three different procedures namely relaxation, visualization and laughter therapy on perception of physical and mental energy on positive and negative mood states, study samples consisted of 71 normal volunteers in the age group of 21 to 76 years. Study findings revealed that laughter therapy produced a significantly greater increase in perception of mental and physical energy and feeling of alertness and enthusiasm than the other two procedures (P<0.05). Relaxation made subject significantly more sleepy and sluggish immediately after the session than laughter therapy (P<0.05). Visualization made them more sluggish but less content than laughter therapy (P<0.05) and more upset than relaxation after the second session (P<0.05). Thus, a 30 minutes program of laughter therapy which can be practiced even by elderly have a significant effect on perception of both mental and physical energy and increased high positive mood.

# Studies Related to the Effectiveness of Laughter Therapy on Promotion of Mental Health among old age People

 The health benefits of humor have been extensively studied over the past 30 years for healthy, sick, or stressed adults, children, and seniors. Medical research confirms our human instinct that smiling and laughing people are happy, while those who are inaudible are unhappy. Studies show that humor stimulus leads to mirth, which leads to primarily emotional responses with psychological effects, and laughter, which leads to physical responses with physiological effects. Many of the physiological benefits of laughing in adults have been well-documented in medical research.

 VenkataRao, (2004) conducted 20 interviews, 9 of which were with women, and 11 of which were with men, all of whom had no formal connections to health services and nursing. The interviewers ranged in age from 17-75 years old, and all of the interviewers were from Sweden. The question posed was, ‘what does humour mean to you?’.

 Mak,w.,et.al., conducted to assess the Sense of humor and longevity: older adults self-ratings compared with ratings for deceased siblings. The sample of 33 older adults (mean age – 72.3 yr.) rated themselves and a deceased sibling on the Multidimensional Sense of Humor Scale. A significant mean difference between the two groups on the subscale of Humor appreciation suggested the possibility of a positive relationship between humor appreciation and longevity.

 Yoder, MA., (Feb 78) 20 interviews were conducted. 9 interviews were conducted with women and 11 interviews were conducted with men. The age range of interviewees ranged from 17-75 years old. All interviewees were from Sweden. What does humor mean to me? What categories can I use to define humor? Unforeseen events/situations Real humor/art form Jokes Punctuality Play on words/punctuality Comedy Political satire The essence of humor can be classified as weapon/protection The effects and functions of humor on individuals.

**CHAPTER-IV**

 **METHODOLOGY**

 Research methodology is one of the vital sections of research. Since the success of any research is mostly dependent upon the methodological issues that are followed in the execution of the research work. The role of methodology consists of procedure and technique for conducting the study.

 According to Polit and Hungler (2004) research methodology refers to investigations of the ways of obtaining, organizing, analyzing data.

 The present chapter consists of research design, setting of the study, population of the study, sample, sampling technique, and criteria for sample selection, development and description of the tool, scoring procedure intervention, validity, reliability, pilot study, data collection and plan for data analysis and protection of human rights.

**Research approach**

. Due to the complexity of the issue under study and to achieve the goals of the study, a quantitative approach has been adopted

**Research design**

A group pre test, post test research design has been implemented in this study to evaluate the efficacy of laughter therapy on a random sample of 50 participants

 One group pre-test, post-test research design was used in this study, to measure the effectiveness of

 Laughter therapy on a sample of 50 respondents

|  |  |  |  |
| --- | --- | --- | --- |
| Group | Assess the Mental Health | Administer the Laughter Therapy | Evaluation |
| Study Group | O-1 | x | O-2 |

 **Table:1 Study representation of Research Design**

|  |  |
| --- | --- |
| Symbol |  |
| O1 | = | Pre-test assessment of level of mental health |
| X | = | Intervention on administration of Laughter therapy for 20 minutes |
| O2 | = | Post- test assessment level of mental health |
| O1-O2 | = | Effectiveness of Laughter therapy Intervention |

**Setting of the study**

The study was carried out at St. Joseph’s old age home (Coimbatore). Geographic proximity, feasibility, sample availability, and familiarity of the investigator with the setting were factors in selecting this study.

**Variables**

**Independent variable**

 Administration of Laughter therapy on promotion of Mental Health among old age people.

**Dependent variable**

 Mental Health level of old age people residing in selected old age home.

# Extraneous variable

#  In this present study age, gender, marital status, religion, type of family, number of children, illness, educational qualification, experience, hobbies, awareness of laughter therapy and source of information are extraneous variable.

