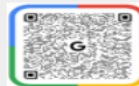




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Effectiveness of Jacobson's Progressive Muscle Relaxation (JPMR) on level of stress among elderly people at selected old age homes in Lucknow.

Harshita Sahu, Rituza Singh, and Atul Kumar Singh and Prashant Kumar Singh

Abstract

Elderly individuals experience unique stress, often linked to chronic health conditions. This study evaluated the effect of Jacobson's Progressive Muscle Relaxation (JPMR) technique in reducing stress among institutionalized elderly. A quantitative, quasi-experimental (one-group pre-test-post-test) design was used with 50 elderly participants selected via total enumeration sampling at SSS Vridhashram, Lucknow. Data were gathered using a Self-Structured Stress Rating Scale after administering 15–20-minute JPMR sessions over three consecutive days. The paired t-test demonstrated a significant reduction in post-test stress levels ($t > 2.00$, $p < 0.05$). JPMR effectively lowers stress and serves as a beneficial coping strategy for the elderly.

Keywords: Elderly people, level of stress, progressive muscle relaxation.

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Corresponding author: Mr. Prashant Kumar Singh (Assistant Professor), Mental Health (Psychiatry) Nursing Department, T.S. Misra College of Nursing, Lucknow, Uttar Pradesh, India. **Email ID:** psprashant944@gmail.com

Infographic abstract



Introduction

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Stress is the reaction people have toward excessive pressures or other

types of demand placed upon them. It arises when they worry that they can't cope. -(According to Rubenstein, 1999). Stress responses help your body adjust to new situations. Stress can be positive, keeping you alert, motivated, and ready to avoid danger. For example, if you have an important test coming up, stress response might help your body work harder and stay awake longer. But stress becomes a problem when stressors continue without relief for periods of relaxation. Stress can be debilitating for older adults, and it can manifest itself in physical and emotional ways. Physical stress can cause headaches, digestive issues, heart palpitations, sleep disturbances, and muscle tension. It can also lead to chronic health problems like heart disease, high blood pressure, and diabetes. Emotional stress can cause irritability, crying, social withdrawal, anxiety, and depression. It can also make people feel pressured or rushed, and it can lead to poor concentration and difficulty making decisions. There are some common stressors for older adults, like loss of a loved one, too much unstructured time, changes in relationships with children, loss of physical abilities, caretaking

responsibilities, chronic health conditions or diseases, cognitive impairment, loneliness or social isolation, and big life changes like retirement. Rishi Panday et al. al (2017) As per a survey conducted by the Madras Institute of Ageing, there were 529 old age homes in India in 1955. While help age India has reported 700 old age homes in 1998. In addition, it has been reported that the southern part of India accounts for 52% of old age homes. Residents of old age homes in another survey were found to be generally from lower socio-economic classes, with the exception of homes that charged fees for their services. Mr. Libin babu, Mrs. Reena Raju et.al, In another study, 75% of elderly people had moderate stress, 16.7% had low stress and 8.3% had high stress. Stress can manifest itself in physical ways such as headaches, sleep problems, fatigue, and difficulty controlling. Many elderly individuals living in old age homes face a high level of stress due to factors like social isolation, loss of independence, chronic health condition and the emotional toll of being separated from family. Chronic stress can lead to numerous physical and mental health issues, such as

stress, hypertension, depression, and anxiety which further reduce the quality of life.

JACOBSON PROGRESSIVE MUSCLE RELAXATION: This method of relaxation focuses on tensing and relaxing different muscle groups in a certain order. Dr. Edmund Jacobson developed this method in the 1920s. JPMR is a two-step relaxation technique that lowers stress and increases awareness of tension separations and deep muscular relaxation in different areas of the body. "Progressive muscle relaxation is a method of deep muscle relaxation that does not involve any medication, which means it is a non-pharmacological intervention."

JPMR can aid in lowering anxiety and fostering mental and physical peace. It facilitates falling and staying asleep by calming the body and mind, which enhances the quality of sleep. Frequent JPMR practice can help reduce blood pressure, which improves cardiovascular health.

A 2016 study suggests that JPMR may decrease the frequency of migraine episodes by helping to balance serotonin levels, a neurotransmitter

that's often low in people with migraines.

A 2019 study found that JPMR can dramatically reduce temporomandibular joint (TMJ) pain in the jaw's chewing muscles. JPMR calls for sequential tensing and relaxing particular muscle groups. You can practice JPMR twice a day by following these steps.

Material and methods

The study was conducted through a quasi-experimental design (one-group pre-test post-test design) under a quantitative research approach in selected old age homes of Lucknow. The old age homes were selected on the basis of the availability of elderly people giving permission to conduct the study. Samples were selected by the non-probability total enumeration sampling technique. The sample consists of elderly people residing in an old age home at Lucknow who comply with inclusion criteria. Sample size taken was 50. It consists of an entire number of individuals who are meeting the designated set of criteria.

Development and Description of Tool

Tool A. Demographic Variables

Tool B. Self-structured Stress Rating Scale (SSSRS)

This tool was developed in English and Hindi. These were standardizing tools to check the level of stress. The Demographic Variables was one of the first rating scales developed to collect the data of the elderly people. The scale consists of 7 items that are as follows: Age, gender, religion, marital status, educational status, and income are about JPMR. Whereas, the SSSRS was the rating scale developed to measure the severity of stress symptoms and can be used on the sample taken under this study. It can also be used to monitor changes regarding the increase level of stress. The tool consists of 30 items.

