



RESEARCH ARTICLE

A STUDY TO ASSESS THE EFFECTIVENESS OF PROGRESSIVE MUSCLE RELAXATION TECHNIQUE ON ANXIETY AMONG SENIOR CITIZENS IN SELECTED OLD AGE HOME AT INDORE

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ABSTRACT

The term anxiety has become a part of our everyday life. The concepts of anxiety may differ according to the individual's state of contexts and interpretations. Certain amount of anxiety is desirable, productive and can facilitate the individuals to grow but when the anxiety exceeds disturb the normal functions. The objective of the study are 1.] To assess the level of anxiety among senior citizens staying in old age home before and after administering progressive muscle relaxation technique. 2.] To elicit the effectiveness of progressive muscle relaxation technique among senior citizens staying in old age home. 3.] To associate pre test level of anxiety among senior citizens with their selected demographic variables. The pre experimental one group pre test post test research design was used. The data was obtained from 50 senior citizens from selected old age home, Indore.

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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 can result when a combination of increased internal and external stresses overwhelm one's normal coping abilities or when one's ability to cope normally is lessened for some reason. Different surveys suggest that anxiety affects one-eighth of the total population of the world. The lifetime overall prevalence rate for anxiety disorders is 24.9%. The aged person have many reasons to be anxious, including failing health, diminishing mental capacity, loss of loved ones and financial concerns. There are a number of drugs available to treat anxiety, but according to the National Institutes of Health, elderly patients are more likely to experience side effects from drugs, so doctors must treat aging patients with care not to prescribe drugs that will have adverse effects. There are other options that can be used to treat anxiety in the elderly is progressive muscle relaxation technique.

1. To assess the level of anxiety among senior citizens staying in old age home before and after administering progressive muscle relaxation technique.
2. To elicit the effectiveness of progressive muscle relaxation technique among senior citizens staying in old age home.
3. To associate pre test level of anxiety among senior citizens with their selected demographic variables.

Hypothesis

- H1: There will be a significant difference between the level of anxiety before and after administering progressive muscle relaxation technique among senior citizens staying in old age home.
- H2: There will be a significant reduction in post test level of anxiety among senior citizens residing in old age homes.
- H3: There will be a significant difference between the levels of anxiety before giving progressive muscle relaxation technique and related demographic variable of senior citizens.

MATERIALS AND METHODS

The research design used for this study was pre experimental one group pre test post test research design. The independent variable was progressive muscle relaxation technique and the dependent variable was level of anxiety of the senior citizens.

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The setting of the study was Old Age Home at Indore [M.P.], India Non probability purposive sampling technique was used to select the subject. The sample size was 50 senior citizens.

Description of tool

The tool of the study has two sections.

Part-I: Demographic variables of the senior citizen were in relation to age, sex, religion, education status, no of child and source of income.

Part-II: State – Trait Anxiety Inventory Scale was used to measure the anxiety level (consists of 40 items)

This is a self evaluation questionnaire developed by Charles–D–Spiel Berger in 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 person 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 or wrong answers. No time limit but the persons is instructed to do as early as possible.

Score interpretation

State – Trait Anxiety Inventory Scale (20 items) State Anxiety (20 items)

Positive statement (items 1 – 20): 3, 4, 6, 7, 9, 12, 13, 14, 17, 18

Negative statement (items 1 – 20): 1, 2, 5, 8, 10, 11, 15, 16, 19, 20

Trait Anxiety (20 items)

Positive statement (items 21 – 40): 22, 24, 25, 28, 29, 31, 32, 35, 37, 40

Negative statement (items 21 – 40): 21, 23, 26, 27, 30, 33, 34, 36, 38, 39

Maximum Score: 160

Minimum Score: 40

Category	Score
Mild Anxiety	41 – 80
Moderate Anxiety	81 – 120
Severe Anxiety	121 – 160

RESULTS

- The result of this study shows Overall pre-test anxiety score among the senior citizens was 109.58 with SD of 9.898 mean percentage was 68.49% where as Overall post test anxiety score among the senior citizens was 63.18 with SD of 9.33, mean percentage of 39.49%.
- The comparison of overall pre-test and post-test percentage of subjects reveals that the total effectiveness of progressive muscle relaxation was 29%.
- The findings of the study also revealed that during pre-test, majority of senior citizens (86%) have moderate

level of anxiety; where as 14% of senior citizens have severe anxiety. After the administration of progressive muscle relaxation technique, in the post-test there was significant reduction in the level of anxiety. Out of 50 senior citizens majority of the senior citizens (96%) had mild level of anxiety, whereas 4% of senior citizens had moderate level of anxiety.

