

## A STUDY TO ASSESS THE EFFECTIVENESS OF GUIDED IMAGERY ON STRESS AMONG SENIOR CITIZENS RESIDING AT SELECTED OLD AGE HOME OF MEHSANA CITY

**Author's Name:** Dharti Prajapati<sup>1</sup>, Prof. Jerone L.B.<sup>2</sup>, Dr. Dayalal Patidar<sup>3</sup>

### **Affiliation:**

1. M.Sc. Nursing, Joitiba college of Nursing, Bhandu, Mehsana, Gujarat, India
2. Professor and HOD Psychiatric, Joitiba college of Nursing, Bhandu, Mehsana, Gujarat, India
3. PhD Guide, Associate dean (HNGU, Patan), Principal, Joitiba college of Nursing, Bhandu, Mehsana, Gujarat, India

**Corresponding Author Name & E-Mail:** Dharti Prajapati

### **ABSTRACT**

*INTRODUCTION: Stress is highly prevalent among senior citizens, particularly those in old age homes, due to isolation, illness, and dependency. Persistent stress affects both mental and physical health. Guided imagery is a simple, safe, and cost-effective relaxation technique that reduces stress by calming the sympathetic nervous system. This study was conducted to evaluate its effectiveness among senior citizens in a selected old age home at Mehsana. OBJECTIVES: 1. To assess the level of stress among senior citizens residing at selected old age home of Mehsana. 2. To evaluate the effectiveness of guided imagery on stress among senior citizens residing at selected old age home of Mehsana. 3. To find out the association between pretest level of stress among senior citizens with their selected demographic variables. PARTICIPANTS: 60 senior citizens residing at selected old age home of Mehsana city were selected using non probability purposive sampling technique. INTERVENTION: Guided imagery is a brief, structured relaxation technique using verbal cues to evoke soothing mental images. Sessions (10–20 minutes) support stress reduction and emotional regulation. Content is culturally tailored for geriatric and psychiatric populations to ensure clarity and therapeutic impact. TOOLS: Data were collected using a structured demographic proforma to obtain background information of the participants, and the Perceived Stress Scale (PSS), a standardized tool widely used to measure the level of stress. RESULT: Guided imagery significantly reduced stress among elderly participants, with mean scores declining from 23.13 (pre-test) to 16.07 (post-test;  $t = 15.34, p < 0.05$ ). High stress prevalence dropped from 36.67% to 5%, indicating marked emotional improvement. Moderate stress levels increased, reflecting a shift toward healthier coping. Significant associations were observed with age, marital status, and duration of stay, underscoring contextual influences on intervention outcomes.*

**Keywords:** Guided imagery, Stress, Senior citizens, old age home, Perceived Stress Scale, Nursing intervention

## INTRODUCTION

A man's life is normally divided into five main stages namely infancy, childhood, adolescence, adulthood and old age. In each of these stages an individual has to find himself in different situations and face different problems. In old age physical strength deteriorates, mental stability diminishes. The world's elderly population is 650 million. By 2050, the "greying" population is forecast to reach 2 billion. By 2050 about 80% of the elderly will be living in developing countries.

Aging can also bring many changes at a time when they are least able to adapt to change. It is a well-known axiom that elderly people have problems, not just physical disease. The elderly people are vulnerable to emotional and stress because of the sense of loss that comes from the death of friends and family members, loss of outcomes, loss of autonomy as well as from retirement.

In more recent times, the traditional role of the family is being shared by institutions such as old age homes. It is often assumed, and sometimes argued, that the absence of familial care and surroundings induces stress among the residents of old age homes. Stress is a major cause of depression and Alzheimer's disease in old age. They have identified an area of the brain which shrinks in old age resulting in depression and Alzheimer's disease. The shrinkage of a region of the brain called the anterior cingulate cortex results in the release of high levels of stress hormones.

