



A STUDY TO EVALUATE THE EFFECTIVENESS OF GUIDED IMAGERY ON LEVEL OF ANXIETY AMONG ELDERLY FROM SELECTED OLDAGE HOMES

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Abstract: “A study to evaluate effectiveness of guided imagery on level of anxiety among elderly from selected old age homes.”

Objectives: • To assess the pre-test level of anxiety among elderly in experimental and control group. • To assess the post-test level of anxiety among elderly in experimental and control group. • To evaluate the effectiveness of guided imagery on level of anxiety among elderly. • To find out the association of pre interventional level of anxiety with selected demographic variables among experimental and control group.

Methods: The study was quasi- experimental non-equivalent non- randomized control group design in nature. Quantitative research approach was adopted for study. Sample size was 60 that consisted of elderly from selected old age homes. Non- probability x purposive sampling technique was used for the data collection. Guided imagery was provided for 15 minutes to experimental group. The data collection done by using standardized tool Hamilton anxiety rating scale. Then analyzed by using descriptive and inferential statistics.

Results: The study tool had demographic variables based on age, gender, marital status, religion, education, type of family, source of income, monthly income, no. of children, if spouse is alive, whether he/she is residing in the old age home, duration of stay in the old age home, type of admission, no. of visits by visitors, health issues if any. Findings related to effectiveness of guided imagery on level of anxiety shows that pre-test score of anxiety in experimental group was 8 (26.7%) had mild anxiety, 17 (56.7%) had mild to moderate anxiety, 5 (16.7%) had moderate to severe anxiety. Where as in control group 3 (10.0%) had mild anxiety, 21(70.0%) had mild to moderate anxiety and 6 (20.0%) had moderate to severe anxiety. Post-test results shows, in experimental group 19 (63.3%) had mild anxiety, 10 (33.3%) had mild to moderate anxiety and 1(3.3%) had moderate to severe anxiety and in Control group 02 (6.7%) had mild anxiety 21 (70.0%) had mild to moderate anxiety and 07(23.3%) had moderate to severe anxiety. Result shows average change in anxiety score in experimental group was 3.6 and in control group was -0.4. Changes in anxiety score among

elderly in experimental group was more than that of control group. Since p-value xi corresponding to a number of visits by visitors was small (less than 0.05), the demographic variable number of visits by visitors was found to have a significant association with anxiety among elderly staying in old age homes. So, it is evident that the guided imagery is significantly effective in reducing anxiety level among elderly. Conclusion: The conclusion drawn on the basis of findings of the study shows that there was significant change in level of anxiety among elderly after intervention of guided imagery and hence, it indicates that Guided Imagery was effective in reducing the level of anxiety in elderly residing in old age homes.

Keywords: Anxiety, Guided Imagery, Old age homes, Elderly.

I. INTRODUCTION

According to WHO, health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.¹

According to data from population projections for India and States 2011- 2036, a report published by the National Commission on Population in July 2020, India's senior population has been growing since 1961. This has been ascribed to improved healthcare and economic well-being, which has resulted in increased life expectancy. The elderly population increased by more than a 2 third between 2001 and 2011. This rise will be 34 million in 2011-21 and 56 million in 2021-31. According to the 2020 National Commission on Population study, India would have almost 138 million senior people in 2021, with 67 million men and 71 million women. The senior population is growing at a faster rate than the general population. As a result, the percentage of elderly people in the general population has risen. While the overall population grew by 18% from 2001 to 2011 and 12.4% from 2011 to 21, the elderly population grew by 36% in each of those two decades.²

The current study examines elderly mental health challenges as well as a future roadmap for India. Anxiety is a widespread ailment among the elderly, affecting 10-20% of the population, despite the fact that it is frequently untreated. The most common type of anxiety is phobia, which occurs when a person is afraid of certain objects, locations, or occurrences. Anxiety is the most prevalent mental health condition among older women, and the second most common mental health problem among males, behind substance misuse. Anxiety disorders in the elderly are frequently mistreated for a variety of reasons. Many elderly people are unaware of or dismiss their symptoms. When they do, they may be hesitant to talk to their doctors about their feelings. Some seniors may refuse treatment because they have experienced anxiety symptoms for most of their life and believe they are normal.³

Guided imagery is a method for managing your stress. It's a relaxation technique that involves visualizing positive, peaceful settings like a beautiful beach or a peaceful meadow. This technique is also known as visualization or guided meditation. According to research, guided imagery may help: 1. To reduce stress and anxiety 2. To promote relaxation 3. To ease various symptoms related to stress.

