



## Research Article

### A STUDY TO ASSESS THE EFFECTIVENESS OF LAUGHTER THERAPY ON STRESS AND ANXIETY AMONG ELDERLY AT SELECTED OLD AGE HOME, PUDUCHERRY

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#### ARTICLE INFO

##### Article History:

Received 24<sup>th</sup> September, 2016  
Received in revised form  
22<sup>nd</sup> October, 2016  
Accepted 15<sup>th</sup> November, 2016  
Published online December, 30<sup>th</sup> 2016

##### Keywords:

Stress,  
Anxiety,  
Laughter therapy,  
Elderly.

#### ABSTRACT

Senility consists of ages nearing or surpassing the life expectancy of human beings, and thus the end of the human life cycle. WHO reports that there are currently about 6000 million old-age persons in the world aged 60 years and above; they have frustration and feeling of stress and anxiety about their remaining life. Changing family structure and attitude of younger generation towards the aged have led to a sharp rise in old age homes. To promote the psychological wellbeing and general health by reducing the stress and anxiety through the most effective therapy applicable for all age group is laughter therapy. So the study was to assess the effectiveness of laughter therapy on stress and anxiety among elderly at selected old age home, Puducherry. The aim of the study was to evaluate the effectiveness of laughter therapy on stress and anxiety among elderly at selected old age home, Puducherry. The Pre-experimental study with one group pretest and posttest design was conducted among 60 elderly of Hospice Home for the aged. The samples were selected by using simple random sampling technique. The pretest of Stress and Anxiety was assessed by using Modified Cohen Perceived Stress Scale and Hamilton Anxiety Rating Scale. The laughter therapy was administered for 20 minutes daily for 21 days. The Post test was conducted by using same tool. The study result showed that out of 60 elderly, the post-test level of stress median score (17.5) was significantly less than the pre-test level of stress median score (23.5) by using Wilcoxon Signed Ranks test ( $\square 6.383$ ) and the post-test level of anxiety median scores (16) was significantly less than the pre-test level of anxiety median scores (19) by using Wilcoxon Signed Rank Test ( $\square 6.383$ ) and indicates that laughter therapy was significantly effective in reducing stress and anxiety  $P$ -value  $< 0.001$ . Thus this study proves that "Laughter therapy was effective in reduction of Stress and Anxiety among elderly", who residing in Old Age Home.

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## INTRODUCTION

Senility consists of ages nearing or surpassing the life expectancy of human beings, and thus the end of the human life cycle (WHO, 2013). WHO reports that there are currently about 6000 million old-age persons in the world aged 60 years and above; by 2020 approximately 70% of the elderly population will be living in the developing countries (WHO, 2012)<sup>2</sup>. Old age is observed as an ineluctable, undesirable, problem-ridden stage of life that we all are compelled to live, marking time until our final exit from life itself. This un-bonding situation may lead to frustration and feeling of stress and anxiety about their remaining life<sup>4</sup>. Changing family structure and attitude of younger generation towards the aged have led to a sharp rise in old age homes (Sinclair et al., 2006).

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By reducing the stress and anxiety among elderly residing at old age home, with regard to the importance of elderly to promote general health, much importance is given for the psychological wellbeing. Hence the most effective therapy applicable for all age group is laughter therapy (Madan Kataria, 1995). Laughter helps to relieve the stress and anxiety, because during laughing adrenaline level goes down and also triggers the release of endorphins, the body's natural painkillers and produce a general sense of wellbeing. It provides relaxation and maintains the balancing factor of blood vessels (Manohar bokdia, 2002).

