

A Study to Assess the Effectiveness of Guided Imagery on Stress, Anxiety and Depression Among Geriatric at Selected Old Age Homes in Kanchipuram District A Pilot Study

S. Mary Metilda^{1*}, S.J. Nalini², Aruna¹, Prema Mohan Singh²

¹Right Con, Vanagaram, Chennai, India

²Faculty of Nursing, Sri Ramachandra University, Chennai, India

ABSTRACT

The aim of this study is to assess the effectiveness of guided imagery on stress, depression and anxiety among geriatric in selected old age homes, in Kanchipuram district. Ageing is a natural process which is necessary and thus being the end of the human life cycle. Perceiving ageing with fear is new phenomenon and is increasing and becoming more complex day by day, which is associated with functional disability. The ageing process produce profound changes that there will be 1–2% decline in functional ability per year. The functional disability in the aged comprises the three dimensions, physical, emotional and mental performance. The results declare that the relationship between the variables stress, depression and anxiety was significant at $p < 0.01$. The tool was reliable, and the study was practicable. The findings revealed that the guided imagery intervention was effective and can be implemented to reduce the geriatric stress, depression and anxiety.

Keywords: anxiety, depression, elderly, guided imagery, stress

***Corresponding Author**

E-mail: metildayovan@gmail.com

INTRODUCTION

The world's elderly population is 650 million. By 2050, the "grieving" population is forecast to reach 2 billion. By 2050 about 80% of the elderly will be living in developing countries. There are 81 million older people in India. The number of persons above the age of 60 years is fastly growing, especially in India. India is the second most popular country in the world which has 76.6 million people at over the age of 60, constituting above 7.7% of total population.

Depression, anxiety and stress are more common in geriatric people these can affect anyone of any culture, age or background [1]. It affects an older people than any other age group. 10 – 16 % and

10-20% of elderly people in the community have depression and anxiety respectively [2]. This is because of older people are much more vulnerable to factors such as widowed or divorced or illness, loneliness, isolation, and neurobiological changes associated with ageing, etc. [3].

BACKGROUND OF THE STUDY

The rapid urbanization and societal modernization has brought in its wake a breakdown in family values and the framework of family support, economic insecurity, social isolation, and elderly abuse leading to a host of psychological illnesses. In addition, widows are prone to face social stigma and ostracism. The socio-economic problems of the elderly

are aggravated by factors such as the lack of social security and inadequate facilities for health care, rehabilitation, and recreation. Also, in most of the developing countries, pension and social security is restricted to those who have worked in the public sector or the organized sector of industry. Many surveys have shown that retired elderly people are confronted with the problems of financial insecurity and loneliness [4].

Statement of the Problem

A study to assess the effectiveness of guided imagery on stress, depression and anxiety among geriatrics at selected old-age homes in Kanchipuram district.

Objectives

- (1) Evaluate the effectiveness of guided imagery on stress, depression, and anxiety among geriatrics at selected old-age homes.
- (2) Identify the relationship between stress, depression, and anxiety among geriatrics at selected old-age homes in study and control group.
- (3) Associate stress, depression, and anxiety, among geriatrics with their selected background variables.

METHODS AND MATERIALS

True experimental design with the sample size of 10 in each group was carried out in selected old age home in Kanchipuram districts. Multistage sampling technique was used. The prevalence of the stress was assessed by using older adult perceived stress scale. Group A – experimental and group B – control group was assigned by simple randomization method. The samples were randomly assigned by chance. (by simple randomization). Level of depression was assessed by using geriatric depression scale and the level of anxiety was assessed by using geriatric anxiety scale. In each group, 10 participants were selected by lottery method. Study group A (received 80minutes of guided imagery therapy once

a day initially. Each session held per week. 12 session was totally conducted. The duration of the session was 80 minutes. The steps of the therapy are Step I: breathing exercise, Step II: progressive muscle relaxation Step III: visualization. After 3 months reinforcement was given for the participants through phone calls. Again, posttest conducted by assessing the level of stress, anxiety and depression by using the same scale for both Group A and group B.

