



EFFECT OF PROGRESSIVE MUSCLE RELAXATION THERAPY IN REDUCING ANXIETY AMONG THE ELDERLY RESIDING IN SELECTED HOSPITAL AT KANPUR

Nursing

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ABSTRACT

A study to assess the effect of Progressive Muscle Relaxation therapy in reducing anxiety among the elderly residing in selected Hospital at Kanpur. The following objectives were set for the study 1) to assess the degree of anxiety among elderly in experimental and control group before Progressive Muscle Relaxation therapy. 2) to assess the degree of anxiety among elderly in experimental group and control group after administration of Progressive Muscle Relaxation therapy in the experimental group. 3) to compare the degree of anxiety among elderly in experimental and control group after administration of Progressive Muscle Relaxation therapy in the experimental group. 4) to associate the degree of anxiety among elderly before Progressive Muscle Relaxation therapy with the selected demographic variables such as age, sex, education, previous occupation, marital status, dietary pattern, hobby, religion and duration of stay in the old age home

KEYWORDS

MOTIVATION FOR THE STUDY-

The urge to live, the fear of death, the desire for youth, distaste for old age and quest for rejuvenation have always interested mankind. Ageing, which is an Inescapable reality of the human existence on the planet earth, plays a crucial role in the global demographic transition. Ageing is a universal, inevitable social and a scientific challenge confronting mankind. Every organism born, ages with time and then decay. There is no one who would not grow old. Every being on the earth inevitably follows the cycle, determined by nature that takes him/her through the variegated phases of childhood, adolescence, adulthood and maturity. Graying population is one of the most 'significant characteristics' of the 20th century and the first quarter of the 21st century is known as the "age of ageing". Along with the world population, Indian elderly are also "ageing in old age". Anxiety can affect anyone at any age, and the elderly are of no exception. Senior citizens face numerous anxiety-inducing issues, including health problems, loss of close friends and their life transitions such as moving to a nursing home (Langton, 2009).

Anxiety is a distressing, unpleasant state of nervousness and uneasiness; its causes are obscure. Anxiety is less tied to the exact timing of a threat; it can be anticipatory before a threat occurs, persist after a threat has passed, or occur without an identifiable threat. Anxiety is often accompanied by physical changes and behaviors similar to those caused by fear. Anxiety in the elderly occurs most commonly in a wide range of physical disorders and in mental disorders other than primary anxiety disorders.

"Encouraging the use of routines, exercise and activity, and socialization may be useful. Relaxing activities and hobbies should be encouraged. Gardening, fishing, art, and music are particularly relaxing for some older adults," says Grossberg (2009).

In fact few studies are available to indicate the benefits of psychological treatments for anxiety in the elderly. In principle there is every reason to support that seniors would respond as positively as the rest of the population. Case studies indicate that psychotherapy can be effective up to the mark and including the early stages of dementia. Generally speaking, the elderly live a lonely life and face health problems; isolation, reduced a sense of purpose in life, worries, anxiety, and fear may all lead to major mental health problems. so my thought of view that the importance to support the positive and active living of the elderly because there is lacking of the provision of psychological health services in the geriatric area of nursing. I selected this study because the rate of anxiety disorders among adults aged 65 and above is higher among those who living at institutional settings such as hospital and Progressive Muscle Relaxation have an effect in reducing anxiety. So I made a trial to rule out the effect of Progressive Muscle Relaxation therapy on anxiety among the elderly residing in hospital.

OBJECTIVES:

1. To assess the degree of anxiety among elderly Orthopedic patient in experimental and control group before Progressive Muscle

Relaxation therapy.

2. To assess the degree of anxiety among elderly Orthopedic patient in experimental group and control group after administration of Progressive Muscle Relaxation therapy in the experimental group.
3. To compare the degree of anxiety among elderly Orthopedic patient in experimental and control Group after administration of Progressive Muscle Relaxation therapy in the Experimental group.
4. To associate the degree of anxiety among elderly before Progressive Muscle relaxation therapy with the selected demographic variables such as age, sex, education, previous occupation, marital status, dietary pattern, hobby, religion and duration of stay in the old age home.

OPERATIONAL DEFINITIONS:

Effect: Effect is defined as a change which is a result or consequence of an action or Other cause. In this study effect refers to a decrease in posttest anxiety score after Progressive Muscle Relaxation therapy.

Elderly orthopedic: Elderly is defined as people who are old and patient with orthopedic problem. In this study elderly refers to person in the age group of above 56 years and below 70 years.

Anxiety: Anxiety is defined as a multi system response to a perceived threat or danger.