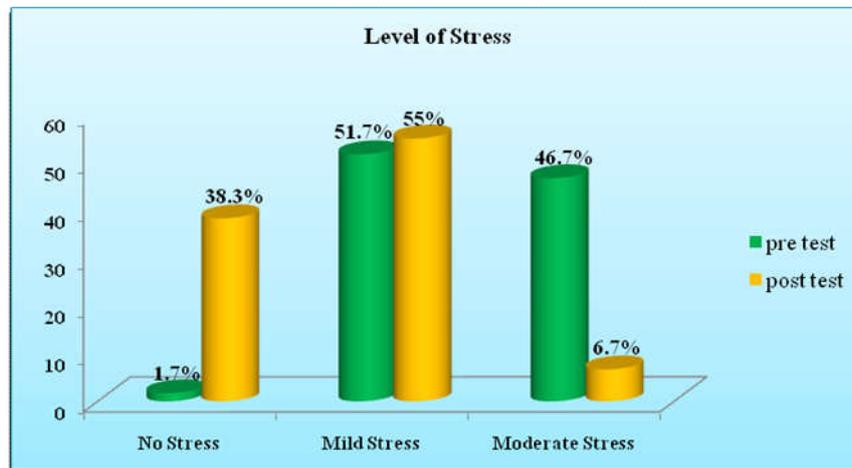
## STATEMENT OF THE PROBLEM

**A Study to Assess the Effectiveness of Laughter Therapy on Stress and Anxiety among Elderly at selected Old Age Home, Puducherry.**

**Table 1. Assessment of pre-test and post-test level of stress among elderly**

(N = 60)

LEVEL OF STRESS	PRE-TEST		POST-TEST	
	Frequency (n)	Percentage (%)	Frequency (n)	Percentage (%)
No stress (0-16)	1	1.7	23	38.3
Mild (17-24)	31	51.7	33	55
Moderate(25-32)	28	46.7	04	6.7
Total	60	100	60	100

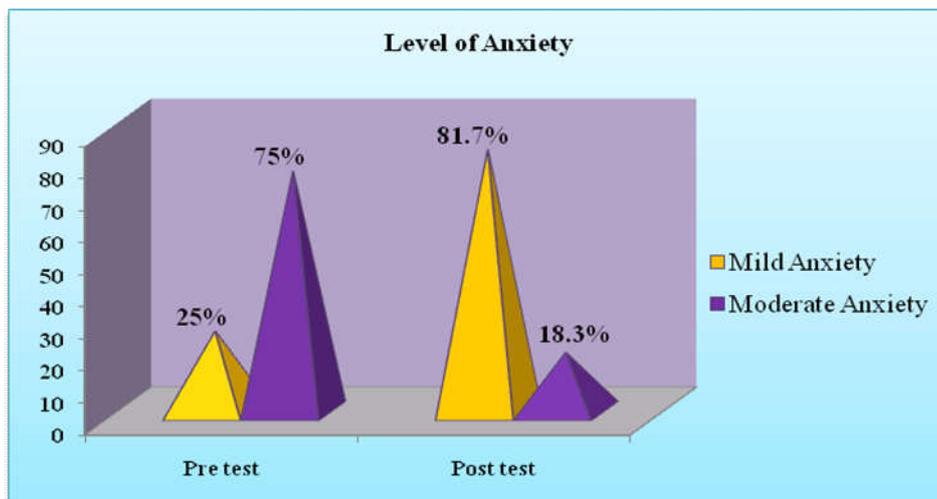


**Figure 1.**

**Table 2. Assessment of pre-test and post-test level of anxiety among elderly**

(N = 60)

LEVEL OF ANXIETY	PRE-TEST		POST-TEST	
	Frequency (n)	Percentage (%)	Frequency (n)	Percentage (%)
Mild (17-24)	15	25	49	81.7
Moderate (25-32)	45	75	11	18.3
Total	60	100	60	100



**Figure .2**

**Table 3. Effectiveness of laughter therapy on level of stress among elderly**

Stress level	Median	WilcoxonSignedRankTest	P-value (0.000)
Pre-test	23.5	-6.383	<0.001 ***HSS
Post-test	17.5		

