

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

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 important in aging. Aim of 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:

- To assess the level of mental health among old age people
- To evaluate the effectiveness of laughter therapy on promotion of mental health among old age people
- To find out the association between the post-test level of mental health with their selected demographic variables.

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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 after-experimental post-test. Setting is St. Joseph old age home, Coimbatore. Sample size is 50 old age individuals. There are 13 items in Tool-1 demography proforma and 28 items in section-B standardised general health questionnaire. The tool is verified by the experts. The confidential error 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 than 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.

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

I. INTRODUCTION

“If taking vitamins doesn’t keep you healthy enough, try more laughter; the mostwasted 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 more enough 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 peeling, 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.

II. 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 increase to 72 million by 2050. Currently, the aged 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 percent 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 US nearly 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 enkephalins, 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 financial problems and cardiovascular 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 that 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.

III. CHAPTER 2

1. 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.

2. 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.

3. Objectives

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

4. 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.

5. Operational Definition

- **Effectiveness:** It refers to the outcome of laughter therapy in terms of promotion of mental health among people above 60 yrs of age 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.

IV. CHAPTER- 3

1. Review of Literature

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

An essential stage in the creation of any research project is the review of the literature review. Analyzing what is previously known about the subject and outlining earlier research's techniques of inquiry, including their successes and failures, is helpful to the investigator. An exhaustive literature review was conducted for the current study in order to compile the data and findings over the years and choose works.

The information gathered from published materials that is pertinent to the current investigation is covered in this chapter. These works served as the basis on which the research was conducted. To gather the most data possible for the study's foundation, a very thorough review of the relevant literature was conducted.

2. Review of literature was organized as follows

- Mental health problems of old age people.
- Laughter therapy.
- Benefits of laughter therapy on promotion of mental health of 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 it was noted that there were 57.8% women. Poor socioeconomic level, marital status, reliance, and illiteracy were significant stressors. Stressed older people were more likely to take drugs, had sleep problems in 58.13% of cases, and were more likely to have acute or chronic illnesses, Yoga and relaxation techniques for lowering stress and anxiety were compared in a randomized, controlled trial by Gupt et al. in 2007. The purpose 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 study's findings showed that yoga appears to provide benefits for reducing stress and anxiety that are comparable to those of relaxation.

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.

Yoga asana sessions were assessed to see if they increased brain GABA levels by Streete, CC., et al. (2006). The study's objective was to contrast variations in brain GABA levels. Verus reading session connected to an acute yoga session. This investigation examined the impact of a personal yoga session on GABA levels in the brain. The investigation was carried out at a facility connected to a medical school. 8 yoga practitioners and 11 control participants made up the sample. The yoga practitioner group experienced a 27% (0.20m mol/kg) rise in GABA levels following the yoga session. The outcome was comparable for the control group. If yoga alone has an impact on GABA levels, more research should be done to compare it to other forms of exercise

- 1. Studies Related to Laughter Therapy:** A study on the benefits of thorough laughing therapy on wellness was carried out by Hohnson et al. in 1990 with 103 persons. A 6-week intense program of laughter therapy and related practices, to be used every day for 6 weeks, was delivered to the participants. The control group was instructed to unwind each day in a chair for the same time period. A person's stress level was measured using the Stress Scale, and their energy and stress-related experiences were assessed using the Stress and Energy Test. Participants in the laughter group experienced lower levels of stress and higher levels of optimism than those in the control group.

Research on the impact of laughter therapy based on lifestyle interventions on stress was done in 1998 by Martin, RA., et al. at AIIMS, New Delhi. The study's objective was to evaluate the immediate impact.

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.

- 2. 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 interviewees ranged in age from 17-75 years old, and all of the interviewees 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.

V. CHAPTER- 4

1. 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.

2. 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

3. 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

Table 1: Study representation of Research Design

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

Symbol

- O1 = level of mental health before the intervention
- X = Intervention on administration of Laughter therapy for 20 minutes
- O2 = level of mental health after therapy
- O₁-O₂ = Effectiveness of Laughter therapy Intervention

4. 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.

5. 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.

6. Population : old age people (50+ years of age)

7. **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.

8. **Sampling Technique:** Non probability convenient sampling technique was used to select sample.

9. 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.

- 10. 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 tool was computed by using split half technique employing Karl Pearson's formula.
- 11. Reliability :** The reliability of the split half test was found by using Karl Pearson correlation by deviation method and found to be 0.7 and 0.5 . Hence the tool was found reliable.
- 12. 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.

VI. CHAPTER -5

- 1. 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

Mentalhealth	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			X ²
		Good	Satisfactory	Poor	Value
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				
	Hindu	4	14	3	
	Christian	2	11	2	1.424

	Muslim	1	8	1	df=6
	Other	1	3	0	NS
4	Educational Status				
	Illiterate	0	6	2	
		4	9	1	
		2	6	2	
	SSLCHSC	1	9	1	
	Graduate PG & Above				6.61 df=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

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	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 Therapy Yes No	14	10	1	0.33
	Information of LaughterTherapy Family member & Relatives	37	26	5	df=2*
	Friends & Neighbors Printed Media	3	2	1	5.27
	Radio & Tv	1	1	0	df =8*
		2	1	0	
		8	7	0	

* Significant at $P > 0.05$ level

V. DISCUSSION

The purpose of this chapter is to discuss important findings about the mental health of the elderly. The results of the data analysis were discussed according to the objectives and hypotheses were presented .