**Population**

 The target population for this study was old age people (50+ years of age)

**Sample and Sample Size**

 The subjects for the present study comprised of 50 old age people of St. Joseph old age home Coimbatore was selected conveniently.

**Sampling Technique**

 Non probability convenient sampling technique was used to select sample.

**Criteria for selecting the Sample**

**Inclusion Criteria**

The old age people who are willing to participate.

The old age people above 60 years of age.

The old age people who are interested to participating in Laughter therapy.

**Exclusion Criteria**

The subjects who are having physical disabilities like hearing loss, loss of vision etc., and mental disabilities like loss of memory or any cognitive problems.

**Description of the tool**

 The tool is selected and prepared by the investigator to assess the effectiveness of laughter therapy on the promotion of mental health among old age people are;

 Tool- 1: Socio-demographic Proforma. It consists of 13 items; which include age, gender, marital status, religion, type of family, number of children, , illness, educational qualification, experience, hobbies, awareness of an laughter therapy and source of information.

 Tool- 2: The General health Questionnaire. The general health questionnaire consists of 28 items. Each item has 4 alternative responses. The responses of positive items are better than Usual, Same as Usual, Worse than Usual, Much Worse than Usual. The responses of negative items are Not at all, No more than usual, rather more than usual, much more than usual. In that, there are 7 positive (A1,C1-C7) and 21 negative items (A2-A7,B1-B7,D1-D7). The score given for each negative item is 4 for ‘Not at All’, 3 for ‘No more than usual’, 2 for ‘Rather more than Usual’ and 1 for much more than usual and it is reversed for positive items. The high score is 112 and less score is 28. Based on the score, the Mental health level is categorized into Good (above 75% of the score), satisfactory (51%-75% of the score) and poor (below 50% of the score). When the score increases, it indicates that the mental health level also increases.

**Content Validity**

Study and criteria of scales were submitted to experts for content validity. Experts were from the field of Mental Health Nursing, Psychiatric doctor, Hospital Psychologist, Statistician and expert in the field of laughter therapy. Based on the pilot study and experts’ suggestions, few modifications and rearrangements of the items were done. The reliability of the tools was computed by using split half technique employing Karl Pearson’s formula.

**Reliability**

 The reliability of the split half test was found by using Karl Pearson co-relation by deviation method and found to be 0.7 and 0.5 . Hence the tool was found reliable.

 **Pilot study**

 After obtaining formal approval from the Mother Superior of St. Joseph old age home, Coimbatore. The researcher conducted pilot study in November 2013. Five old age people were selected by using convenient sampling technique, Who were selected for pilot project were excluded from the main thesis. Information was given received sign in the form from the sample after explaining the purpose of the study and assuring them to maintain the confidentiality of the information provided. The data was collected by interviewing them by using the general health questionnaire. After the assessed Mental Health level on pretest, laughter therapy was administered to the old age people. The time taken for completing the laughter therapy schedule was 20 minutes. The laughter therapy schedule was continued one week. After a week post –test level of Mental Health was assessed. A concise data analysis was done using descriptive statistics and inferential statistics. The pre-test findings revealed that 4 (80%) of the respondents had satisfactory mental health, 1 (20%) of the respondents had the poor mental health and none of the respondents had good mental health. The post-test findings revealed that 4 (80%) of respondents had good mental health, 1 (20%) of respondents had satisfactory level of mental health and none of the respondents had poor mental health. The comprehension, feasibility and time required to complete the scale were assessed.. The language was found to be clear and all the items in the tool were clearly understood by the subjects without ambiguity. Hence, the tool was found to be feasible and practicable for the main study.

**CHAPTER-V**

**RESULTS**

 This chapter deals with Data analysis and interpretation of data regarding effectiveness of laughter therapy on the promotion of mental health. The data was collected from the respondents before and after the laughter therapy programme. The collected information was organized, tabulated, analyzed and interpreted.

**Table: 2 Frequency and Percentage Distribution of Mental Health Among old age with post-intervention Level**

|  |  |  |  |
| --- | --- | --- | --- |
| **Mental health** | **Category** | **Frequency(n)** | **Percentage (%)** |
| **Good** |  **>75%Score** |  **36** | **72** |
| **Satisfactory** | **51-75%Score** |  **14** | **28** |
| **Poor** |  **<50%Score** | **0** | **0** |

 **Table: 3 evaluate the effectiveness of Laughter therapy by comparing Pre-test and post-test**

**Mean Mental health Score among old age people**

|  |  |  |  |
| --- | --- | --- | --- |
| Aspects | Mean percentage | Standard deviation (%) | Paired “t” formula |
| Pre intervention | 54.82 | 5.6 |  24.2\* |
| Post intervention | 84.40 | 6.1 |

