

A Study To Assess The Effectiveness Of Progressive Muscle Relaxation Therapy On Anxiety Among Elderly At Selected Old Age Home At Bhopal.

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Abstract

Progressive Muscle Relaxation (PMR) has remained an important tool in the treatment of anxiety disorders in recent times. It is clear that geriatrics are highly agitated and require relaxation strategies to quiet their minds. The goal of this study was to use Jacobson's progressive muscle relaxation approach to help geriatrics feel less anxious. The purpose of this study was to see how effective Progressive Muscle Relaxation Therapy is at reducing anxiety in the elderly. With one group pre-test and post-test, a pre-experimental design was used. A total of 50 senior people were included in the study. Demographic data and a HAM-A tool to determine anxiety levels were utilised to perform the study. The study clearly indicates a considerable reduction in stress and anxiety among the elderly, indicating that Progressive Muscle Relaxation Therapy is effective in reducing anxiety.

Keywords: Progressive Muscle Relaxation Therapy, anxiety and elderly

INTRODUCTION

PMR is a stress-reduction technique in which you slowly tighten and then release each muscle in your body. The assumption behind this practice is that a patient cannot enjoy relaxation and a warm sense of well-being in their body while experiencing anxiety symptoms. Each muscle should be tightened during this exercise, but not to the point of discomfort. Pay close attention to the sensations of tension and relaxation in each muscle.¹

Stress, according to the World Health Organization, is a significant problem of our time that affects people's physical and mental health. A condition in which the organism's homeostasis is disturbed or the organism sees a situation as hazardous is characterised as stress. The cognitive, behavioural, and psychological efforts to cope with stress are referred to as stress coping mechanisms.²

Progressive muscle relaxation (PMR) is a technique for reducing anxiety that was first presented in the 1930s by American physician Edmund Jacobson. All of the body's major muscle groups are alternating tense and relaxed in this technique. It's possible that if someone uses this approach correctly, they'll fall asleep.³

Other cognitive behavioural treatment strategies, such as systematic desensitisation, are frequently used in conjunction with progressive muscle relaxation. However, simply practising the technique will give you more control over your body's anxiety response.⁴

Old age is the end of a person's life span, and it is marked by physical and psychological changes in the individual, such as anxiety and depression. The elderly personal and social adjustments are frequently influenced by these changes.⁵

Problem Statement

A study to assess the effectiveness of progressive muscle relaxation therapy on anxiety among elderly at selected old age home at Bhopal.

Objectives:

1. To assess the level of anxiety among elderly.
2. To study the effectiveness of Jacobson progressive muscle relaxation technique on anxiety amongst them.

MATERIALS AND METHODS

Research Methodology

An experimental research approach was adopted in the study.

Research Design

One group pre-test post test research design was adopted in the study.

Variables under Study

Independent Variable: - Progressive Muscle Relaxation Therapy on Anxiety.

Dependent Variable: - Anxiety among elderly.

Demographic Variables

age, gender, marital status, occupation before joined old age home and length of stay in old age home

Sample: The elderly male and female clients residing in the old age homes who fit the criteria of sample selection were selected as sample.

Sample size: Total 50

Setting

The study was conducted at selected old age home at Bhopal.

Criteria for Sample Selection

Inclusion Criteria: - The elderly people who are willing to participate and don't have any mental illness.

Exclusion Criteria: - The elderly people who are not willing to participate and have any mental illness.

Sampling :- Convenience sampling technique.

Duration of Study: - 6 weeks.

Development and Description of the Tool

The following steps were used for preparation of the tool:-

- By extensive review of literature from books, journals, manuals, reports and published researches, newspapers and internet.
- Consultation with experts.
- Hamilton Anxiety Rating Scale – Standardized Tool

Part I — Age, gender, marital status, occupation before joining the old age home, and length of stay in the old age home are all demographic characteristics. Experts in the fields of psychiatry, psychiatric nursing, and psychology assessed the tool's content validity. The language expert determined the appropriateness, clarity, and relevancy of the content.

Part-II –Anxiety–Assessment–Tool: In this study, the (Hamilton Anxiety Rating Scale)HAM-A⁶ was utilized to determine the level of anxiety among the elderly. It is made up of 14 elements that are characterized by a set of symptoms and is used to assess both psychological and somatic anxiety. Each item is graded on a scale of 0 to 4, with a minimum score of 0 and a maximum score of 56.

