



## Effectiveness of guided imagery on level of anxiety among elderly residing in old age homes in selected areas

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### Abstract

**Statement:** 'Effectiveness of Guided Imagery on level of anxiety among elderly residing in old age homes in selected areas.'

**Objectives:** To assess pre-existing level of anxiety among elderly residing in old age homes, To assess effectiveness of Guided Imagery on level of anxiety among elderly in old age homes. And To find association between pre-test study findings with selected background variables.

**Methodology:** A Quantitative Quasi experimental non-equivalent control group design. The sample consisted of 60 s old age people. (30 experimental and 30 control group).

**Sampling technique:** Probability cluster sampling technique used to select the samples.

**Data collection technique and tool preparation:** Semi- structured questionnaires and 4- Point Likert Scale to assess level of anxiety among elderly.

**Results:** Findings related to effectiveness of guided imagery on level of anxiety In Experimental group 29 (96.66%) mild anxiety and 01 (3.33%) had moderate anxiety. In Control group 01 (3.33%) had mild anxiety 25 (83.33%) had moderate anxiety and 04 (13.33%) had severe anxiety. However, a significant association was found between the level of anxiety and the marital status of the elderly regarding level of anxiety. ( $\chi^2= 8.148$ )

**Conclusion:** It indicates that Guided Imagery was effective in improving the level of anxiety in elderly residing in old age homes.

**Keywords:** effectiveness of guided imagery, level of anxiety, elderly, old age homes

### Introduction

Dubey A, Bhasin S, Gupta N, Sharma N (2011) Ageing is a normal process, which is associated with physical, social and psychological changes. The number of older populations of both developed and developing countries has considerably increased in the 20th century. While some dimensions grow and expand over time, others decline. "Old age" refers to a phase of human life known for reduced physical ability, declining mental ability, the gradual giving up of role playing in socio-economic activities, and a shift to a status of economic dependence. Old age is called "dark" not because the light fails to shine but because people refuse to see it <sup>[1]</sup>.

According to situation Analysis of the Elderly in India (2011) India has thus acquired the label of "an ageing nation" with 7.7% of its population being more than 60 years old. The longer life expectancy and their higher number per 1000 males is showing increase in population of elderly females. With an increase in the geriatric population and an expected decline in the population of the middle aged, the burden of caregiving is bound to increase and lead to some unforeseen problems, one of them being Institutionalization of elderly <sup>[2]</sup>.

Elakkuvana B.R (2017) Anxiety is usually considered a normal reaction to a realistic danger or threat to biological integrity or self-concept. Normal anxiety dissipates when the danger or threat is no longer present. It is difficult to draw a precise line between normal and abnormal anxiety. Normally is determined by societal standards. There may even be regional differences within a country or cultural

difference within region. Anxiety can be considered abnormal or pathological if: It is out of proportion to the situation that is creating it. The anxiety interferes with social, occupational or other important area of functioning <sup>[3]</sup>.

Franks J. (2006) Some experts suggest that in general anxiety is equally prevalent in all adult age groups but perhaps is less often reported by seniors, and not as accurately diagnosed and treated as in younger people. A large study published in the American Journal of Psychiatry (1998, A. Beekman) found that 10% of adults 55 to 85 years of age had elderly anxiety disorders-the same prevalence as for other age groups, depression an alteration in mood that is expressed by feeling of sadness, despair, and pessimism. There is a loss of interest in usual activities, and somatic symptoms may be evident. Changes in appetite and sleep patterns are common <sup>[4]</sup>.

Taha T. (2006) Anxiety are more prevalent in elderly living at geriatric homes than in elderly living at their own homes and going to geriatric clubs regularly <sup>[5]</sup>.

Banker K, Prajapati B, Kedia G. (2011) Presently, there are 1018 geriatric homes in India today. Out of these, 427 homes are free of cost while 153 geriatric homes are on pay and stay basis, 146 homes have both free as well as pay and stay facilities and detailed information is not available for 292 homes. A total of 371 geriatric homes all over the country are available for the sick and 118 homes are exclusively for women <sup>[6]</sup>.