Result and discussion

The majority of the study participants, out of 50 samples, were 29 (58%) in

age group of 65-70 years. Among the samples, 27 (54%) were males. Among the samples, 16 (32%) were studied in primary school. All the samples 50 (100%) were of the Hindu religion. Among the samples, 22(44%) were widowed. Among the samples 29 (58%) earn rupees 5000-10,000 as income. Most of the samples 48 (96%) did not had any knowledge about JPMR. In this it shows that mean and standard deviation of stress where the pre-test score is 82.66 ± 10.189 , and post-test score on third day 65.98 ± 7.944 which shows that there is reduction in the level of stress among elderly people at old age home. Progressive muscle relaxation was beneficial for reducing the stress among elderly people at old age home, according to the results of the present study. We found that the demographic variables were not statistically significant linked to the stress.

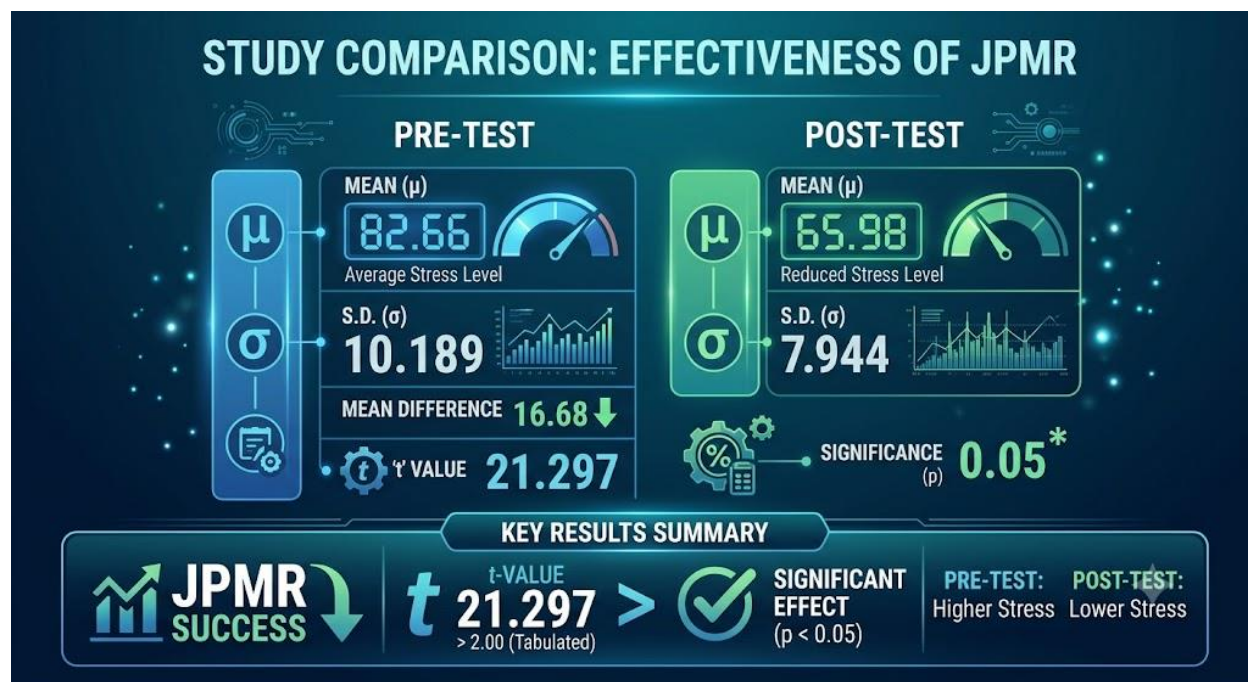


Fig-1: Effectiveness of JPMR.

Most of the samples were in the age group 65-70 years (58%), Religion of Hindu 50 (100%). The pre -test and post-test means were 82.66 and 65.98, respectively. The standard deviations of the pre-test and post-test were 10.189 and 7.944, respectively. The mean difference was 16.68 and the calculated t value 21.297 is greater than the tabulated value level 2.00. This indicates JPMR technique was effective.

The objective of the current study was to investigate whether progressive muscle relaxation was effective for the level of stress. Findings are

discussed based on different reviews of literature with reference to the study findings. The discussion is prepared under the following subsequent headings. Kalavathi et.al (2018) conducted a study on Jacobson's progressive muscle relaxation technique on stress among elderly people. The pre-experimental research design with Convenience sampling technique was adapted to select 60 elderly people with stress who are residing at Venkatachalam at Nellore District. Results: The results show that among 60 samples, the post-test level of stress among elderly people revealed that 38 (63.3%)

elderly people were had mild stress, 19 (31.7%) were had no stress and 3 (5.0%) were had moderate stress and none of them had severe stress.

Conclusion

Progressive Muscle Relaxation was effective for reducing the level of stress. There was no association seen with the demographic variable. The study concluded that Progressive Muscle Relaxation helps in reducing the level of stress, it also provided healthy coping strategy. Jacobson's Progressive Muscle Relaxation technique is one of the cost effective non pharmacological intervention found to be very effective in reducing stress among elderly people. The interventional study was done to evaluate the effectiveness of "Jacobson's Progressive Muscle Relaxation technique" on stress among elderly people at old age home. The findings were consistent with the literature and it was effective on reducing stress among elderly peoples,

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