Scoring Procedure

- No anxiety (0-13),
- Mild anxiety (14–17),
- Moderate anxiety (18–24),

Intervention

The researcher received formal PMRT training from a subject specialist. Jacobson's Progressive Muscle Relaxation was shown to a group of 4–5 old people for 45 minutes. Each elderly person was asked to provide a return demonstration, and training proceeded until each elderly person had mastered the method. The intervention was then repeated for 10 days in a designated old age home for 20–30 minutes once a day under observation.

METHOD OF DATA COLLECTION

On the first day, the Hamilton Anxiety Rating Scale (HAM-A) questionnaire was utilized to determine the level of anxiety before to the exam. Each participant took 10–20 minutes. The experimental group was then provided PMRT via demonstration method within 45 minutes and continued to practice intervention for 20–30 minutes once a day for 10 days. Then, on the final day, the interview method was utilized to determine the level of anxiety post-test.

Data Analysis

Statistical analysis was performed through differential and inferential statistics and the level of significance $t < 0.05$ was considered as the level of significance.

Findings

Table 1. Frequency and Percentage distribution of subjects as per demographic variables
N=50

Characteristics	Category	Frequency	Percentage
		N	%
Age	50-60	10	20
	61-70	28	56
	71-80	12	24
Gender	Male	38	76
	Female	12	24
Marital status	Single	05	10
	Married	37	74
	Widow	08	16
Occupation before coming to old age home	Govt. job	06	12
	Private job	42	84
	Any other	02	04
Duration of stay in old age home	< 2 years	28	56
	2 years -5 years	12	24
	5 years and above	10	20

Table 1 shows that majority of elderly ,28 (56%) were in the age group of 61–70 years, them 12 (24%) were in the age group of 71-80 and 10(20%) were from the age group of 50-60 years .38 (76%) elderly were male and 12 (24%) were female. The majority of the elderly 37 (74%) were married, 8 (16%) were widow and 5 (10%) were single. 42 (84%) were doing private job before coming to old age home ,6 (12 %) retired from government job and 02(4%) were farmer before

coming to old age home. Duration of stay in old age home of 28(56%) elderly were <2 years, 12(24%) were 2-5 years and 10(20%) were 5 years and above.

Table 2. Frequency and Percentage distribution of the pretest level of anxiety among elderly (N=50)

S. No.	Level of anxiety	Frequency	%
1.	No anxiety (0-13)	10	20
2.	Mild anxiety (14-17)	25	50
3.	Moderate anxiety (18-24)	15	30

Table 2 represents the pretest level of anxiety among the elderly. It shows that 25(50 %) elderly had mild anxiety (14-17) ,15(30%) had moderate anxiety (18-24) and 10 (20%) elderly had no anxiety (0-13).

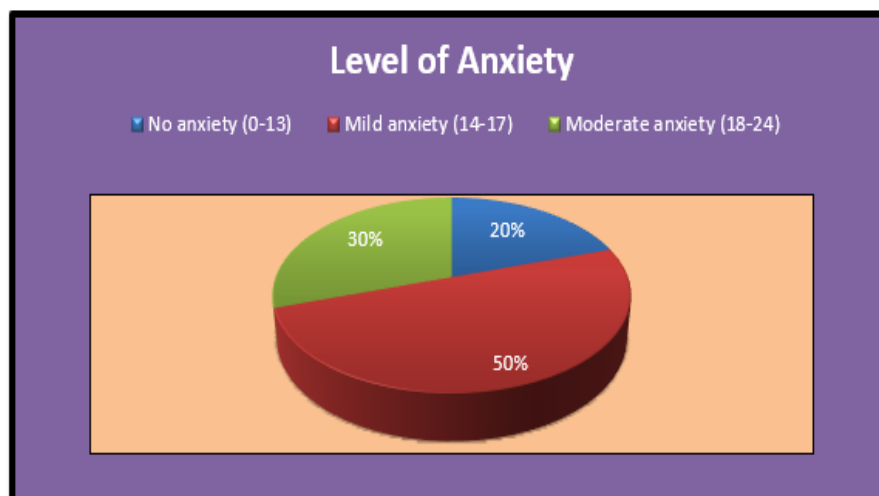


Figure 1. Pie diagram showing percentage distribution of the pretest level of anxiety among elderly

Table 3. Frequency and Percentage distribution of the posttest level of anxiety among elderly (N=50)

S. No.	Level of anxiety	Frequency	%
1.	No anxiety (0-13)	37	74
2.	Mild anxiety (14-17)	10	20
3.	Moderate anxiety (18-24)	03	06

Table 3 represents the posttest level of anxiety among the elderly. It shows that 10(20 %) elderly had mild anxiety (14-17) ,03(6%) had moderate anxiety (18-24) and majority 37 (74%) elderly had no anxiety (0-13).