Guided imagery is a sort of meditation or concentrated relaxation. To calm your mind, focused relaxation entails focusing on a certain item, sound, or sensation. You think about a serene area or scenario while using guided imagery. Through relaxation and mindfulness, the goal is to promote a tranquil condition.⁴

NEED OF THE STUDY:

The United Nations has designated India as an 'ageing country,' with 8.6% of the total population over the age of 60. By 2050, this figure is predicted to triple, accounting for 20% of the population. According to epidemiological data, anxiety is a common serious health issue in later life. It has been linked to a higher risk of mortality⁵, disability⁶ and significant quality of life (QOL) impairment.⁷

The prevalence of anxiety disorders in older persons was shown to range from 3.2% to 14.2%, according to a recent review by Wolitzky-Taylor et al.⁸ More than 103 million people in India are above the age of 60, or 8.6% of the country's overall population. According to a recent study, it will reach 12.2% by 2026.⁹ Anxiety

levels in the elderly range from 1.2% to 15% in community samples, and from 1% to 28% in clinical settings. Anxiety symptoms are substantially more common, with rates ranging from 15% to 52.3% in population samples and 15% to 56% in clinical samples. Anxiety can have a negative impact on one's quality of life.

Based on the idea of the mind-body link, guided imagery is a practise in which mental health experts assist people in therapy to concentrate on mental images in order to create sensations of relaxation. The interplay between the body and the mind is supported by research on the mind-body link as a key element in a person's general health and well-being. Through guided therapeutic imaging, one can use their imagination to enhance both their emotional and physical well-being.

Research shows guided imagery to be helpful in the treatment of a number of concerns, including: • Stress • Anxiety • Depression • Substance abuse • Grief • Posttraumatic stress • Relationship issues • Diminished self-care • Family and parenting issues¹⁰

In recent years, there has been an increase in the use of mindfulness practices in western culture. There are a host of mindfulness practices including relaxation techniques, meditation, and guided imagery. Mindfulness techniques have been used by physicians, therapists, nurses, and trainers to treat pain, depression, and anxiety. Guided imagery is a simple, low cost, and effective tool for reduction in pain and improved well-being. Studies show that the brain stimulation through guided imagery can affect the central nervous system which can contribute to a positive impact in all physical and mental areas of an elder person's life.

OBJECTIVES:

- To assess the pre-test level of anxiety among elderly in experimental and control group.
- To assess the post-test level of anxiety among in elderly in experimental and control group.
- To evaluate the effectiveness of guided imagery on level of anxiety among elderly.
- To find out the association of pre interventional level of anxiety with selected demographic variables among experimental and control group.

HYPOTHESIS:

(All hypothesis will be tested at 0.5 level of significance.)

H₁: There will be significant difference between pre-test and post-test level of anxiety among elderly in experimental and control group.

H₂: There will be significant association between pre-test level of anxiety and selected demographic variable in experimental and control group.

RESEARCH APPROACH: Quantitative research approach.

RESEARCH DESIGN: Quasi-experimental non-equivalent non-randomized control group design.

POPULATION: Elderly from selected old age homes.

SAMPLE SIZE: Total sample size of the study consist of 60 participants.

SAMPLING TECHNIQUE: Purposive sampling technique.

DESCRIPTION OF FINAL TOOL

A standardized tool was used to assess the level of anxiety. The questionnaire consisted of the following: -

Part I

Consent form

Part II

Section A: Structured questionnaire to assess demographic variable (Age, gender, marital status, education, type of family, religion, source of income, monthly family income, number of children, spouse residing in the same old age home, duration of stay, type of admission, number of visits by visitors and any disease).

Section B: Standardized tool to assess the level of anxiety among elderly. Level of anxiety was assessed by using Hamilton anxiety rating scale.

SCORING

- There were 14-item brief self-reported measure of anxiety in Hamilton anxiety rating scale.
- There were five responses for each of the 14 questions. The scoring for each question can range from 0-4.

- 0 = Not present, 1 = Mild, 2 = Moderate, 3 = Severe, 4 = Very severe.
- Scoring will be done on a scale of 0-56, which indicates;

ORGANIZATION OF THE DATA

The analyzed data has been organized and presented in the following sections:

Section I: - Frequency and percentage distribution of samples (elderly from old age) according to demographic data.