\*\*\*HSS – Highly Statistically Significant

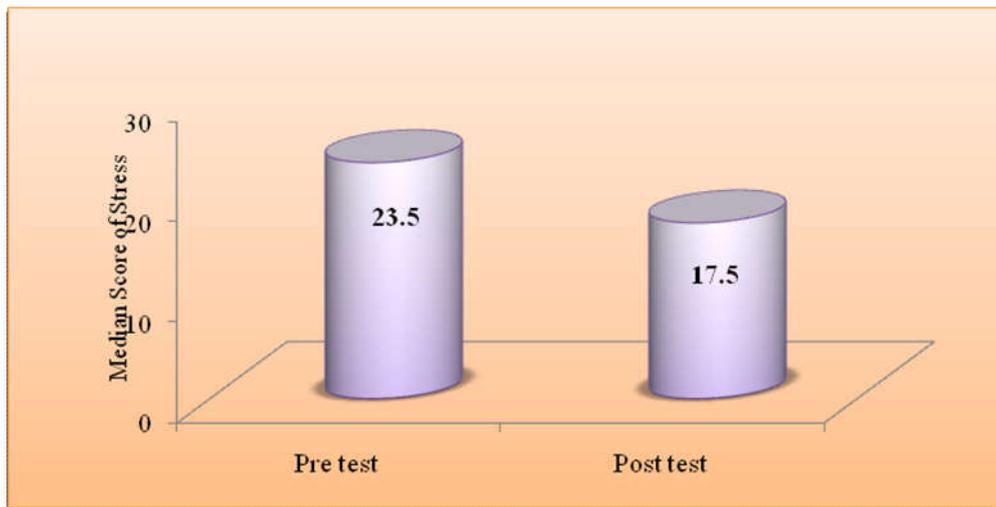


Figure 3.

Table 4. Effectiveness of laughter therapy on level of anxiety among elderly

Anxiety level	Median	WilcoxonSignedRankTest	P-value (0.000)
Pre-test	19	-6.292	<0.001 ***HSS
Post-test	16		

\*\*\*HSS – Highly Statistically Significant

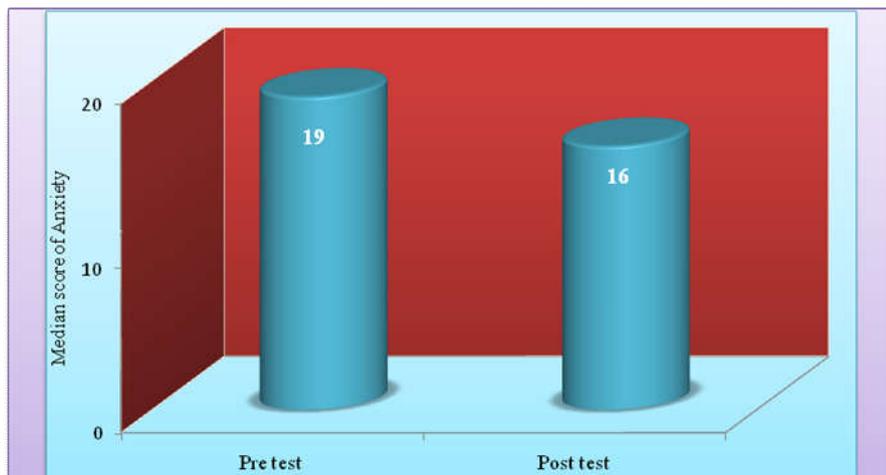


Figure 4.

**OBJECTIVES OF THE STUDY**

- To assess the level of stress and anxiety among elderly population.
- To evaluate the effectiveness of laughter therapy on stress and anxiety among elderly.
- To associate the level of stress and anxiety with the selected demographic variables.

**HYPOTHESES**

- **H<sub>1</sub>**–There is a difference in the level of stress and anxiety before and after laughter therapy among elderly.
- **H<sub>2</sub>** – There is an association between the level of stress and anxiety among elderly and the selected demographic variables.

**METHODOLOGY**

Pre-experimental study with one group pre-test and post-test design was used to assess the Effectiveness of Laughter Therapy on Stress and Anxiety among Elderly at selected Old Age Home, Puducherry. The samples of 60 elderly both male and female residing at the Hospice Home for the aged, Puducherry, were selected by using simple random sampling technique (lottery method). The data was collected by using demographic profiles such as age, sex, religion, educational status, marital status, source of income, mode of admission, duration of stay in old age home, if the spouse is alive/ whether he/she is residing in this home, family support. Pre-test was done by using Modified Cohen Perceived stress scale<sup>8</sup> (reliability score r=0.909), it containing 10 questions and the questions asked about the feelings and thoughts during the Past Month.