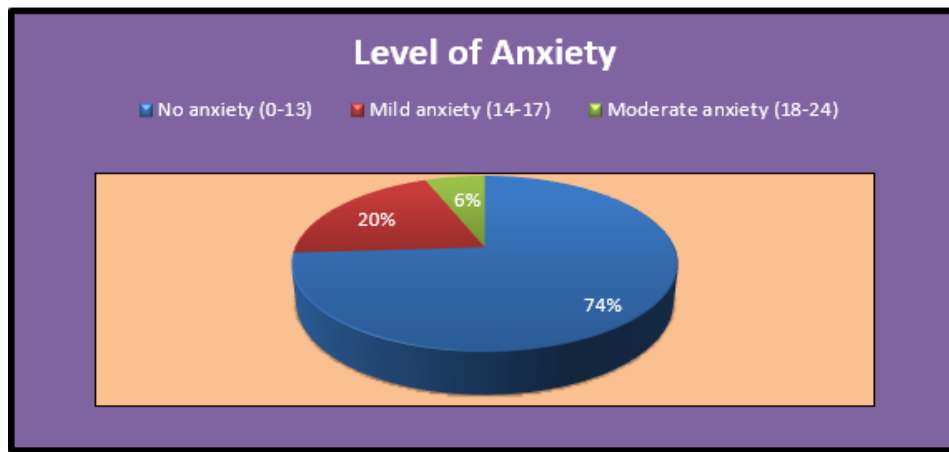


Figure 2. Pie diagram showing percentage distribution of the posttest level of anxiety among elderly

Table 4. Comparison of pre- and post-test level of anxiety among elderly
N=50

Scale	Level of anxiety						df	X ²	p
	No anxiety		Mild anxiety		Moderate anxiety				
	f	%	f	%	f	%			
Pre test	15	30	22	44	13	26	2	15.32	0.002*
Post test	32	64	17	34	1	2			

Table 4 shows the pretest and posttest comparison of anxiety among the elderly and it was found that progressive muscle relaxation was significantly effective ($\chi^2 = 15.32, P = 0.002$) in reducing the level of anxiety among elderly.

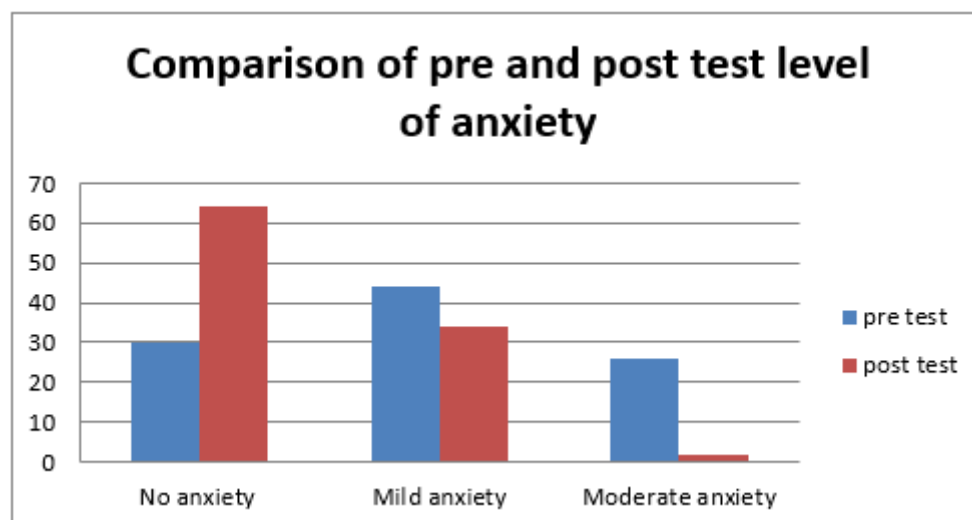


Figure 3. Bar diagram showing comparison between pre and posttest level of anxiety among elderly