God created our bodies with perfect balance and healing ability. We were designed with congruence and a natural rhythm. The rhythmic opening and closing of the valves of the heart, the coagulation of blood to form a healing covering or scab on a wound, the messaging system of our nerves which alert our brains to act are examples. Sometimes, the person is not aware of these abilities, and they are unable to deal with the situation or have stress. To assist them to deal with this, there are some therapies. Guided imagery is one of these. Guided imagery is not hypnosis, sorcery, witchcraft, voodoo, or demonic. It is not handing over control of your mind in any way. But imagery can stimulate changes in bodily functions such as heart rate, blood pressure and respiratory patterns. It can help tap inner strengths to help the patient find hope, courage and other qualities that can help the patient to cope with a variety of conditions.

Moreover, guided imagery is a skill that can be learned in both inpatient and outpatient settings and it can be taught by nurses. Teaching relaxation skills is consistent with the 3 concept that the patients who participate in their care are more autonomous. Once it is learned they can practice it themselves. Relaxation training is also cost effective. For patients, the goal of guided imagery is to replace the negative images that provoke fear, helplessness and anxiety with positive images of healing and wellbeing that contribute to recovery. Stress management focuses on reducing the secretion of cortisol and the catecholamine which destroy the balance of the immune system.

Mental imagery, by altering brain biochemistry, may influence or alter the immune system cells. The daily sessions of the guided imagery make heavy use of the imagery in changing the participant's perceptions of the stress through cognitive/imagery restructuring. The person is encouraged to image the salubrious changes taking place. Imagining the overall feeling of health and wellbeing seems to actualize the body is becoming whole, healthy, beautiful and powerful.

The main benefit of guided imagery is reducing physical and emotional stress. By mentally removing yourself from a stressful situation, you remove the stressors causing negative physiological reactions. Various studies have shown that stress can lead to high blood pressure, exhaustion, and depression. In the long run, these symptoms can take a toll on your body. Guided imagery can also provide relief for people who have chronic health conditions. Several studies have shown that guided imagery visualization leads to significant pain reduction and improved mobility for people who have arthritis and other joint diseases. As a result, these patients were able to reduce their use of pain medications.

Guided imagery helps your mind and body relax. When you calm your sympathetic nervous system, you reduce your body's production of stress hormones. Some stress can help you be productive, but too much over an extended period can cause inflammation in your body. Guided imagery can help you manage your stress better, which in turn improves your overall health.

With the rapid demographic transition globally, the proportion of elderly individuals continues to rise, necessitating focused research on their mental health and well-being. Aging is accompanied by biological and psychosocial changes that can increase vulnerability to stress and anxiety, particularly in institutional settings such as old age homes. Such environments often lack the personalized social support and familiar surroundings essential for emotional stability. 4

Stress among older adults has been linked to detrimental effects on both psychological and physical health outcomes, including depression, cardiovascular disease, and cognitive decline. Therefore, identifying effective interventions to alleviate stress in this population is of paramount importance. Non-pharmacological approaches like guided imagery offer a promising pathway by fostering relaxation and empowering seniors with coping strategies that are easy to learn and practice regularly. The utilization of guided imagery aligns with holistic healthcare models emphasizing mind-body interventions that enhance the immune response, improve emotional balance, and reduce physiological symptoms of stress. Clinical evidence supports that regular guided imagery practice can lead to measurable decreases in stress hormone levels, thereby promoting better health outcomes in elderly populations.

Furthermore, the accessibility and low cost of guided imagery make it an ideal intervention for old age homes, where resources for mental health support may be limited. Training nursing staff to administer guided imagery can bridge the gap in psychological care, enhancing residents' autonomy and overall

quality of life. Lastly, considering the multifactorial nature of stress in old age, integrative approaches combining guided imagery with other therapeutic modalities could further improve well-being and reduce the burden of stress-related illnesses in elderly care settings.

### **OBJECTIVES:**

- To assess the level of stress among senior citizens residing at selected old age home of Mehsana city.
- To evaluate the effectiveness of guided imagery on stress among senior citizens residing at selected old age home of Mehsana city.
- To find out the association between pretest level of stress among senior citizens with their selected demographic variables.

### **HYPOTHESIS:**

- $H_0$ : There will be no significant difference between pre-test and post-test level of stress among senior citizens residing at selected old age home of Mehsana city.
- $H_1$ : There will be significant difference between pre-test and post-test level of stress among senior citizens residing at selected old age home of Mehsana city.