In this study anxiety refers to the feeling of tension or irritability.

Progressive Muscle Relaxation therapy: Progressive Muscle Relaxation therapy is defined as a treatment in which people are encouraged to relax their muscles to reduce tension.

In this study Progressive Muscle Relaxation therapy means practice of Progressive Muscle Relaxation technique according to planned time.

HYPOTHESIS

H1: There will be no significant association between the degree of anxiety and Selected demographic variable of anxiety.

H2: There will be no significant association between Progressive Muscle Relaxation therapy and reduction in anxiety among the elderly

VARIABLES OF THE STUDY

Independent variable – Progressive Muscles Relaxation therapy

Dependent variable – Anxiety

REVIEW OF LITERATURE

1. Studies related to anxiety in elderly.

Beekman, Beurs, Balkom, Deeg, Dyck, and Tilburg (1998) conducted a study on "Anxiety and Depression in Later Life: Co-Occurrence and Communality of Risk Factors". The purpose of this study was to examine the co morbidity of and communality of risk factors associated with major depressive disorder and anxiety disorders in later life. A random age and sex-stratified community-based sample (N=3,056) of the elderly (age 55–85 years) in the Netherlands was studied with the Center for Epidemiologic Studies Depression Scale and National Institute of Mental Health Diagnostic Interview Schedule. The result revealed that Co morbidity was highly prevalent:

47.5% of those with major depressive disorder also met criteria for anxiety disorders, whereas 26.1% of those with anxiety disorders also met criteria for major depressive disorder Beck, Stanley and Zebb (1999) conducted a descriptive study on "Characteristics of Generalized Anxiety Disorder in older adults". This investigation compared 44 Generalized Anxiety Disorder patients (age 67.6), diagnosed using structured interview, with a matched sample free of psychiatric disorders on self-report and clinician measures. Despite the prevalence of Generalized Anxiety Disorder in older adults, little is known about psychopathological features of excessive worry in the elderly. Results indicated that Generalized Anxiety Disorder in the elderly is associated with elevated anxiety, worry, social fears, and depression.

2. Studies related to Progressive Muscle Relaxation and anxiety in elderly

Rankin, Gilner, Gfeller and Katz (1993) conducted a study on "Efficacy of progressive muscle relaxation for reducing state anxiety among elderly adults on memory tasks." Cognitively intact anxious elderly subjects were randomly assigned to either a progressive muscle relaxation-training condition or control condition ($n = 15$) and then completed selected subtests from the Wechsler Memory Scale-Revised. Despite significant reductions in state anxiety in the relaxation group, no significant differences were detected between the two groups on memory measures.

Gerilynn, Sheridan and Wise (2008) conducted a study on "Effects of Progressive Muscle Relaxation Training on Anxiety and Depression in Patients Enrolled in an Outpatient Pulmonary Rehabilitation Program." This prospective, randomized controlled trial examined the effect of progressive muscle relaxation (PMR) training on anxiety and depression in patients with chronic breathing disorders receiving pulmonary rehabilitation. Eighty-three subjects with chronic breathing disorders entering the 8-week pulmonary rehabilitation program were randomly assigned to a standard care or intervention randomly assigned to a standard care or intervention group. The intervention group received additional sessions of progressive muscle relaxation training using a prerecorded tape for 25 min/week during weeks 2–8. The study revealed that for anxiety, there was an overall significant improvement within each group over time ($p < 0.0001$). There was no statistically significant group-time interaction ($p = 0.17$) and no statistically significant difference between the groups ($p = 0.22$), despite lower scores for every time point in the progressive muscle relaxation group. For depression, there was an overall significant improvement within each group over time ($p < 0.0001$). Although the difference between the groups ($p = 0.09$) and group-time interaction ($p = 0.07$) did not reach statistical significance, the results again favored the progressive muscle relaxation group for weeks 5–8.

Casten, Parmelee, Kleban, Lawton and Katz (2000) conducted a study on "The relationships among anxiety, depression, and pain in a geriatric institutionalized sample." The study sought to be determining if depression and/or anxiety is uniquely related to pain after controlling for the strong association between anxiety and depression. Both depression and anxiety were assessed in an elderly institutionalized sample using: (1) research-based diagnoses based on Diagnostic and Statistical Manual-revised 3rd edition criteria, and (2) evaluations of one's recent affective states using the Profile of Moods States. Pain was assessed by pain intensity and number of pain complaints

METHODOLOGY

Research approach

Quantitative approach was adopted for the study.