DISCUSSION

Nitin et al., who conducted an experimental investigation (Pre & Post) on 30 patients residing in an old age home in the age group 60-85 years, backed up these findings. All of the participants were taught Jacobson's Progressive Muscle Relaxation technique for one week under the supervision of a physiotherapist and then encouraged to practise it once a day for 5-6 days a week without supervision. Subjects were tracked for 12 weeks using a weekly chart of technique performance. At baseline and after twelve weeks, the patients were assessed for geriatric depression using the Geriatric Depression Scale (GDS) and the Quality of Life Enjoyment and Satisfaction Questionnaire (Q-OLES-QSF). This study found a statistically significant difference between pre

and post GDS ratings ($p=0.005$, $t=2.9709$, $df=29$), indicating a reduction in depression symptoms in older persons ($p=0.005$, $t=2.9709$, $df=29$). The difference in pre and post Q-OLES-Q SF ratings is statistically significant ($p=0.01$, $t=2.5292$, $df=29$), indicating that older persons' quality of life enjoyment and satisfaction has improved. Jacobson's Progressive Muscle Relaxation approach appears to promote Quality of Life Enjoyment and Satisfaction in older persons by reducing depressive symptoms. To confirm the benefits of the JPMR approach, more research is needed to address the limitations of this study design.⁵

A quasi-experimental with pretest and posttest intervention on two groups (intervention and control group) similarly validated the findings. The study's sample comprised of 50 nurses who matched the inclusion criteria and were randomly recruited from two hospitals in Mashhad: the 550 Army Hospital and the Najai Hospital. The Taft and Anderson (1981) Job Stress Questionnaire (version 57) of French et al. (2000) questionnaire to measure stress was utilized in this study. SPSS 16 was used to analyze the data in this study, which included five 2-hour training sessions. ($P<0.05$). Prior to the intervention, nurses' initial stress levels were moderate, and both groups were homogeneous ($P=0.063$). The stress level of nurses in the intervention group reduced from 76 percent to 60 percent after stress inoculation training, however the difference between the two groups was not statistically significant, and $P0.05$ was regarded a significant level. Discussion and Conclusion: The findings of this study differ from those of previous occupational stress studies because they were conducted using a specialized discipline used in military hospitals.⁷

In a study to assess the effectiveness of using progressive muscle relaxation training (PMRT) in the management of chemotherapy-related nausea and vomiting in Chinese breast cancer patients receiving doxorubicin and cyclophosphamide, as well as feasibility issues for a larger study, to back up Molassiotis' findings. Eight patients were randomly randomized to receive either oral antiemetic (maxolon) or adjuvant PMRT, as per hospital procedure. However, half an hour before the chemotherapy, both groups got intravenous anti-emetics. A skilled nurse administered PMRT once a day for five days. The researchers utilized a repeated measures design. The Morrow Nausea and Vomiting Scale was used to assess nausea and vomiting. The length and intensity of nausea were shown to be decreased in the experimental group, while the former was only marginally significant. In the experimental group, vomiting lasted less time and was less intense. Both groups experienced delayed nausea and vomiting. Despite the limited sample size, the study found that PMRT is an effective adjuvant treatment for chemotherapy patients who suffer from nausea and vomiting. This has significance for nursing practice because it is a low-cost, simple-to-learn strategy that may be used in the care planning of chemotherapy patients.⁸

The Arab American University conducted a quasi-experimental pre-post investigation. The purpose of this study is to see how incremental muscle relaxation exercises affect nursing students' anxiety during their first practical experience. 90 first-year nursing students were chosen as a convenience sample. One set of nursing students was given a progressive muscular relaxation practice to do five days a week. The S-anxiety scale (STAI Form Y-1) was used to assess students' anxiety before and after the intervention. After the exercise, the severity of anxiety decrease was larger ($t(89) = 30.783$, $P = .001$).⁹

An other study with how incremental muscle relaxation exercises affect nursing students' anxiety during their first practical experience. Another study that corroborated the findings showed that the impact of progressive muscle relaxation training (PMRT) on anxiety and quality of life in colorectal cancer patients after stoma surgery. Over the course of 10 weeks following stoma surgery, a randomized controlled trial with repeated measures assessment was used. In the trial, 59 patients were randomly assigned to one of two groups: a control group receiving normal care ($n=30$) or an experimental group receiving routine treatment plus PMRT via two teaching sessions and home practice for the first 10 weeks. To gather data, researchers employed the State-Trait Anxiety Inventory and two Quality of Life Scales. Both groups' social interactions deteriorated. When it came to the disease-specific quality of life measure, there were only changes at the 10-week evaluation, with the experimental group reporting greater quality of life at 10 weeks but not throughout time when compared to the control group. PMRT should be included in colorectal

cancer patients' long-term treatment since it can improve their psychological health and quality of life. This could be a cost-effective remedy that requires little training and could simply be delivered to those patients who choose to use it as part of their stoma specialist treatment.¹⁰

CONCLUSION

The study concludes that most of the elderly experienced mild-to-moderate level of anxiety before intervention. Progressive muscle relaxation therapy was effective in reducing level of anxiety among elderly.

Conflict of Interest:None

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