Noreen C, Frisch L, Frisch E. (2005) A technique that goes hand with relaxation, guided imagery build on relaxation

response and adds visual or other sensory images to enhance the relaxation and/ or to present an images for the client that is one of healing. Many clinical observations suggest that after the visualizing an imagined scene reacts on the individual's behaviour and provides pleasant effect to them. The usefulness of guided imagery techniques have been shown to be effective in helping individuals learn or modify behaviours such as: Learning to relax, changing or controlling their event, belief, negative emotions in response to a particular situation. Preparing themselves for changes they are likely to have to deal with in the future. Eliminating or reducing unacceptable behaviours. Increasing effective pain management, coping with difficult situations, Learning new and sensible behaviours. Coping with how they behaved in an earlier situation in order to feel less shame or guilt, experimenting with ways to manage stressful or anxiety-producing situations (giving a presentation in public) by mentally rehearsing the needed behaviour. Relaxation and guided imagery technique have great use in nursing practice. As mentioned earlier, there is use in preparing clients to go through procedures, but there are other documented uses as well [7].

### Background of the Study

Elakkuvana BR. (2017) Individuals have experienced anxiety throughout the ages. Yet anxiety, like fear, was not clearly defined or isolated as a separate entity by psychiatrist or psychologists until the 19<sup>th</sup> and 20<sup>th</sup> centuries. In fact, what we know as anxiety was once solely identified by its physiological symptoms, focusing largely on the cardiovascular system. Freud first introduced the term anxiety neurosis in 1895. Freud wrote, "I call this syndrome anxiety neurosis" because all its components can be grouped round the chief symptom of anxiety" For many years, anxiety disorders were viewed as purely psychological or purely biological in nature. It is likely that various factors, including genetic, development, environment and psychological, play role in the etiology of anxiety disorders [8].

### Need of the Study

According Ageing and health WHO (2018) The world's population is ageing rapidly. Between 2015 and 2050, the proportion of the world's population over 60 years will nearly double from 12% to 22%. By 2020, the number of people aged 60 years and older will outnumber children younger than 5 years. In 2050, 80% of older people will be living in low- and middle-income countries. The pace of population ageing is much faster than in the past. All countries face major challenges to ensure that their health and social systems are ready to make the most of this demographic shift. Common conditions in older age include hearing loss, cataracts and refractive errors, back and neck pain and osteoarthritis, chronic obstructive pulmonary disease, diabetes, anxiety, depression, and dementia [9].

Ackerman, Turkoski (2000) Guided Imagery is a technique used by many natural or alternative medicine practitioners as well as some physicians and psychologists for aiding clients and patients to use mental imagery to help with anything from healing their bodies with elderly guided imagery to solving problems or reducing depression and anxiety. Guided Imagery is a therapeutic technique allowing individuals to use their own imagination to connect body and mind to achieve desirable outcomes [10].

### Problem Statement

'Effectiveness of Guided Imagery on level of anxiety among elderly residing in old age homes in selected areas.'

### Objectives

1. To assess pre-existing level of anxiety among elderly residing in old age homes.
2. To assess effectiveness of Guided Imagery on level of anxiety among elderly in old age homes.
3. To find association between pre-test study findings with selected background variables.

### Inclusion Criteria: Elderly people

1. who can read, write and understand English/ Marathi language.
2. age group of 60 – 75 yrs.
3. willing to participate.
4. present during the period of data collection.
5. able to relax for 20 to 25 min.
6. able to listen.
7. who score in between 31-60 on modified level of anxiety scale out of 60.

### b. Exclusion Criteria: Elderly people who are

1. Previously exposed to Guided Imagery Technique.
2. Elderly seriously ill during the period of data collection.

### c. Withdrawal Criteria

Samples can withdraw from research at any point of time during data collection.

### Hypothesis

**H<sub>01</sub>:** There is no significant difference between pre-test and post-test level of anxiety after implementation of Guided Imagery among experimental group. (at P=0.05)

**H<sub>02</sub>:** There is no significant difference between alterations in level of anxiety among elderly residing in old age homes of experimental and control group. (at P=0.05)

**H<sub>03</sub>:** There is no significant difference in pre-test study findings on the basis of background variables of samples.

