Journal of Coastal Life Medicine

A Study on the Influence of Muscle Relaxation Therapy in Decreasing Stress on Elderly Individuals Staying at Trivandrum, Kerala.

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Abstract

The study is going to shed light on the influence of muscle relaxation therapy in decreasing stress on elderly individuals who have been staying at old age homes in the district of Trivandrum, Kerala. The Objectives of the studies were To evaluate the stress among the experimented elders, in comparison to the control group after using the music relaxation therapy, To find out the impact of stress on elderly individuals before utilisation of muscle relaxation therapy on a particular variable or selected groups., and To measure the influence of administration on two different groups and progression of the therapy can be detected in selected demographic groups. Methodology: The study further includes two different groups such as a pre-test and post-test, to further evaluate the influence of progressive Muscle Relaxation Therapy. For this study, a quantitative approach has been chosen. The study further includes two different groups such as a pre-test and post-test, to further evaluate the influence of progressive Muscle Relaxation Therapy. A total number of 60 old individuals were randomly selected who have been suffering from a serious stress issues. The selection of samples for the research has been conducted through the convenience sampling method. Elderly men and women were randomly selected for this study. The tool that has been used for this study mainly made up of two parts, Part I - In the case of demographic data collection questionnaire was the appropriate structure. It mainly comprises of marital status, age, sex, occupation, duration, and education. Part-II The actual level of stress can be easily calculated through "the modified psychological stress assessment scale". An appropriate model or framework was successfully adapted for the study depending on Roy's adaptation model by the year 1984. The reliability of the tool was assessed by test retest method. The obtained reliability coefficient was 'r' =0.988The stress levels of seniors were analysed by frequency and percentage distribution based on the selected demographic variable. The effectiveness of progressive muscle relaxation in reducing stress was evaluated using a paired t-test. A Chi-square test was performed to see if there was a connection between their preferred demographic variables and their stress levels.

1. Introduction

Aging can be considered a challenging factor for individuals from the entire world and the challenges are inevitable for mankind. In that case, all organism in this world goes through three main steps such as birth, age, and death. Therefore, each organism has been following a cycle that will take them through various phases such as childhood, maturity, and adulthood and finally decay.

One of the major identifying characteristics of the population of the 21st century is the greying population. Therefore, the first part of the 21st century can be denoted as "The age of ageing".

Stress can be taken as a major influencer of aging and a threat can be observed on psychological, physiological or behavioral factors. According to Lalitha (2007), a rapid formation of stress can easily alter the mental and physical factors of any individual. In the case of nursing and other treatment, relaxation methods can be highly preferable for the country of India. In a various range of intervention processes to reduce stress factors, psychologists and medical practitioners have been selecting the relaxation phase. Therefore, nurses can easily employ the relaxation method on patients to promote healing by reducing the negative impact of illness, stress, and surgery. The process of relaxation includes visualization, breathing, and

Journal of Coastal Life Medicine

music listening, yoga and meditation for improving the health of individuals Grossberg (2009).Henceforth, I introduced a trial process that can deliberately influence the relaxation of muscles in old age individuals who live in an aged care centre.

11 NEED FOR THE STUDY

Many doctors fail to diagnose or treat anxiety in elderly patients because they believe the disease is uncommon in elderly patients or that it is a normal part of the ageing process. Despite the fact that anxiety is quite common in elderly patients and can have a significant influence on quality of life, many doctors fail to do so (Lenze). n that case, a rapid enhancement of the elder population in the world has created the necessity of conducting research for solving the psychological issues of elderly patients. In this context, it can be observed that the number of elderly individuals staying at aged care homes has already been enhanced in this century.

People who are elderly and live in institutions are at increased risk for developing a variety of mental health conditions, including but not limited to depression, anxiety, stress, a sense of insecurity, loneliness, behavioural difficulties, social isolation, and low self-esteem. The failure to adequately adjust can be linked back to the decline of health as well as the accompanying behavioural and physical diseases. The absence of human interaction and familiarity that residents of an elderly people's home no longer experience can frequently leave these individuals feeling isolated and lonely (Avdesh Sharma, 2010).