**Table: 4 Mental Health of old age people with their Demographic Variables.**

|  |  |  |  |
| --- | --- | --- | --- |
| **S.NO** | **Demographic Variable** |  **Level of Mental Health** | **X²** **Value** |
| **Good** | **Satisfactory** | **Poor** |
| 1 | Age (in years) |  |  |  |  |
|  | 60-65 | 3 | 14 | 4 | 4.36 |
|  | 66-70 | 2 | 13 | 1 |  |
|  | 71-75 | 3 | 6 | 1 | df=6 |
|  | Above 75 | 0 | 3 | 0 | NS |
| 2 | Gender |  |  |  |  |
|  | Male | 3 | 12 | 1 | 0.78 |
|  | Female | 5 | 24 | 5 | df=2 |
|  |  |  |  |  | NS |
| 3 | Religion |  |  |  |  |
|  | HinduChristian | 42 | 1411 | 32 | 1.424 |
|  | Muslim | 1 | 8 | 1 | df=6 |
|  | Other | 1 | 3 | 0 | NS |
| 4 | Educational Status |  0421 |   6969 | 2121 |  |
|  | Illiterate |  |
|  | SSLC HSCGraduate PG & Above | 6.61df=NS |
| 5 | Marital status |  |  |  |  |
|  | Unmarried | 0 | 4 | 1 |  |
|  | Married | 5 | 15 | 3 | 4.29 |
|  | separate | 0 | 4 | 1 | df= 8 |
|  | Divorced | 1 | 5 | 1 | NS |
|  | Widow/Widower | 2 | 8 | 0 |  |
| 6 | Hobbies |  |  |  |  |
|  | Games | 2 | 3 | 1 | 5.13 |
|  | Listening Music | 11 | 9 | 2 | df = 6 |
|  | Reading | 7 | 6 | 0 | NS |
|  | Watching TV | 26 | 18 | 3 |  |
| 7 | Illness |  |  |  |  |
|  | Yes | 7 | 23 | 4 | 1.68 |
|  | No | 1 | 13 | 2 | df =2 |
|  |  |  |  |  | NS |
|  | If illness |  |  |  |  |
|  | Hypertension | 3 | 4 | 1 |  |
|  | Diabetes Mellitus | 1 | 4 | 0 | 6.74 |
|  | Arthritis | 2 | 6 | 1 | df = 10 |
|  | Vision Problem | 0 | 7 | 1 | NS |
|  | Others | 1 | 3 | 1 |  |
|  |  |  |  |  |  |
| 9 | Type of Family |  |  |  |  |
|  | Nuclear | 31 | 22 | 3 | 2.13 |
|  | Joint | 16 | 12 | 2 | df = 4\* |
|  | Extended | 3 | 2 | 1 | NS |
| 10 | Number of Children |  |  |  |  |
|  | One | 11 | 9 | 1 | 1.68 |
|  | Two | 22 | 17 | 2 | df = 4\* |
|  | Three & Above | 17 | 10 | 3 |  |
| 11 | Awareness of Laughter TherapyYes NoInformation of Laughter TherapyFamily member & RelativesFriends & Neighbors Printed MediaRadio & Tv |  |  |  |  |
|  | 14 | 10 | 1 | 0.33 |
|  | 37 | 26 | 5 | df=2\* |
|  | 3 | 2 | 1 | 5.27 |
|  | 1 | 1 | 0 | df =8\* |
|  | 2 | 1 | 0 |  |
|  | 8 | 7 | 0 |  |

 **\*** **Significant at P\*>0.05 level**

**CHAPTER-VI**

 **DISCUSSION**

 This chapter attempts to discuss the significant findings on the mental health level of old age people.

The findings of data analysis were discussed in accordance with the objectives and stated hypotheses of the

 Present study.

**Characteristics of demographic variables**

 In relation to the age group, majority 21(42.0%) of the respondents are belonged to the age group of 60-65 years, In gender, majority 34(68%) of the respondents are female, Based on the marital Status, majority 23(46%) of respondents are married. According to educational qualification, most of the respondents 14(28%) are educated up to SSLC level. In the category of loss of spouse 7(14%) lost their wife, 3(6%) lost their husband. On the aspect of religion, majority 21(42%) of the respondents are Hindus, In relation to the presence of illness, the majority 34(68%) of respondents are having illness, out of that 8(16%) are having vision problem and 5(10%) fall under other category of illness like bearing

loss, back pain etc., whereas 6(32%) are physically healthy. On the aspect of hobbies 26(52%0 are having the hobby of watching television, In the type of family, majority 31(62%) are belonged to nuclear family. In relation to no. of children, most of the respondents 22(44%) are having two children. According to awareness of the laughter therapy, most of the respondents 14(28%) are having awareness of laughter therapy. Out of that 8(16%) got information through radio and television, 3(6%) got awareness from family members and relatives, 2(4%) from printed media and the remaining only 1(2%) got information from friends and neighbors.