### Research Approach

The research approach was selected as Quantitative approach

### Research Design

A Quasi experimental Non-equivalent control group was chosen for the study.<sup>11</sup>

The design widely used in educational research.

### Setting of the Study

Setting refers to the areas where the study is conducted.<sup>11</sup>

The study is conducted in the selected old age homes.

### Sample

In this study sample is the elderly people in between the age 60-75 residing in selected old age homes.

### Sample Size

Sample size for the study consists of 60 (30 experimental and 30 control group) old age people were selected as per availability and fulfilment of the present criteria.

**Tool and Techniques**

A tool is an instruments or equipment used for collecting the data.

**Method of data collection: Structured self-report questionnaires.**

**Description of tool**

Section wise Description of tool:

**Section A:** Consent form for screening test

**Section B:** Selection of samples based on screening test:

Screening test based on level of anxiety:

It consists of 20 questions based on 4-point likert scale each carries 0 to 3 scoring. So maximum score comes 60 and minimum score comes to be 0.

Those elderly who score in between 31-60 on modified level of anxiety scale was be included in this study.

**Section C:** Consent form for main study Demographic data of samples.

**Section D:** Demographic data of samples.

**Section E:** 4-point likert scale to assess level of anxiety It consists of 20 questions based on 4-point likert scale

**Section F:** Scoring keys:

Scoring keys for analyse the level of anxiety.

**Data Analysis and Interpretation**

This chapter deals with analysis and interpretation of the data collected from 60 elderly residing in old age homes.

**Organization of the Data**

The collected data is tabulated, analysed, organized and presented under the following headings:

**Section-1** Deals with the analysis of the demographic variables of the elderly people.

**Section-2** Deals with the analysis of the data related to pre-existing level of anxiety.

**Section-3** Deals with the analysis of the data related to effectiveness of guided imagery on level of anxiety.

**Section-4** To find association between pre-test study level of anxiety with selected background variables.

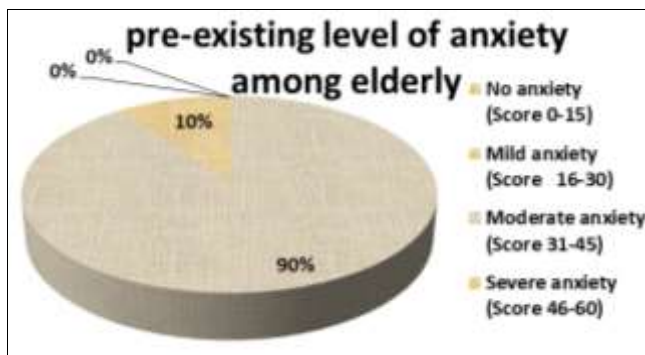
**Section -1 Deals with the Analysis of the Demographic Variables of the Elderly People.**

In demographic data total six questions. It included Age in years, Gender, Marital status, Education, Duration of staying in old age home and Dependency Index.

**Section -2 Deals with the Analysis of the Data Related to Pre-Existing Level of Anxiety.**

**Table 1:** Pre-existing level of anxiety among elderly.

Sr. No	Scoring key	Number of samples	Percentage (%)
1	No anxiety (Score 0-15)	0	0%
2	Mild anxiety (Score 16-30)	0	0%
3	Moderate anxiety (Score 31-45)	54	90%
4	Severe anxiety (Score 46-60)	06	10%
Total		60	100%



**Fig 1:** Pie diagram showing percentage wise distribution of elderly to their pre-existing level of anxiety.

The above table and Pie diagram showing Percentages wise distribution of respondents according to their level of anxiety among elderly before Guided Imagery depicts that 54 (90%) samples had moderate anxiety and 06 (10%) had severe anxiety.