## **RESEARCH METHODOLOGY**

### **RESEARCH DESIGN**

a pre-experimental one-group pre-test post-test design was adopted

### **SETTING OF THE STUDY**

This study was conducted in a selected old age home in Mehsana city, Gujarat, India. The old age home in Mehsana city was selected due to its feasibility for conducting the study and the geographical convenience of being in an accessible area.

### **SAMPLE AND SAMPLING TECHNIQUE**

The study utilized a non-probability purposive sampling technique to select appropriate participants.

### **DEVELOPMENT AND DESCRIPTION OF THE TOOL**

After obtaining approval from the institutional ethical committee and permission from the concerned authorities of the selected old age home- Sneh Kutir Senior Citizen Home, Mehsana, data collection was initiated. Participants were selected using a non-probability purposive sampling technique based

on the inclusion criteria. Rapport was established with the participants, the purpose of the study was explained, and written informed consent was obtained. The data collection tool consisted of two sections: Section A for demographic variables and Section B containing the Perceived Stress Scale (PSS-10). Initially, a pre-test was conducted to assess the baseline stress levels. Following this, the participants received the guided imagery intervention for 28 days, from 01/07/'25 to 28/07/'25. After completion of the intervention, a post-test using the same stress scale was administered to evaluate changes in stress levels. The entire procedure was carried out in a quiet and comfortable setting, ensuring participant confidentiality and cooperation.

## INTERVENTION

Guided Imagery, a relaxation-based mind–body technique, was selected for this study to reduce stress and promote emotional well-being among senior citizens in a Mehsana old age home. This simple, non-invasive, and cost-effective method involves mental 34 visualization of calming scenes to trigger relaxation responses and improve coping. Sessions were conducted daily for 15 days in a quiet setting, using a standardized script with deep breathing, progressive relaxation, and imagery of peaceful environments. Each session lasted 20–25 minutes and was facilitated by the investigator in a calm, reassuring voice. The intervention was well-suited for the elderly and aimed to produce measurable reductions in stress, which were evaluated post-intervention.

## DATA ANALYSIS

The data obtained was analysed and interpreted in accordance with the objectives of the study by employing both descriptive and inferential statistics.

**Descriptive Statistics:** Frequency, percentage, mean, mean percentage, and standard deviation were used to describe the demographic variables of the participants and to assess the distribution of stress scores before and after the intervention. The findings 36 will be presented in the form of tables, charts, and graphs for better clarity and understanding.

**Inferential Statistics:** The paired t test was applied to evaluate the effectiveness of guided imagery by comparing pre-test and post-test stress scores. The Chi-square test ( $\chi^2$ ) was used to determine the association between pre-test stress levels and selected demographic variables. All inferential statistics will be interpreted at the 0.05 level of significance ( $p < 0.05$ ).

## RESULT

The findings of the study revealed that the mean pre-test stress score of senior citizens was 23.13, while the mean post-test score reduced to 16.07. This indicates a mean difference of 7.06 following the

guided imagery intervention. The calculated t-value of 15.34 was found to be much higher than the critical table value at the 0.05 level of significance ( $df = n-1$ ). This clearly demonstrates that the difference observed between the pre-test and post-test scores was not due to chance.

Hence, the null hypothesis ( $H_0$ ), which stated that there will be no significant difference between pre-test and post-test stress scores of senior citizens, is rejected. The research hypothesis ( $H_1$ ) is accepted, confirming that guided imagery had a statistically significant effect in reducing stress among senior citizens. These results support the effectiveness of guided imagery as a therapeutic, non-pharmacological nursing intervention for stress management in the elderly population.

A significant association was found between marital status and stress levels ( $\chi^2 = 16.25$ ,  $df = 6$ ,  $CV > TV 12.59$ ). Married individuals ( $n=36$ ) had the highest levels of high and moderate stress, while widowed and divorced participants showed mixed stress responses. Single elders ( $n=2$ ) reported only low stress, suggesting marital history impacts emotional well-being.