**Testing of Hypothesis**

 The pretest results show that out of 50 samples, 26(52%) of the respondents are having mental health at satisfactory level, 24(48%) of them are having poor mental health and none of them comes under good mental health. The post test result i s 36(72%) of the respondents are having good mental health, 14(28%) of them are having mental health at satisfactory level and none of them comes under poor mental health.

 The overall pre intervention mean mental health score was 48.94% ±5.6 and post intervention mean mental health score was 75.35% ±6.1. So the difference of mental health level was observed by mean mental health score of 26.41 ±0.5. Since the post intervention mental health level was more than the pre intervention mental health level, it was inferred that the laughter therapy was effective.

 The comparison of pre and post intervention mental health score of old age people revealed that t=24.2. Therefore the research hypotheses (H1) is accepted and null hypotheses is rejected.

**CHAPTER – VII**

**CONCLUSION**

This study concluded that laughter therapy is effective in promoting mental health. Therefore, laughter therapy is the most effective way for holistic and complete care of mind and soul. Laughter therapy relieves us from emotional and mental conflict. It helps us to live in harmony with the environment. Therefore, this type of study will be conducted in large scale in the future. This study evaluated the effectiveness of laughter therapy on Promoting Mental Health among old age people living at St Joseph old age home in Coimbatore, using a convenient sampling method. The research approach adopted was pre experimental design, with the aim of measuring the Mental Health on a pre-test scale and the effectiveness assessed on a post-test scale to evaluate the efficacy of laughter therapy. The data was collected using a General Health questionnaire, and the data was interpreted using an appropriate statistical method.

The following are the conclusions of this study:

Based on the findings of this study, the following conclusions have been made. This also brings into perspective the limitations of this study. The implications of this study can be seen on various aspects such as nursing education and practice and nursing administration. This study also provides insight for future studies. Old age people had poor Mental Health as assessed in the pre test. However, their Mental Health has improved significantly in the post test. Laughter therapy has been found to be effective in improving old age people's Mental Health. The significant difference between the pre test and post test knowledge score has been demonstrated by using the 't' test. When analyzing the mean and standard deviation of Mental Health of the pre and post test participants, the mean pre test Mental Health score reached 54.82 and the post test mean score reached 84.40 respectively. This indicates a high average difference in Laughter therapy effectiveness. It can be concluded that the mental health score of the old age people in the pre test was inadequate. However, the Laughter therapy has significantly improved the mental health level of the age group.

 The analysis revealed that there was a significant association relationship between post intervention mental health score of old age people with the socio- demographic variables such as religion and marital status. The obtained value was less that the table score at 0.05 level of significant. So the research hypothesis (H2) is accepted and the null hypothesis is not accepted.

**Implications of study**

**Nursing Practice**

 Current, medical care delivery system has changed from a intervention approach to improvement of health and alleviate the illness oriented approach. So, it focuses mainly on first level prevention, It is aimed at healthimprovement.. Considering these factors. Nursing personnel can contribute much for the promotion of mental health by creating awareness of laughter therapy on the Hospital through health programme, camps and special programme, and mass media education.

**Nursing Education**

 The changing values of society, globalization, urbanization, industrialization etc. have influenced the mental health. It is today’ need to involve mental health related education in nursing course at starting level, prepare nurse to address the issue of mental health both in the clinical as well as community field. The advanced field of medical care aims in the provision of comprehensive care and hence, family is an unavoidable part of care. So the nurse with proper education in this regard should have a clear cut idea about the physical, psychological, social, economic, occupational, familial, marital and sexual havoc to work on the need base approach.

**Nursing Administration**

 The main focus of nursing administration is to organize seminars and workshop and other education program for staff nurses as a part of in-service education program by which knowledge towards mental health promotion shall be enhanced. They also can start training of volunteers to provide specialized care to old age people

**Nursing Research**

 Nurses in developed countries regarding mental health among old age people have conducted the studies. In India, very little studies have been studied in this area. Researcher has to be verified out on large scale to examine mental health level adopted by the old age people. This helps to give meaningful, need-based information and create awareness towards mental health.