**Section -3 Deals with the Analysis of the Data Related to Effectiveness of Guided Imagery on Level of Anxiety.**

**1. Analysis of data related to level of anxiety among elderly residing in old age homes.**

**Table 2:** Effectiveness of guided imagery on level of anxiety. (N=30 Experimental group, N=30 Control group)

Sr. No	Scoring key	Group I (Exp.)		Group II (Con.)	
		F	%	F	%
1	No anxiety (Score 0-15)	0	0%	0	0%
2	Mild anxiety (Score 16-30)	29	96.66%	01	3.33%
3	Moderate anxiety (Score 31-45)	01	3.33%	25	83.33%
4	Severe anxiety (Score 46-60)	0	0%	04	13.33%
Total		30	100%	30	100%

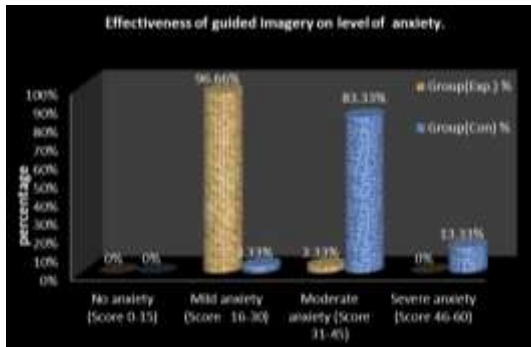


Fig 2: Column diagram showing percentage wise distribution of effectiveness of guided imagery on level of anxiety among elderly

The above table and column diagram showing Percentages wise distribution of respondents according to their level of anxiety among elderly after Guided Imagery depicts that, In Experimental group 29 (96.66%) mild anxiety and 01 (3.33%) had moderate anxiety.

In Control group 01 (3.33%) had mild anxiety 25 (83.33%) had moderate anxiety and 04 (13.33%) had severe anxiety. It indicates that Guided Imagery was effective in reducing the level of anxiety in elderly residing in old age homes.

**2. Paired t- test for effectiveness of Guided Imagery among elderly residing in old age homes.**

Table 3: Paired t- test was used for comparison of pre-test and post-test anxiety scores among elderly.

	Mean	SD	t	df	p-value
pre-test (Experimental)	41.03	3.39	16.05	29	0.05
post-test (Experimental)	27.36	3.19			

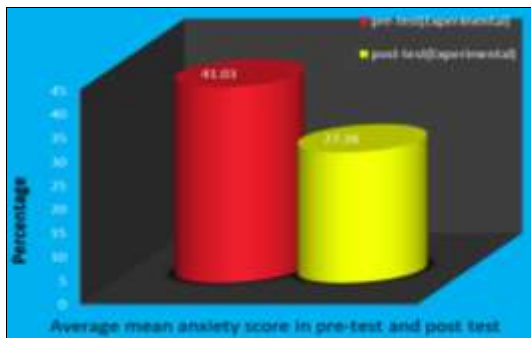


Fig 3: Diagram shows distribution of the subjects according to the average mean anxiety score in pre-test and post-test experimental group.

T-value was found to be 16.05 at 29 degree of freedom. P-value at 29 degrees of freedom was 0.000. Since the p-value is small (less than 0.05) or t-value is greater than p-value, the null hypothesis is rejected. Anxiety score in pretest was 41.03 which reduce to 27.36 in post-test. This indicates that anxiety of elderly improves significantly after guided imagery.

**3. Two sample t- test for effectiveness of Guided Imagery among elderly residing in old age homes.**

Table 4: Two sample t- test was used for compare the anxiety scores among elderly in experimental and control group.

	Mean	SD	t	df	p-value
Group I (Experimental)	12.1	4.76	20.32	58	0.05
Group II (Control)	0.3	5.34			

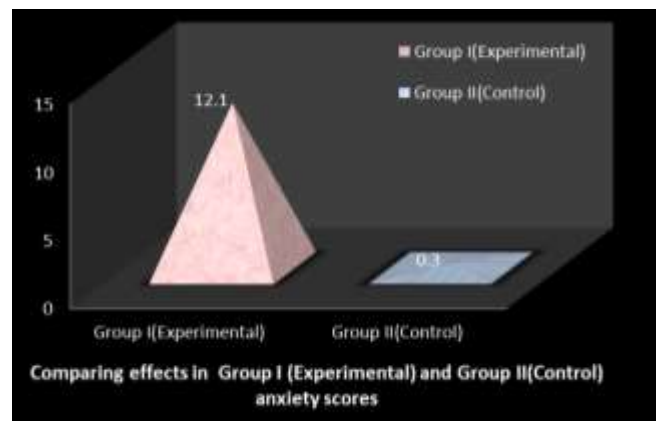


Fig 4: Distribution of the subjects according to the comparing effects in Group I(Experimental) and Group II(Control)