Research design

In this study pretest posttest control group design planned to used. The Experimental group used to determine the effect of Progressive Muscle Relaxation Therapy. Schematic representation of the design is given below.

O1 X O2

O3 O4

O1 - Observation (Pretest assessment of anxiety in experimental group) X - Exposure to Progressive Muscle Relaxation Therapy

O2 - Observation (Post test assessment of anxiety in experimental group)

O3 - Observation (Pretest assessment of anxiety in Control group).

O4 - Observation (Posttest assessment of anxiety in Control group).

Population of the study

The target population selected for the study was 85 elderly in the selected Hospital at Manglor.

Sample

The elderly in the age group of above 56 and below 70 years residing in the old age homes who fit the criteria of sample selection were selected as sample.

Sample size

The sample size of the study was 60 elderly people. The sample consisted of 30 samples in the experimental group and 30 samples in the control group with anxiety.

Sampling technique

The elderly who satisfied the inclusion criteria were selected by using Convenience sampling technique to the experimental group and the control group

Criteria for sample selection

The sample was selected based on the following criteria

INCLUSION CRITERIA

The elderly people who can understand Hindi who are willing to participate in the age group of above 56 years and below 70 years.

EXCLUSION CRITERIA

The elderly who are having history of fracture .
who are too debilitated. Who are having mental illness.

Research tool

The research tool which was used for the study was Zung's Self Rating Anxiety Scale.

Setting of the study

The present study will be conducted among the elderly orthopedic patient selected hospital in Kanpur

Content Validity: In order to establish content validity, tools will be submitted to experts from various disciplines along with the validation criteria checklist.

The experts will from the field of Mental health nursing.

Reliability:

Reliability of the tool will be established by test retest Method

Method of data collection:

The data was collecting from selected hospital kanpur. Samples were selecting accordance with convenience sampling technique for both groups. Data collection was planning for a short period. The Elderly orthopedic who fit into the criteria were selecting. The data were collecting by following three steps Written formal permission was obtained from concern authority, consent from the elderly orthopedic people. The study was explained and assured them that the answers were kept confidential. The questions were asked to the elderly and the anxiety assessed.

Followed by All the pretest data were kept confidential. After assessment of anxiety Progressive Muscle Relaxation technique was demonstrated to the subjects in the experimental group every morning for particular hours and made they practice Progressive Muscle Relaxation technique twice daily for three short period of time

DATA ANALYSIS AND INTERPRETATION

Statistical analysis is the method of rendering quantitative information meaningful and intelligible statistical procedure that enables the researcher to reduce, summarize, organize, evaluate, interpret and communicate numeric information (Polit, 2008).

This chapter deals with the analysis and interpretations of data collected to evaluate the effect of Progressive Muscle Relaxation therapy in reducing the anxiety among the elderly residing in selected old age homes at Thiruvananthapuram district, Kerala based on the objectives and hypotheses of the study. The objectives of the study were, to assess the degree of anxiety among elderly in experimental and control group before Progressive Muscle Relaxation therapy.

to assess the degree of anxiety among elderly in experimental group and control group after administration of Progressive Muscle Relaxation therapy in the experimental group.

to compare the degree of anxiety among elderly in experimental and control group after administration of Progressive Muscle Relaxation therapy in the experimental group.

to associate the degree of anxiety among elderly before Progressive Muscle Relaxation therapy with the selected demographic variables such as age, sex, education, previous occupation, marital status, dietary pattern, hobby, religion and duration of stay in the old age home.

ORGANIZATION OF THE FINDINGS

In order to find out the relationship between the variables and the effect of Progressive Muscle Relaxation therapy, the data gathered were tabulated, analyzed and interpreted by using both descriptive and inferential statistics. The data are Presented under the following headings.

Section I : Description and matching of study subjects

Section II: Assessment of anxiety before Progressive Muscle relaxation therapy

Section III: Comparison of anxiety between experimental and control groups before Progressive Muscle relaxation therapy

Section IV: Assessment of anxiety after Progressive Muscle relaxation therapy

Section V: Assessment of the effect of Progressive Muscle relaxation Therapy

Section VI: Association between anxiety and demographic variables

SECTION I: DESCRIPTION AND MATCHING OF STUDY SUBJECTS

The study subjects were described according to their demographic variables such as age, sex, education, previous occupation, marital status, dietary pattern, hobby and duration of stay in the old age home.