RESULTS

Comparison of pretest and posttests score of perceived stress in the experimental group. Pretest mean was 24.20 with SD 4.66. In the posttest 1, mean score was 17.60 with SD 5.27. The difference between the pretest and the posttest score was significant at $p < 0.000$. The mean value of posttest 2 score was 13.00 with SD 3.68. The difference between posttest 1 and posttest2 scores was statistically significant at $p < 0.000$. The mean score of posttest 3 was 8.1 with SD 3.63. The difference between the posttest2 and posttest3 scores was highly significant at $p < 0.013$.

Comparison of pretest and posttests score of depression in the experimental group. Pretest mean was 13.70 with SD 3.68. In the posttest 1, mean score was 11.30 with SD 2.94. The difference between the pretest and the posttest score was significant at $p < 0.000$. The mean value of posttest 2 score was 10.40 with SD 2.79. The difference between posttest 1 and posttest2 scores was statistically significant at $p < 0.004$. The mean score of posttest 3 was 7.80 with SD 2.09. The difference between the posttest2 and posttest3 scores was highly significant at $p < 0.013$.

Correlation between posttest perceived stress, depression and anxiety scores in the experimental group. It shows the relationship between the variables stress,

depression and anxiety was significant at $p < 0.01$ level.

Table 1 reveals that the frequency and percentage distribution of pre- and posttests level of perceived stress among geriatrics in the experimental group. In the pretest, 7 (70%) had mild stress and 3 (30%) had moderate stress. None of them had severe stress in pre and posttest. In

posttest 1, 3 (30 %) had no stress and 7 (70%) had mild stress, none of them had moderate and severe stress. In posttest 2, 6(60%) of the geriatric persons had no stress and 4 (40%) had moderate stress. In the posttest 3, most of the geriatrics 9 (90%) had no stress and 1 (10%) had mild stress. None of them had moderate and severe stress.

Table 1. Frequency and percentage distribution of pretest and posttests level of perceived stress among geriatrics in the experimental group. $N = 10$.

Perceived stress	No stress		Mild stress		Moderate stress		Severe stress	
	No.	%	No.	%	No.	%	No.	%
Pretest	0	0	7	70.0	3	30.0	0	0
Posttest 1	3	30.0	7	70.0	0	0	0	0
Posttest 2	6	60.0	4	40.0	0	0	0	0
Posttest 3	9	90.0	1	10.0	0	0	0	0

Table 2 shows that the comparison of mean difference pretest and posttests perceived scores between experimental and control group. The pre- and posttest 1 mean difference score was 6.60 with SD 2.83, the mean difference score of posttest 1 and posttest 2 was 4.60 with SD 1.95, and posttest 2 and posttest 3 mean difference score was 4.90 with SD 4.99 in the experimental group. In the control group the mean difference score of pretest

and posttest1 was 0.30 with SD 0.67. The difference between the posttest 1 and the posttest 2 was 0.20 with SD 0.63 and in posttest 2 and posttest 3 score was 0 and SD 0. It reveals that there was a high statistically significant difference at the level of $p < 0.001$ in experimental group. This shows that the participants in the experimental group had no stress after receiving the intervention.

Table 2. Comparison of mean difference pretest and posttests perceived stress scores between experimental and control group. $N = 20$.

Perceived stress	Experimental group		Control group		Unpaired 't' value
	Mean difference	SD	Mean difference	SD	
Pretest–posttest 1	6.60	2.83	0.30	0.67	$t = 6.833$ $p = 0.001, S^{***}$
Posttest 1–posttest 2	4.60	1.95	0.20	0.63	$t = 6.771$ $p = 0.001, S^{***}$
Posttest 2–posttest 3	4.90	4.99	0.00	0.00	$t = 3.100$ $p = 0.013, S^*$

* $p < 0.05$, *** $p < 0.001$, S – significant, NS – not significant.

CONCLUSION

Many people use imagery daily without realizing it. Imagery entails the use of imagination to alter perceptions of events, surroundings or experiences. Guided imagery is considered a part of the

growing field of psychoneuroimmunology. The new science of psychoneuroimmunology seeks to clarify the connection between the mind and emotions, the brain and central nervous system, and the body's cellular responses. Guided imagery is particularly

helpful for stress management and for reducing symptoms related to anxiety, depression, stress and other mental health conditions. Many guided imagery scripts include common elements such as asking the patient to sit or lie in a comfortable position, quieting the mind, removing negative thoughts and images and calling to mind a vivid image or scenario that is calming and relaxing.

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