T-value was found to be 20.32 at 58 degree of freedom. P-value at 58 degrees of freedom was 0.000. Since the p-value is small (less than 0.05) or t-value is greater than p-value, the null hypothesis is rejected. The mean difference in anxiety score is 12.1 for experimental group which was 0.3 for control group. For experimental group the average change in anxiety score is significantly higher them that in control group. This indicates that anxiety of elderly improves significantly after guided imagery.

**Section -4 to find association between pre-test study level of anxiety with selected background variables.**

Table 5: Find association between pre-test study level of anxiety with selected background variables.

Demographic variables		Level of anxiety			Calculate d value	Tabulate d value
		Moderate anxiety	severe anxiety	Total		
Age in years	0-65	20	01	21	1.755	5.99
	65-70	26	03	29		
	Above 70	08	02	10		
Total		54	06	60		
Gender	Male	40	03	43	1.541	3.84
	Female	14	03	17		
Total		54	06	60		
Marital status	Married	17	00	17	8.148	7.82
	Single	07	00	07		
	Divorce	09	00	09		
	Widow/ Widower	21	06	27		

Total		54	06	60		
Education	Primary education	12	01	13	4.476	7.82
	Secondary education	22	05	27		
	Higher secondary education	13	00	13		
	Graduation & above	07	00	07		
Total		54	06	60		
Duration of staying in old age home	0-2 years	10	01	11	1.509	7.82
	3-4 years	29	03	32		
	5-6 years	09	02	11		
	Above 6 years	06	00	06		
Total		54	06	60		
Dependency Index	Depend on wife /Husband	06	01	07	1.032	7.82
	Depend on Son /Daughter	10	01	11		
	Pension	19	03	22		
	Other	19	01	20		
Total		54	06	60		

\* Significant at 0.05 level

Chi square values were calculated to find out the association between Pre-test study level of anxiety with selected background variables among elderly residing in old age homes in selected areas. The findings revealed that there was no significant association between Pre-test study level of anxiety with selected background variables like Age in years, Gender, Education, Duration of staying in old age home and Dependency Index. However, a significant association was found between the level of anxiety and the marital status of the elderly regarding level of anxiety. ( $\chi^2=8.148$ )

Samples scores in between 31-45 are having moderate anxiety.

Samples scores in between 46-60 are having severe anxiety.

**References**

1. Dubey A, Bhasin S, Gupta N, Sharma N. A study of elderly living in old age home and within family set-up in Jammu. *Stud Home Com Sci*, 2011; 5:93-8.
2. Situation Analysis of the Elderly in India. Ministry of Statistics and Programme Implementation. Government of India: Central Statistics Office, 2011, p. 5.
3. Elakkuvana BR. A text book of Mental (Psychiatric) Health Nursing 2<sup>nd</sup> ed. EMMESS Publication, 2017.
4. Franks J. Anxiety-missed-elderly. Year-2006 Last Updated, 2013. Available from: <http://www.webmd.com/anxiety-panic/guide>
5. Tomader Taha Abdul Rahman. Anxiety and Depression in lonely Elderly living at their own homes and going to geriatric clubs versus those living at geriatric homes. *AM J Geriatric Psychiatry* May, 2006.
6. Banker K, Prajapati B, Kedia G. Study of health profile of residents of geriatric home in Ahmedabad district. *NJCM*, 2011; 2:378-82.
7. Frisch N, Frisch L. Psychiatric mental health nursing. Australia: Delmar/Thomson Learning, 2006.
8. Elakkuvana BR. A text book of Mental (Psychiatric) Health Nursing 2<sup>nd</sup> ed. EMMESS Publication, 2017.
9. <https://www.who.int/news-room/fact-sheets/detail/ageing-and-health>
10. Ackerman & Turkoski. Guided Imagery is a technique used by many natural or alternative medicine practitioners, 2000.
11. Sharma SK. A text book of nursing research and statistics. 2<sup>nd</sup> edition.