Hamilton Anxiety Rating scale (Hamilton, 1959) (reliability score  $r=0.936$ ), this scale consists of 14 items, each defined by a series of symptoms, and measures both psychic anxiety (mental agitation and psychological distress) and somatic anxiety (physical complaints related to anxiety). The subjects were divided into 3 groups each consisting of 20 elderly. Laughter therapy was administered for the duration of 20 minutes daily for 21 days and the post test was conducted. The data were organized and analyzed in terms of both descriptive and inferential statistics by using Wilcoxon Signed Rank Test and Chi-square test (Antonisamy, 2010). And the steps of laughter therapy (Deep Breathing, Laughing with clapping, Laughing Waves, Welcome Laughter, Child Like Playfulness, Closing Technique: Laughter Relaxation) (Madan Kataria, ?).

## MAJOR FINDINGS AND DISCUSSION OF THE STUDY

The Major findings of the study was discussed by using Research Objectives

### OBJECTIVES OF THE STUDY

- To assess the level of stress and anxiety among elderly
- To evaluate the effectiveness of laughter therapy on stress and anxiety among elderly
- To associate the level of stress and anxiety with the selected demographic variables

#### The first objective of the present study was to assess the level of stress and anxiety among elderly

Table 1 and Figure 1 reveals that, out of 60 elderly, 1 (1.7%) of them have no stress, 31 (51.7%) of them had mild level of stress and 28 (46.7%) of them had moderate level of stress. After Laughter therapy for 21 days, the level of stress reduced to no stress among 23 (38.3%) of elderly, mild stress among 33 (55%) of elderly and moderate stress among 4 (6.7%) of elderly. Table 2 and Figure 2 reveal that all the 60 elderly have undergone assessment. The level of anxiety among 60 elderly in pre-test: 15 (25%) of the elderly had mild anxiety and 45 (75%) of them had moderate anxiety. After laughter therapy, the level of anxiety reduced to mild anxiety among 49 (81.7%) of elderly and moderate anxiety among 11 (18.3%) of elderly.

#### The second objective was to evaluate the effectiveness of laughter therapy on the level of stress and anxiety among elderly

Table 3 and Figure 3 shows that the post-test level of stress median score (17.5) was significantly less than the pre-test level of stress median score (23.5) by using Wilcoxon Signed Ranks test (-6.383) and indicates that laughter therapy is significantly effective in reducing stress at  $P$ -value  $<0.001$ . Table 4 and Figure 4 shows that the post-test level of anxiety median scores (16) was significantly less than the pre-test level of anxiety median scores (19) by using Wilcoxon Signed Rank Test (-6.383) and indicates that laughter therapy is significantly effective in reducing anxiety at  $P$ -value  $<0.001$ . Hence the findings revealed that laughter therapy was effective in reduction of stress and anxiety among elderly. Hence the stated research hypothesis ( $H_1$ ) was accepted, i.e. there is a difference in the level of stress and anxiety before and after laughter therapy among elderly.

#### The third objective was to associate the level of stress and anxiety with the selected demographic variables

The data reveal that there is no association between the level of stress and anxiety with any of the demographic variables at  $P$ -value  $>0.05$ . Hence, the research hypothesis ( $H_2$ ) was rejected, i.e. there is an association between the level of stress and anxiety among elderly and the selected demographic variables.

### IMPLICATIONS

- The findings of the study clearly states that laughter therapy was most effective intervention in reducing the stress and anxiety among elderly residing at old age home.
- The study will create awareness among the general population to know the benefits of laughter therapy with the level of stress and anxiety among elderly.

### Conclusion

The study findings conclude that the post-test level of Stress and Anxiety score was lower than the pre-test score after administration of Laughter therapy. Thus this study proves that "Laughter therapy was effective in reduction of Stress and Anxiety among elderly", who residing in Old Age Home.

### Acknowledgement

I feel privileged to express my deep sense of gratitude to Dr. Renuka.K Principal, Kasturba Gandhi Nursing College and Mrs.Prabavathy.S, Associate Professor, Dept. of Psychiatric Nursing, Kasturba Gandhi Nursing College and Ms. Beniya Elizabeth Rani. R, M.Sc. (N), Assistant Professor, Kasturba Gandhi Nursing College, MGMCRI (Campus), Puducherry.

### ETHICAL CLEARANCE

- Ethical clearance has been obtained from the Institutional Human Ethics Committee. MGMCRI, Sri BalajiVidyapeeth, Puducherry.

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