## DISCUSSION

The study was conducted to assess the effectiveness of guided imagery on stress among senior citizens residing at a selected old age home in Mehsana. Stress is a common psychological concern among the elderly, often aggravated by institutionalization, loss of social support, chronic illness, and age-related dependency. Guided imagery, as a mind–body relaxation technique, has been shown to reduce stress and improve coping abilities in older adults.

In the present study, pre-test findings revealed that 48.33% of the participants had moderate stress, 36.67% had high stress, and only 15% experienced low stress. This indicates that the majority of elderly residents in the selected old age home were living under conditions of moderate to high stress.

After the intervention, there was a substantial reduction in stress scores. Post-test results showed that 68.33% of participants reported moderate stress, 26.67% low stress, and only 5% high stress. The mean stress score decreased from 23.13 (pre-test) to 16.07 (post-test), with a mean difference of 8.13. The calculated t-value of 15.34 was statistically significant at  $p < 0.05$ , confirming the effectiveness of guided imagery. These findings support previous evidence that guided imagery is an effective non-pharmacological method to relieve stress and promote psychological well-being among older adults.

Chi-square analysis revealed that pre-test stress scores were significantly associated with age, marital status, and duration of stay in the old age home, while no significant associations were observed with gender, education, or medical conditions. This suggests that older age, being widowed or married, and prolonged institutional stay may predispose individuals to higher stress, whereas stress appears to affect elderly persons irrespective of gender, educational attainment, or illness. 57

Thus, the findings of the present study highlight that guided imagery is a safe, cost-effective, and

efficient nursing intervention for reducing stress among institutionalized elderly persons.

## CONCLUSION

The study concludes that guided imagery is a highly effective intervention in reducing stress among senior citizens residing in old age homes. The intervention led to a significant reduction in mean stress scores, with fewer participants experiencing high stress and more participants reporting low stress in the post-test. Stress levels were influenced by demographic factors such as age, marital status, and duration of institutional stay, while gender, education, and medical conditions had no significant effect.

Thus, guided imagery can be recommended as a simple, safe, and low-cost nursing intervention for stress reduction and psychological well-being among institutionalized elderly populations

## REFERENCES

1. Anjali, R., & Sneha, P. (2020). Effectiveness of recreational activities on stress reduction in elderly. *Kerala Nursing Journal*, 15(1), 12–19.
2. Arnold, S., & Wang, H. (2020). Guided imagery in cancer care: Pain and stress management. *Singapore Oncology Review*, 9(1), 44–52.
3. Barai, R., & Sharma, H. (2023). Comparative analysis of stress and coping among elderly in family and institutional settings. *Journal of Geriatric Psychology*, 12(1), 45–53.
4. Bansal, A., & Chavan, S. (2021). Guided imagery for stress relief in elderly: A nursing intervention. *Maharashtra Journal of Nursing Practice*, 8(3), 40–47.
5. Bennett, M., & Lee, J. (2022). Guided imagery for dementia-related anxiety. *Residential Care Psychiatry Review*, 6(2), 30–38.
6. Bhardwaj, R., & Sharma, M. (2016). Guided imagery as an adjunct to cardiac rehabilitation in elderly patients: A Jaipur study. *Journal of Cardiac Wellness and Aging*, 3(4), 72–78.
7. Collins, J. (2019). Guided imagery and CBT integration for stress relief. *Journal of Cognitive Therapy*, 15(1), 60–68.
8. Desai, A. (2021). Research gaps in semi-urban geriatric care. *Indian Journal of Nursing Research*, 10(1), 14–21.
9. Desai, P., & Kumar, M. (2022). Stress levels in institutionalized elderly: A cross-sectional study. *Gujarat Journal of Mental Health*, 9(2), 34–41.
10. Deshmukh, K., & Raut, N. (2018). Short-term guided imagery sessions for psychological stabilization in elderly outpatients. *Indian Journal of Geriatric Psychiatry*, 6(3), 33–39.
11. Evans, R. (2021). Guided imagery for high anxiety individuals. *Journal of Alternative Mental*



Health, 12(2), 50–58.

12. Freeman, L. W., et al. (2018). Imagery and stress reduction. *Journal of Holistic Nursing*, 36(2), 123–13