Section II: - Analysis of data related to the pre-test level of anxiety among elderly from experimental and control groups.

Section III: - Analysis of data related to the post-test level of anxiety among elderly from experimental and control groups.

Section IV: - Analysis of data related to the effectiveness of guided imagery on level of anxiety among elderly.

Section V: - Analysis of data related to the association of anxiety with selected demographic variables among experimental and control group.

Section I:

Frequency and percentage distribution of samples (elderly from old age) according to demographic data.

Table 1: Frequency and percentage distribution of samples (elderly from old age) according to demographic data.

N=30, 30

Sr. No.	Score	Level			
1	< 17	Mild severity			
2	18-24	Mild to moderate severity			
3	25-30	Moderate to Severe			

Demographic variable	Experimental group		Control group	
	Freq	%	Freq	%
Age				
60-70 years	14	46.7%	12	40.0%
71-80 years	14	46.7%	10	33.3%
≥81 years	2	6.7%	8	26.7%
Gender				
Male	3	10.0%	15	50.0%
Female	27	90.0%	15	50.0%
Marital status				
Unmarried	6	20.0%	7	23.3%
Separated/ Divorced	7	23.3%	5	16.7%
Widow/Widower	17	56.7%	18	60.0%
Religion				
Hindu	26	86.7%	21	70.0%
Christian	0	0.0%	5	16.7%
Muslim	1	3.3%	2	6.7%
Others	3	10.0%	2	6.7%
Education				
Primary	24	80.0%	18	60.0%
High school	5	16.7%	5	16.7%

Higher secondary	1	3.3%	3	10.0%
Graduate	0	0.0%	3	10.0%
Post Graduate	0	0.0%	1	3.3%
Type of family				
Nuclear	14	46.7%	20	66.7%
Joint	13	43.3%	7	23.3%
Single parent	3	10.0%	3	10.0%
Source of income				
Pensioners	2	6.7%	7	23.3%
Dependent	28	93.3%	22	73.3%
Others	0	0.0%	1	3.3%
Monthly income				
≤ 5000	30	100.0%	26	86.7%
6000- 20,000	0	0.0%	4	13.3%
21,000-50,000	0	0.0%	0	0.0%
≥ 51,000	0	0.0%	0	0.0%
Number of children				
No children	27	90.0%	17	56.7%
One	1	3.3%	8	26.7%
Two	2	6.7%	2	6.7%
More than two	0	0.0%	3	10.0%
If spouse is alive, whether he/she is residing in the old age home				
Yes	0	0.0%	1	3.3%
No	30	100.0%	29	96.7%
Duration of stay in the old age home				
Less than 1 year	6	20.0%	8	26.7%
2-3 years	5	16.7%	8	26.7%
4-5 years	7	23.3%	5	16.7%
More than 5 years	12	40.0%	9	30.0%
Type of admission				
Voluntary	28	93.3%	27	90.0%
Forced	2	6.7%	3	10.0%
Number of visits by visitors				
Monthly	14	46.7%	16	53.3%
Once in 3 months	9	30.0%	7	23.3%
Once in six months	2	6.7%	1	3.3%
No visitor	5	16.7%	6	20.0%
Health issues if any				
Arthritis	0	0.0%	1	3.3%
ASD	0	0.0%	1	3.3%
Asthma	2	6.7%	1	3.3%
Diabetes	2	6.7%	3	10.0%
Diabetes, Cardiac problem	1	3.3%	0	0.0%
Hypertension	10	33.3%	11	36.7%

Hypertension, Asthma	2	6.7%	0	0.0%
Hypertension, asthma, arthritis	0	0.0%	1	3.3%
hypertension, diabetes	4	13.3%	1	3.3%
Severe acidity	1	3.3%	0	0.0%
Thyroid, hypertension	1	3.3%	0	0.0%
Thyroid	0	0.0%	1	3.3%

Section II:

Analysis of data related to the pre-test level of anxiety among elderly from experimental and control groups.