- The above findings clearly indicated that progressive muscle relaxation technique was an effective method in reduction in the level of anxiety of senior citizens.
- Further computed paired ‘t’ test value (25.209) at $P < 0.05$ level of anxiety level revealed that there was significant reduction in the level of anxiety of senior citizens after administrations of progressive muscle relaxation technique.
- Based on the third objective, the chi square test is used to associate the level of anxiety of senior citizens and selected demographic variables.
- The χ^2 value shows that there is significant association between pre test level of anxiety and the Number of children among senior citizens. (value=10.53 & $p=0.025$)

DISCUSSION

The present study was designed to assess the effectiveness of progressive muscle relaxation technique on anxiety among senior citizens staying in selected old age home at Indore. The present study design was Pre–Experimental in nature conducted over a 4 week from 02 July to 02 August data were collected from 50 senior citizens staying in selected old age home at Indore, by using State Trait Anxiety Inventory Scale. The findings of the study have been discussed with reference to the objectives with the findings of the study. Majority of senior citizen were 19 (38%) were in the age group of above 74 years, 16 (32%) of them between 70–74 years, 11 (22%) of them were between 60–64 years and 4 (8%) of them were between 65–69 years of old. Regarding gender, 35 (70%) of them were female and 15 (30%) of them were male. While considering the educational status most of them 26 (52%) of them had primary school education, 19 (38%) of them had high school education, 5 (10%) of them had graduate education. In relation with religion, most of them 25 (50%) of them were Hindus, 11 (22%) of them were Muslims and 14 (28%) of them were Christians. Spouse and children. While taking the source of income most of them 23 (46%) of them were getting support from children, 15(30%) of them getting support from others, and 12 (24%) of them were pensioners. The first objective was to assess the level of anxiety among senior citizen staying in selected old age home at Indore. The level of anxiety was assessed out of 50 senior citizen 7 (14%) of them had severe anxiety, 43 (86%) of them had moderate anxiety during pre test and during the post test assessment 48 (96%) of them had mild anxiety and 2 (4%) of them had moderate anxiety. The second objective was to elicit the effects of progressive muscle relaxation technique among senior citizen, which was assessed and tabulated during pre test the mean level of anxiety was 109.58, with the standard deviation of 9.898. During post test the mean level of anxiety was 63.18 with the standard deviation of 9.33. After demonstration of progressive muscle relaxation technique the anxiety level was reduced from severe to mild level. The effectiveness was found out through difference in mean anxiety level of 46.400 and

paired 't' test ($t=25.209$) at $P<0.05$. This shows there was effectiveness in the progressive muscle relaxation technique.

The third objective was to associate the effectiveness of progressive muscle relaxation technique on anxiety among senior citizen with selected variables which was assessed by using chi-square test. There was a significant association found between the number of children and the level of anxiety of the senior citizen ($\chi^2 = 10.53$) at $P<0.05$ level. The remaining variables like age in years, educational status, gender, religion, spouse and source of income there was no association found through statistics. All the above findings reveal that there was an effectiveness of the progressive muscle relaxation technique among senior citizen to reduce their anxiety level.

Nursing implications

In the mental health team nurse plays a vital role in the provision of psychosocial therapist. The nurse in the psychiatric area knows that anxiety in the baseline cause for the depression and other mental disorder in senior citizen. The progressive muscle relaxation technique is a simple exercise and easy way of handling the anxiety. It can be included as a part of relaxation therapy, therefore this study has important implication in.

1. Nursing Practice
2. Nursing education
3. Nursing administration
4. Nursing research

1 Nursing practice

A. Hospital

Most patients with physical disorder suffer from anxiety which has not been revealed during hospitalization. The mental health nurse has to assess all the senior citizen about their level of anxiety. Progressive muscle relaxation technique needs to be implemented as a part of other therapies and to be practiced by the nurse in the day-to-day activities. The nurse needs to motivate the senior citizen to practice the progressive muscle relaxation technique in their daily life.

B. Community

The nurse who focuses on the geriatric psychiatric rehabilitation in the community should know about the progressive muscle relaxation technique. In the family, the members can be encouraged to practice and prevent the maladaptive behaviour and also to strengthen the defence mechanism. Nurse can also formulate intervention programs with progressive muscle relaxation technique for various age groups, which will have a cost beneficial effect.

2. Nursing education

The concept of prevention is better than cure need to be concentrated among the senior citizen progressive muscle relaxation technique need to be included as a relaxation therapy in the nursing curriculum. The nurses need to be educated regarding the progressive muscle relaxation technique. Continuing nursing education or progressive muscle relaxation technique should also be developed.

3. Nursing administration

Nursing is an evolving profession to improve the quality of care the practice should be evidence based. The present study shows that there is effectiveness for progressive muscle relaxation technique on anxiety. The administrator can communicate these findings to practicing nurses and they can incorporate this in patients care daily, she can motivate practicing nurses to attend the class on progressive muscle relaxation technique.

4. Nursing research

Practice emerges from research, evidence based practice improve the quality of nursing care. This study focuses on improving the quality of nursing care to the patients with anxiety. Research adds value to the comprehensive and holistic care. The nurse of service side need to educate on relaxation therapy in turn they can educate the patients and enrich the evidence based care. Nurses can also involve in this type of research.

Recommendation for future research

1. Replication of the study could be done with a larger sample to validate and generalize the findings.
2. This study can be carried out on the mental disorder among the senior citizen patients in the community set up.
3. The study can be done by maximizing the time period of progressive muscle relaxation technique.
4. The study can be conducted to determine the effectiveness at progressive muscle relaxation technique on specific illness patients.
5. This study can be conducted on various psychiatric conditions.
6. The study can be carryout among adults in the hospital setup.

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