This study. Characteristics of demographic variables In relation to the age group, the majority of 21 (42.0%) respondents belong to the age group 60-65 years, According to gender, 34 (68%) of the respondents are the majority of women, Based on marital status, the

majority of 23 (46%) of the respondents are married. In terms of education, most of the respondents 14 (28%) are educated up to SSLC level. In the category of loss of a spouse, 7 (14%) women and 3 (6%) lost their husbands. In terms of religion, the majority of 21 (42%) respondents are Hindus. Regarding the presence of disease, the majority 34 (68%) of the respondents have some disease, of which 8 (16%) are visually impaired. 5 (10%) belong to other disease categories such as camp loss, back pain etc., whereas 6(32%) are physically healthy. On the aspect of hobbies 26(52%) 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.

1. 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 is 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 $48.94\% \pm 5.6$ and post intervention mean mental health score was $75.35\% \pm 6.1$. 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 (H_1) is accepted and null hypotheses is rejected.

VII. CONCLUSION

This study came to the conclusion that laughter therapy is useful for enhancing mental health. The most efficient method for providing full and comprehensive treatment for the mind and spirit is hence laughter therapy. We can release emotional and mental tension via laughter therapy. It enables us to coexist peacefully with our environment. As a result, large-scale research of this kind will be done in the future. Using a practical sample technique, this study assessed the effects of laughter therapy on promoting mental health among elderly residents of St. Joseph Old Age Home in Coimbatore. The research strategy used a pre-experimental design, with the goal of assessing the effectiveness on a post-test scale and measuring the mental health on a pre-test scale.

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 than the table score at 0.05 level of significant. So the research hypothesis (H₂) is accepted and the null hypothesis is not accepted.

1. Implications of study

- **Nursing Practice:** The current healthcare delivery system has shifted from an intervention-based approach to improving health to a disease-based approach. So it mainly focuses on primary prevention, it aims to improve health. Considering these factors. Nursing staff can do much to promote mental health by raising awareness of laughter therapy in the hospital through wellness programs, camps and special programs, and media education. Nursing education The values of society, globalization, urbanization, industrialization, etc. affected mental health. Today's need to include mental health education in entry-level nursing courses prepares nurses to address mental health issues in both clinical and social settings. The advanced field of medical care aims at holistic treatment, and therefore the family is an inevitable part of treatment. Thus, a properly trained nurse in this field should have a clear understanding of physical, psychological, social, financial, professional, family, marital and sexual destruction to work as needed.
 - **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
2. **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.

3. Limitations: This study has the following limitations:

- Only 50 seniors were selected for the sample.
- No randomization was performed. Thus, the sample may not be representative of the population. The study was conducted only in a selected nursing home in Coimbatore.
- Therefore, generalization is only possible for selected settings.
- A convenience sampling technique was used due to time constraints.

4. Recommendations: Based on the results of the study, the following recommendations are made

The effectiveness of laughter therapy in promoting mental health in the elderly can be done through experimental research.

A similar study can be repeated with a sample with different demographic characteristics.

A cross-sectional study evaluates the effect of laughter therapy on the promotion of mental health in the elderly.

A follow-up plan for this population at one year can further confirm the effectiveness of laughter therapy

X. SUMMARY

The aim of the study was to assess the mental health of 50 elderly people at St Joseph's Nursing Home (Coimbatore). The researcher first presented the study to the authorities and received permission to conduct the study. The design of the study was pre-experimental and was conducted over a period of 4 weeks. The effectiveness of laughter therapy in promoting the mental health of elderly patients was evaluated with a single-group pre- and post-test design. A general health questionnaire was used to collect data to assess the mental health level of the participants. Subject matter experts validated the questionnaire and ensured its reliability. Data were managed and analyzed according to the objectives. Frequency, percentage, mean and standard deviation were used as descriptive statistics. Chi-square was used as an inferential statistic to test the hypothesis at the 5% significance level. Summary The collected data were compiled, tabulated and analyzed, and the results were presented in tables and graphs under the following headings: Part A To assess the mental health of the elderly, the distribution of the elderly according to the level of mental health was prepared as a table. . Part B To demonstrate the effectiveness of laughter therapy in promoting mental health in the elderly, distribution of means, standard deviations and enhancement scores were tabulated. Part C: Mean distribution and correlation of post-test scores were tabulated to show the relationship between post-test mental health scores. Part E: To show the association between mental health scores in old age and selected demographic variables, frequencies and percentages of selected demographics were tabulated.

1. Tested data described as follows:

Results regarding Social background: 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 on 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.

2. 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

3. Findings regarding the evaluation of effectiveness of Laughter therapy on promotion of Mental Health: The results of the evaluation of the effectiveness of laughter therapy in promoting mental health The mean posttest mental health score with 84.40 SD is 6.1 higher than the pretest mean knowledge score of 54.82 with SD 5.6. A paired t-test was calculated to test the difference between these two means and the

obtained t-value of 24.2 was found to be at the 0.05 level. Therefore, it is concluded that the old state of mental health has a chance to increase. for the elderly after laughter therapy. Observations on mental health scores after therapy with the selected tool -1

- 4. Findings regarding the Mental Health scores after the therapy with selected tool -1:** Association analysis of selected socio-demographic variables and post-intervention mental health levels using the chi-square test showed that there was a significant relationship between post-intervention mental health scores and selected socio-demographic variables such as marital status and religion. It was found to be significant at the 0.05% level.

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