Table 2: Pre-test level of anxiety among elderly from experimental and control groups

N=30, 30

Anxiety	Experimental		Control	
	Freq	%	Freq	%
Mild (score up to 17)	8	26.7%	3	10.0%
Mild to moderate (score 18-24)	17	56.7%	21	70.0%
Moderate to severe (Score 25-30)	5	16.7%	6	20.0%

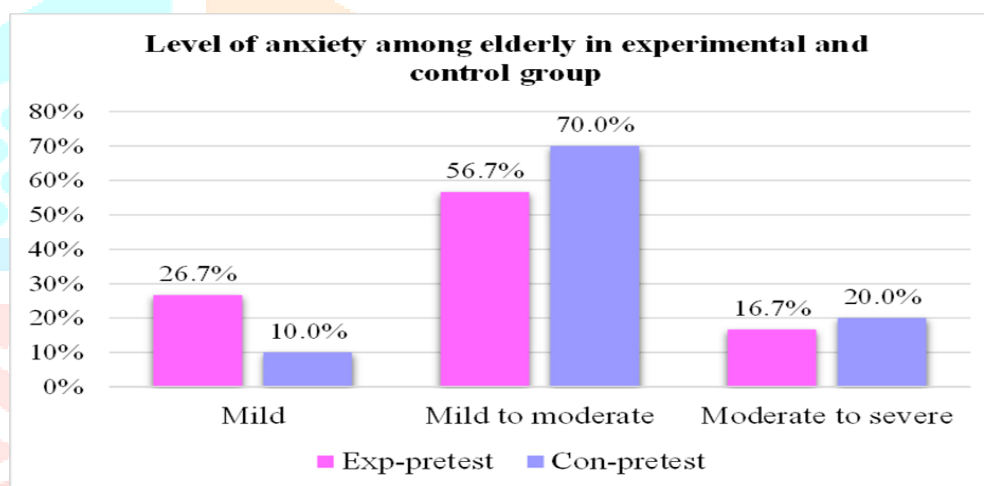


Fig. no. 1: Bar diagram showing pre-test level of anxiety among elderly in experimental and control group

Section III:

Analysis of data related to the post-test level of anxiety among elderly from experimental and control groups

Table 3: Post-test level of anxiety among elderly experimental and control groups

N=30, 30

Anxiety	Experimental				Control			
	Pre-test		Post-test		Pre-test		Post-test	
	Freq	%	Freq	%	Freq	%	Freq	%
Mild (score up to 17)	8	26.7%	19	63.3%	3	10.0%	2	6.7%
Mild to moderate (score 18-24)	17	56.7%	10	33.3%	21	70.0%	21	70.0%
Moderate to severe (Score 25-30)	5	16.7%	1	3.3%	6	20.0%	7	23.3%

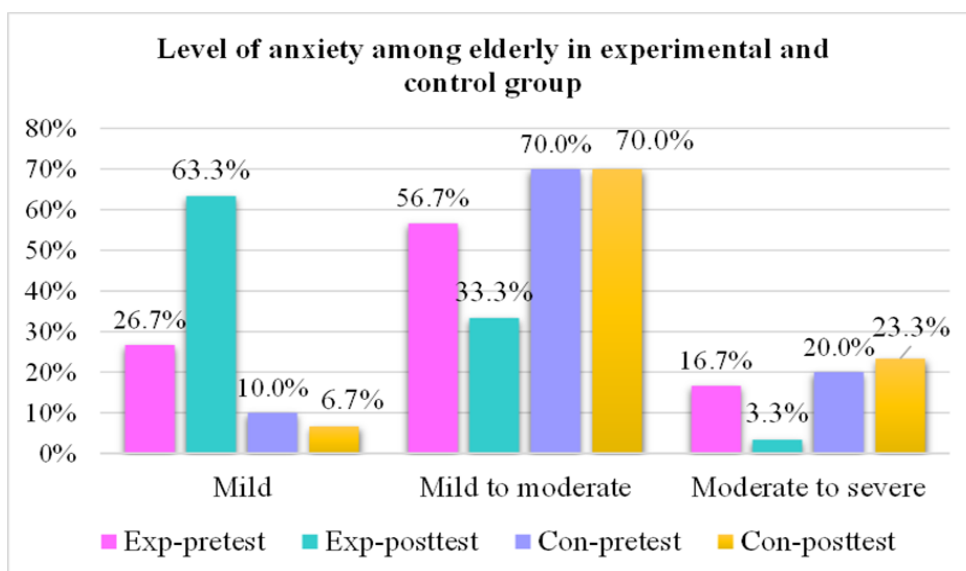


Fig. no. 2: Bar diagram showing post-test level of anxiety among elderly in experimental and control group

Section IV:

Analysis of data related to the effectiveness of guided imagery on level of anxiety among elderly.