**Limitations**

The present study has following limitations:

Only 50 old age people were selected as a sample.

Randomization was not done. So the sample may not be the true representation of the population.

Study was conducted only in selected old age home in Coimbatore. Hence generalization is possible only to the selected settings.

Due to time constraint a convenient sampling technique was used.

**Recommendations**

Based on the findings of the study, the following recommendations are made

An experimental study can be carried out to find out the effectiveness of laughter therapy for the promotion of mental health among old age people.

A similar study can be replicated on sample with different demographic characteristics.

A cross sectional study shall be conducted to assess the impact of laughter therapy on the promotion of mental health among old age people.

A follow up plan among this population after a year can ascertain the effectiveness of the Laughter therapy further

**CHAPTER – VIII**

**SUMMARY**

The objective of the study was to evaluate the mental health of 50 old age people at St.Joseph old age home (Coimbatore). The investigator first presented the study to authorities and obtained permission to conduct the study. The design of the study was pre-experimental, conducted over 4 weeks. One group pre-experimental and post-experimental design was used to evaluate the efficacy of laughter therapy in promoting mental health among old age patients. A General Health questionnaire was used to collect data to evaluate the level of mental health of the participants. Subject experts validated the questionnaire and verified its reliability. Data was administered and analyzed as per the objectives. Frequency, percentage, average and standard deviation were used as descriptive statistics. Chi-square was used as an inferential statistic to test hypothesis at 5% level of significance. Summary

The data collected was collated, tabulated and analyzed, and the results were presented as tables and diagrams under the following headings: Section A To evaluate the mental health of old age individuals, the distribution of old age individuals according to their mental health level was tabulated. Section B To demonstrate the effectiveness of laughter therapy in promoting Mental Health among the old age people, the distribution of average, standard deviation and enhancement score was tabulated.

Section C: To demonstrate the relationship between post test Mental Health scores, the distribution of mean and co-relation of post test scores were tabulated.

Section E: To demonstrate the association of old age Mental Health scores with selected demographic variables, the distribution of frequency and percentage of selected demographics were tabulated.

**Tested data described as follows:**

**Results regarding Social backgroung:**

 In relation to the age group, majority 21(42.0%) of respondents are belonged to the age group of 50-55 years.

In gender, majority 36 (72.0%) of the respondents are female,

Based on the marital Status, majority 23(46%) of respondents are married,

According to educational qualification, most of the respondents 14(28%) are educated up to SSLC level.

Based or religion, majority 21(42%) of the respondents are Hindus.

In relation to the illness, the majority 34(68%) of respondents are having illness, out of that 07(14%) are hypertensive, 06(12%) are diabetic, 09(18%)are having arthritis, 08(16%) are having vision problem and 04(08%) fall under other category of illness like hearing loss, back pain, etc., whereas 16(32%) are physically healthy.

On the aspect of hobbies half of the respondents 26(52%) are having the hobby of watching television

According to the type of family, majority 31(62%) of them are belonged to nuclear family,

In relation to no. of children, most of the respondents 22(44%) are having two children,

According to awareness of laughter therapy, most of the respondents 13(26%) are having awareness of laughter therapy out of that 7(14%) are known through radio and television, 03(06%) were getting awareness from family members and relatives, 02(04%) from printed media and only 01(02%) were getting information from friends and neighbors.

# Findings Related To Pre-Test and Post-Test Mental Health Score

 The pretest score of the study revealed that the majority 26(52%) of the respondents are having mental health at satisfactory level, 24(48%) of them are having poor mental health and none of them comes under good mental health.

 The post test score ,the 36(72%) respondents are having good mental health, 14(28%) of them are having mental health score at satisfactory level and none of them comes under poor mental health

**Findings regarding the evaluation of effectiveness of Laughter therapy on promotion of Mental Health**

 Mean post-test Mental Health score 84.40 with SD is 6.1 higher than the mean pretest knowledge score 54.82 with SD5.6. In order to test the difference between the two means, paired t test was computed and scored t value 24.2 was found to be hypothesized at 0.05 level .Hence, it is inferred that there is a chance to increase in the status of Mental Health of old age people after the Laughter therapy.

**Findings regarding the Mental Health scores after the therapy with selected tool -1**

The analysis of association of selected Socio-demographic variables with post intervention level of mental health using chi-square test revealed that there was a significant association between the post intervention mental health scores and the selected socio-demographic variables such as marital status and religion. It was found to be significant at 0.05% level.

**CHAPTER – IX**

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