Effectiveness of progressive muscle relaxation technique on anxiety
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Introduction

Feeling anxious or nervous is a common emotion for people of all ages and a normal reaction to stress. Feeling anxious can help us handle problems and strange situations, and even avoid danger. It is normal to feel anxious about illnesses, new social interactions, and frightening events. But when one feels anxious often and the anxiety is overwhelming and affects daily tasks, social life, and relationships, it may be an illness.

Anxiety is a common illness among older adults, affecting as many as 10-20 percent of the older population, though it is often undiagnosed. Phobia—when an individual is fearful of certain things, places or events—is the most typical type of anxiety. Among adults, anxiety is the most common mental health problem for women and the second most common for men, after substance abuse.

Older adults with anxiety disorders often go untreated for a number of reasons. Older adults often do not recognize or acknowledge their symptoms. When they do, they may be reluctant to discuss their feelings with their physicians. Some older adults may not seek treatment because they have suffered symptoms of anxiety for most of their lives and believe the feelings are normal. Both patients and physicians may miss a diagnosis of anxiety because of other medical conditions and prescription drug use, or particular situations that the patient is coping with. Untreated anxiety can lead to cognitive impairment, disability, poor physical health, and a poor quality of life. Fortunately, anxiety is treatable with prescription drugs and therapy.

Anxiety is a general term for several disorders that cause nervousness, fear, apprehension, and worrying. These disorders affect how we feel and behave, and they can manifest real physical symptoms. Mild anxiety is vague and unsettling, while severe anxiety can be extremely debilitating, having a serious impact on daily life.

Problem statement

“A study to determine the effectiveness of progressive muscle relaxation technique on anxiety among elderly people residing in selected old age homes in Pune city.”

Objectives

1. To assess the level of anxiety among elderly persons staying in old age home before administering progressive muscle relaxation technique on anxiety.
2. To assess the level of anxiety among elderly persons staying in old age home after administering progressive muscle relaxation technique on anxiety.
3. To associate the effectiveness of progressive muscle relaxation technique on anxiety among elderly persons with selected variables.

Research Design

One group pretest – post test design (01 X 0 2) is used in this study.
01 – Pretest to assess the level of anxiety among elderly persons by using state – Trait Anxiety Inventory Scale.
X – Structured teaching on progressive muscle relaxation technique.
0 2 – Post test to determine the level of anxiety among elderly persons by Using State – Trait Anxiety Inventory Scale

**Sample:**
40 elderly persons were selected from ST. John Old age home and Premnivas Old age home, Pune.

**Sampling Technique:**
Purposive sampling technique.

**Criteria for selection of sample:**

- **Inclusion Criteria:**
  - Elderly persons who were willing to participate in the study.
  - Elderly persons who follow English/Hindi/Marthi
  - Elderly persons staying in ST. John Old age home and Premnivas Old age home in Pune.
  - Both sexes were included in the study.

- **Exclusion criteria**
  - Elderly persons who were not able to perform relaxation techniques.
  - Elderly person who have medical illness or psychiatric illness

**Instruments used for the study**
A standard State – Trait Anxiety Inventory Scale was used to measure the anxiety level. For the present study

**Description of instrument**
The tool of the study has two sections.

<table>
<thead>
<tr>
<th>Section A</th>
<th>Demographic variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section B</td>
<td>State – Trait Anxiety Inventory Scale was used to measure the anxiety level (consists of 40 items)</td>
</tr>
</tbody>
</table>

**Section A:**
Demographic variables of the elderly persons were in relation to age, sex, religion, education, source of income.

<table>
<thead>
<tr>
<th>ANXIETY</th>
<th>SCORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>NORMAL ANXIETY</td>
<td>0 - 40</td>
</tr>
<tr>
<td>MILD ANXIETY</td>
<td>41- 80</td>
</tr>
<tr>
<td>MODERATE ANXIETY</td>
<td>81 - 120</td>
</tr>
<tr>
<td>SEVERE ANXIETY</td>
<td>121 - 160</td>
</tr>
</tbody>
</table>

**Section B:**
**State – Trait Anxiety Inventory:**
This is a self evaluation questionnaire developed by Charles – D – Spiel Bergerin 1968.

It is standardized tool comprises of 20 State and 20 trait anxiety statement.

Each Statement in the State category has four choices numbering which is indicated

1 = not at all;
2 = somewhat;
3 = moderately so;
4 = very much so.

Respectively which the patient had to mark to indicate how he is self right at the moment of testing.

Each statement in the Trait category has again four choices numbering which is indicated 1 = almost never; 2 = some times ; 3 = often; 4 = almost always respectively and the persons has so more these choices according to their self are no right on wrong answers. No time limit but the persons is instructed to do as quickly as possible.

**Score interpretation**
State – Trait Anxiety Inventory Scale (40 items) State Anxiety (20 items)
Direct Scoring (items 1 – 20): 3, 4, 6, 7, 9, 12, 13, 14, 17, 18
Reverse Scoring (items 1 – 20): 1, 2, 5, 8, 10, 11, 15, 16, 19, 20
Trait Anxiety (20 items)
Direct Scoring (items 21 – 40):22, 24, 25, 28, 29, 31, 32, 35, 37, 40
Reverse Scoring (items 21 – 40):21, 23, 26, 27, 30, 33, 34, 36, 39.
The analyzed data has been organized and presented in the following sections.

**Section A**
Distribution of subjects according to demographic variables.

**Section B**
Comparison of pretest and posttest anxiety level among elderly persons.

**Section C**
Effectiveness of progressive muscle relaxation technique on the level of anxiety among elderly persons.

**Section D**
Association of selected demographic variable with effectiveness of Progressive muscle relaxation technique on level of anxiety among elderly persons.

### Table 7.1: Comparison of pretest and posttest anxiety level among elderly persons.

<table>
<thead>
<tr>
<th>Sl. no</th>
<th>Level of anxiety</th>
<th>Pre test</th>
<th>Post test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percentage</td>
<td>Frequency</td>
</tr>
<tr>
<td>1</td>
<td>Normal</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>Mild</td>
<td>4</td>
<td>10%</td>
</tr>
<tr>
<td>3</td>
<td>Moderate</td>
<td>36</td>
<td>90%</td>
</tr>
<tr>
<td>4</td>
<td>Severe</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Bar diagram showing Comparison of pre test and post test anxiety level among elderly persons

In the present study it is observed that 4 (10%) of the subjects had mild anxiety, 36 (90%) of the subjects had moderate anxiety before administering Progressive muscle relaxation technique. The same table also implies that 37 (92.5%) of the subjects had mild anxiety, 3 (7.5%) of them had moderate anxiety after administering progressive muscle relaxation technique.

### Table 7.2 Effectiveness of progressive muscle relaxation technique on the level of anxiety among elderly persons.

<table>
<thead>
<tr>
<th></th>
<th>Pre test</th>
<th>Post test</th>
<th>t-test Value</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>89.82</td>
<td>69.55</td>
<td>5.524</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>SD</td>
<td>8.446</td>
<td>7.37</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

There is statistically significant difference on the level of anxiety in pre test of the elderly persons at the level of P<0.05

### Conclusion

The study reveals that anxiety among elderly was reduced due to progressive muscle relaxation technique which was evidenced by the pre and post test scores of current study. During the pretest period, the elderly persons most of them had moderate anxiety, but following progressive muscle relaxation technique administration, the post test scores showed that most of them had mild anxiety, so intervention was effective in reducing anxiety.

### Bibliography

- Laura A. Talbot. Principles and practice of nursing research. Mosby