

## Effectiveness of Progressive Muscle Relaxation Technique on Generalized Anxiety of Elderly Orthopaedic Patients in Selected Hospitals, of Pune City

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### Abstract

**Introduction:** This study was conducted to assess the effectiveness of progressive muscle relaxation technique on generalized anxiety of elderly orthopaedic patient in selected hospital of Pune City.

**Methods:** Experimental and control group design was selected for the study. 40 elderly orthopaedics patients from selected hospitals of Pune City, were selected by random assignment technique. A Modified state trait Anxiety Inventory Scale was used to collect data from the subjects.

**Result:** In the pre intervention stage, the anxiety level in elderly orthopaedic patients in experimental and control groups revealed that anxiety tended to differ from the mean by  $\pm 5.16$  in control group and  $\pm 8.15$  in experimental group, whereas in post intervention stage, there was a significant mean anxiety reduction that tended to differ from the mean by  $\pm 4.938$  in control group and  $\pm 4.426$  in experimental group.

**Conclusion:** In pre intervention, maximum anxiety in control group was 74 and in experimental group it was 85, whereas in post intervention, in control group the mean average of anxiety was 65.2 and 46.7 in experimental group. Findings indicated that the Jacobson Progressive muscle relaxation technique was effective for anxiety reduction among elderly orthopaedic patients.

**Keywords:** Progressive muscle relaxation; Orthopaedics; Elderly patient.

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### Introduction

Anxiety is a normal emotion. All human beings develop it as a means of protection from danger and threat when we perceive danger. Human body undergoes a number of autonomic physiological changes such as perspiration, restlessness, discomfort, palpitation and tightness in the chest.

Anxiety is defined as a danger signal felt and perceived by the conscious portion of the personality with or without stimulation from external situation. This study was conducted to assess the effectiveness of progressive muscle relaxation technique on generalized anxiety of elderly orthopaedic patient in selected hospital of Pune City.

*Objectives of the study were:* to assess the baseline data of anxiety level in elderly orthopaedic patients for experimental and control group; to determine and compare the anxiety level in elderly orthopaedic patients after the interventions in experimental and control group.

### Research Methodology

A pre-test & post-test experimental and control group approach was used to conduct

the study. The study was done in selected orthopaedic hospitals on 40 elderly orthopaedic patients of age group above 55 years. Random assignment sampling technique was used for selecting the samples. A written consent was taken from the subjects. The tools and techniques used in the present study were :

- Baseline Proforma.
- Modified state trait anxiety inventory scale.
- Jacobson Progressive Muscle Relaxation proforma.

The two tools were administered to the patients. Assurance was given regarding confidentiality and conducive environment was maintained. The average time taken by the respondents to complete the questionnaire was approximately 10 minutes.

### Major findings

In the pre-intervention stage it was seen that in control group 10% of patients were having mild and 90% were having moderate level of anxiety where as in experimental group 10 % of patients were having mild, 85 % were having moderate anxiety and 5% of patients were having severe anxiety. Whereas post intervention revealed that in control group 5% of patients were having mild and 95% of patients were having moderate level anxiety whereas in experimental group 95 % of patients were having mild, 5 % were having moderate anxiety. After using the formula of 't test' the calculated t value (-11.8477) was less than table value (-2.428568). So  $H_0$  was rejected at 1% level of significance meaning that after intervention anxiety level in study groups was not same. As mean of difference of anxiety of control group was less than experimental group, progressive muscle relaxation technique was found to be effective at 1% level of significance.

### Conclusion

The findings revealed that progressive

muscle relaxation exercise is highly effective in treatment of generalized anxiety in elderly orthopaedic patients. Progressive muscle relaxation can be administered as an alternative treatment for treating anxiety.

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