Table 4: Paired t-test for the effectiveness of guided imagery on level of anxiety among elderly in an experimental group.

N=30

Group	Mean	SD	T	df	p-value
Pre-test	20.7	3.9	14.7	29	0.000
Post-test	17.0	3.6			

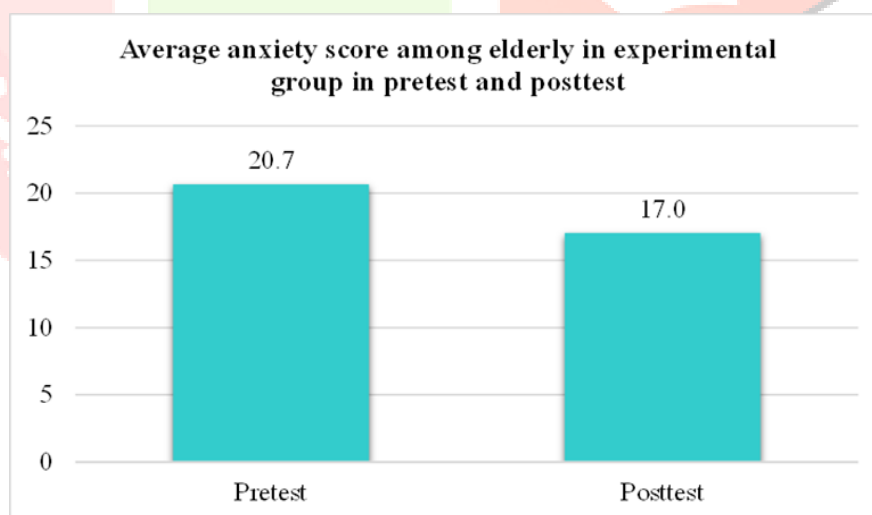


Fig. no. 3: Bar diagram showing average anxiety score among elderly in experimental group in pre-test and post-test

Table 5: Two sample t-test for the comparison of average change in anxiety score among elderly in an experimental and control group

N=30, 30

Group	Mean	SD	T	df	p-value
Experimental	3.6	1.4	13.9	58	0.000
Control	-0.4	0.8			

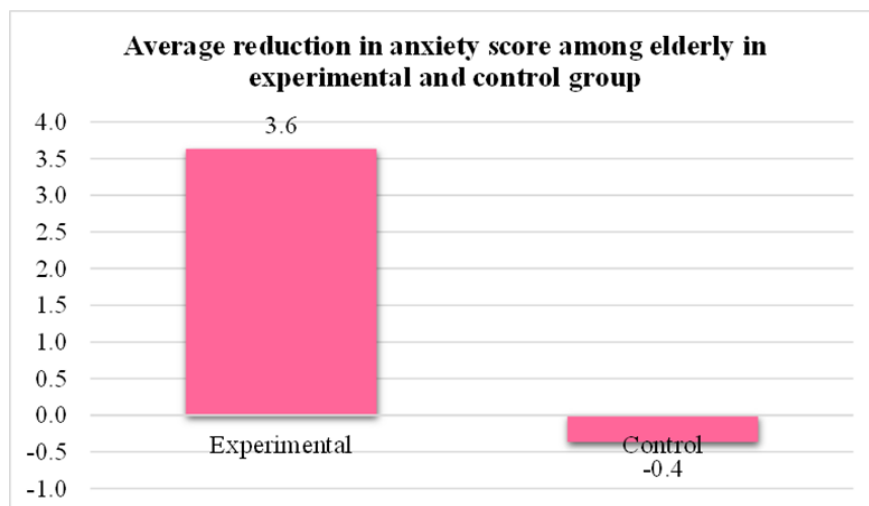


Fig. no. 4: Bar diagram showing average reduction in anxiety score among elderly in experimental and control group

Section V:

Analysis of data related to the association of anxiety with selected demographic variables among experimental and control group.