Table - 1: Description And Matching Of Study Subjects

SL NO	Demographic Variables	Components	Experimental (n=30)		Control (n=30)		Significance
			N	%	N	%	
	AGE	55-59	9	30.0	7	23.3	p>0.05
		60-65	16	53.3	14	46.7	
		65-69	5	16.7	9	30.0	
	SEX	Male	24	80.0	20	66.7	p>0.05
		Female	06	20.0	10	33.3	
	Education	Degree	9	30.0	4	13.3	p<0.05
		Higher secondary	10	33.3	2	6.7	
		Primary	11	36.7	22	73.3	
		Illiterate	0	0	2	6.7	
	Previous occupation	Manual Laborer	5	16.7	14	46.7	p<0.05
		Government	15	50.0	6	20.0	
		Private	8	26.6	10	33.3	
		Unemployed	2	6.7	0	0	
	Marital status	Separated	2	6.7	4	13.3	p>0.05
		Unmarried	3	10.0	5	16.7	
		Widow	5	16.7	8	26.7	
		Widower	20	66.6	13	43.3	
	Dietary habit	Non vegetarian	27	90.0	29	96.7	p>0.05
		Vegetarian	3	10.0	1	3.3	
	Hobby	Yes	25	83.3	7	23.3	p>0.05
		No	5	16.7	23	76.7	
	Religion	Hindu	29	96.7	25	83.3	p>0.05
		Christian	1	3.3	5	16.7	
	Duration of stay	Less than 5 years	7	23.3	16	53.3	p>0.05
		More than or equal to 5 years	23	76.7	14	46.7	

TABLE -2: ASSESSMENT OF ANXIETY BEFORE PROGRESSIVE MUSCLE RELAXATION THERAPY

Score	Percentage Of scores	Level of anxiety	Experimental		Control		Significance
			N	%	N	%	
20-44	25-55	Normal					
45-59	55-75	Mild to moderate	12	40.0	11	36.7	t=0.268
60-74	75-92.5	Severe	18	60.0	19	63.3	d.f=58
75-80	92.5-100	Extreme					p>0.05
Total			30	100	30	100	

TABLE – 3: COMPARISON OF ANXIETY BETWEEN EXPERIMENTAL AND CONTROL GROUPS BEFORE PROGRESSIVE MUSCLE RELAXATION THERAPY

Variable	Experimental		Control		Difference	‘t’	d.f	Significance
	Mean	SD	Mean	SD				
Anxiety Before Progressive Muscle relaxation therapy	59.8	7.0	60.2	6.4	0.4	0.230	58	P>0.05

Table – 4 : ASSESSMENT OF ANXIETY AFTER PROGR ESSIVE MUSCLE RELAXATION THERAPY

Score	Percentage of scores	Level of anxiety	Experimental		Control		Significance
			N	%	N	%	
20-44	25-55	Normal	4	13.3	0	0.0	t=3.85
45-59	55-75	Mild to moderate	25	83.4	12	40.0	d.f=58
60 -74	75 -92.5	Severe	1	3.3	18	60.0	p<0.001
75 -80	92.5 -100	Extreme	-	-	-	-	
Total			30	100.0	30	100.0	

CONCLUSION

The following conclusions were drawn from the study:

The mean anxiety of the experimental group before progressive muscle Relaxation therapy and the same after progressive muscle relaxation therapy was statistically highly significant.

There was no relationship between the selected demographic variables and anxiety.

REFERENCES

- Pandya R, Shukla B. Elderly and their recreational needs. Journal of Social Welfare. 2011 Oct; 58(7): 24.
- Townsend M C. Psychiatric Mental Health Nursing. 7th edi (Indian). New Delhi: Jaypee brothers publisher. 2012: p 833.
- Schoevers RA, Beekman ATF, Deeg DJH, Jonker C, Tilburg W van. Comorbidity and risk-patterns of depression, generalised anxiety disorder and mixed anxiety-depression in later life: results from the AMSTEL study. International Journal of Geriatric Psychiatry. 2003;18(11):994–1001. Available from: [http:// dx.doi.org/ 10.1002/ gps. 1001](http://dx.doi.org/10.1002/gps.1001).
- Lenze. More older adults affected by anxiety disorder than depression. [cited on Oct, 2014] Retrieved from: <http://www.webmd.com/anxietypanic/guide/20060522/anxiety-mixed-elderly>.
- Census of India, 2011. [Accessed in 2014]. Available from: <http://www.censusindia.net>
- National health census 2001. Elderly census.[online]. (cited on April 15th 2014); Available from www.healthorg.com
- Karrie J. Craig, Kelly J. Brown, and Andrew Baum. Environmental Factors in the Etiology of Anxiety , 2000 (online) [cited 2014, December] Available from <http://www.acnp.org/g4/GN401000127/CH125.html>