Table 6: Fisher's exact test for the association of anxiety with selected demographic variables

N=60

Demographic variable		Anxiety			p-value
		Mild	Mild to moderate	Moderate to severe	
Age	60-70 years	5	15	6	0.394
	71-80 years	6	14	4	
	≥81 years	0	9	1	
Gender	Male	2	11	5	0.433
	Female	9	27	6	
Marital status	Unmarried	4	7	2	0.502
	Separated/ Divorced	1	10	1	
	Widow/Widower	6	21	8	
Religion	Hindu	10	28	9	0.468
	Christian	0	5	0	
	Muslim	0	3	0	
	Others	1	2	2	
Education	Primary	8	25	9	0.967
	High school	2	7	1	
	Higher secondary	1	3	0	
	Graduate	0	2	1	
	Post Graduate	0	1	0	
Type of family	Nuclear	6	22	6	0.676
	Joint	3	12	5	
	Single parent	2	4	0	
Source of income	Pensioners	1	6	2	1.000
	Dependent	10	31	9	

	Others	0	1	0	
Monthly income	≤ 5000	10	36	10	0.619
	6000- 20,000	1	2	1	
Number of children	No children	9	26	9	1.000
	One	1	6	2	
	Two	1	3	0	
	More than two	0	3	0	
If spouse is alive, whether he/she is residing in the old age home	Yes	0	1	0	1.000
	No	11	37	11	
Duration of stay in the old age home	Less than 1 year	4	9	1	0.688
	2-3 years	3	7	3	
	4-5 years	2	7	3	
	More than 5 years	2	15	4	
Type of admission	Voluntary	10	35	10	1.000
	Forced	1	3	1	
Number of visits by visitors	Monthly	8	21	1	0.012
	Once in 3 months	1	10	5	
	Once in six months	0	3	0	
	No visitor	2	4	5	
Health issues if any	Arthritis	0	1	0	0.316
	ASD	0	1	0	
	Asthma	0	2	1	
	Diabetes	0	5	0	
	Diabetes, Cardiac problem	0	0	1	
	Hypertension	5	13	3	
	Hypertension, Asthma	0	1	1	
	Hypertension, asthma, arthritis	0	0	1	
	hypertension, diabetes	2	2	1	
	Hyperthyroidism	0	0	1	
	Sever acidity	0	1	0	
	Thyroid, hypertension	1	0	0	
	No issue	3	12	2	

Since p-value corresponding to a number of visits by visitors was small (less than 0.05), the demographic variable number of visits by visitors was found to have a significant association with anxiety among elderly staying in old age homes.

DISCUSSION:

The research study findings have been discussed with relevance to the objectives and with other research study findings.

- Present study depicts in pre-test, 26.7% of the elderly in old age home from experimental group had mild anxiety (score up to 17), 56.7% of them had mild to moderate anxiety (Score 18-24) and 16.7% of them had moderate to severe anxiety (Score 25-30). 10% of the elderly in old age home from control group had mild anxiety (score up to 17), 70% of them had mild to moderate anxiety (Score 18-24) and 20% of them had moderate to severe anxiety (Score 25-30).
- In present study post-test result shows, 63.3% of the elderly in old age home from experimental group had mild anxiety (score up to 17), 33.3% of them had mild to moderate anxiety (Score 18-24) and 3.3% of them had moderate to severe anxiety (Score 25-30). In post-test, 6.7% of the elderly in old age home from control group had mild anxiety (score up to 17), 70% of them had mild to moderate anxiety (Score 18-24) and 23.3% of them had moderate to severe anxiety (Score 25-30). This indicates that the anxiety among elderly residing in old age homes improved remarkably after guided imagery.
- In present study, researcher applied paired t-test for the effectiveness of guided imagery on level of anxiety among elderly in an experimental group. Average anxiety score in pre-test was 20.7 which reduced to 17 in post-test. T-value for this test was 14.7 with 29 degrees of freedom. Corresponding p-value was small (less than 0.05).
- In present study, the researcher applied two sample t-test for the effectiveness of guided imagery on level of anxiety among elderly in an experimental group. Average change in anxiety score in experimental group was 3.6 which was -0.4 in control group. T-value for this test was 13.9 with 58 degrees of freedom. Corresponding p-value was small (less than 0.05), the research hypothesis H_1 is accepted.
- In present study, Fisher's exact test was used to find out association of anxiety with selected demographic variables. Since p-value corresponding to a number of visits by visitors was small (less than 0.05), the demographic variable number of visits by visitors was found to have a significant association with anxiety among elderly staying in old age homes. Hence, the research hypothesis H_2 accepted.

CONCLUSION:

This study concludes that the guided imagery techniques helped the elderly people to reduce their anxiety for those who are staying in the old age home. They felt happy about the presence of the investigator who established closed rapport. Most of them verbalized that they got satisfaction.

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