Care for elderly individuals with proper infrastructure can be taken as a challenge for western countries and also for India. On the other hand, it can be observed that most of the elders in India prefer to stay with their relatives, children, or families.

2. Statement of the Problem

The study is going to shed light on the influence of muscle relaxation therapy in decreasing stress on elderly individuals who have been staying at old age homes in the district of Trivandrum, Kerala.

3. Objectives of the Study

1. To evaluate the stress among the experimented elders, in comparison to the control group after using the music relaxation therapy.

2. To find out the impact of stress on elderly individuals before utilisation of muscle relaxation therapy on a particular variable or selected groups.

3. To measure the influence of administration on two different groups and progression of the therapy can be detected in selected demographic groups.

4. Hypotheses

- A connection cannot be observed between specific demographics and stress as a variable of anxiety.

- A connection can be observed between specific demographics and stress as a variable of anxiety.

5. Operational Definitions

Effectiveness

The word effectiveness has been utilised in this study, which signifies the formation of the intended result. Another term, the stress level is the determination process of most and pre testing scores among elderly individuals.

Elderly

❖ The term elderly can be further explained as a group of individuals who are old. The current study includes the age group between 56 tears to 70 years.

Progressive muscle Relaxation Technique

The study showed the effectiveness of progressive muscle relaxation therapy on elderly patients. The technique has been used on every day at least for one month to evaluate the physical condition of elders.

ASSUMPTIONS

- There may be wide individual variation in the intensity of one's stress.

Journal of Coastal Life Medicine

- The elderly may benefit from progressive muscle relaxation in order to experience reduced levels of tension.

DELIMITATION

Study is delimited to elderly people who are residing in selected old age homes ,who are available at the time of data collection, Study design adopted is one group pretest –posttest design.

CHAPTER-III

6. Methodology

RESEARCH APPROACH

For this study, a quantitative approach has been chosen.

RESEARCH DESIGN

The study further includes two different groups such as a pre-test and post-test, to further evaluate the influence of progressive Muscle Relaxation Therapy.

VARIABLES UNDER STUDY

1. Dependent variable: - It is the change in the level of Stress among Elderly people in selected old age homes

2. Independent variables: - Progressive muscle Relaxation technique on reduction of Level of Stress

SETTING OF THE STUDY

The research was primarily concentrated on a number of retirement communities located within the Trivandrum District of Kerala. Anbunilayam and Malayinkeezhu sadhu dennisprasangiyarvayodhanakendram are two of the retirement communities that were taken into consideration for this research.

POPULATION OF THE STUDY

In this analysis, "population" refers to the senior citizens who call one of the many retirement communities in the TVM District of Kerala home.

SAMPLE SIZE

A total number of 60 old individuals were randomly selected who have been suffering from a serious stress issues.

Sampling Technique

The selection of samples for the research has been conducted through the convenience sampling method.

RESEARCH TOOL

The tool that has been used for this study mainly made up of two parts,

Part I - In the case of demographic data collection questionnaire was the appropriate structure. It mainly comprises of marital status, age, sex, occupation, duration, and education.

Part-II

The actual level of stress can be easily calculated through "the modified psychological stress assessment scale". The tool mainly comprises of total 30 substances which can deal with physical, social, and psychological stress.Each item was answered on a four point scale. Items were scored as, 0 = Never ,1 = Occasionally ,2 = Often3 = Always. Scoring and Interpretation

0-30 (0–33%)- Mildstress , 31-60 (34–67%) - Moderatestress ,61-90 (68–100%) - Severestress

RELIABILITY

The reliability of the tool was assessed by test retest method. The obtained reliability coefficient was 'r' =0.988

7. Method of Data Collection

All required permissions were granted by the proper authorities. After being provided with all of the relevant data, study participants gave their informed consent. In order to help participants understand what it is they are helping with, researchers explain their study's goals to them. Data collection through self-administered questionnaires.. Information for this study was gathered from two different retirement homes, Malayinkeezhu sadhu

Journal of Coastal Life Medicine

dennisprasangiyarvayodhanakendram and Anbunilayam. Data were collected using a convenience sample method over the course of a month. After the preliminary assessment was finished, the experimental groups were given one month of teaching and demonstrations in progressive relaxation therapy. The post-test was conducted immediately afterwards.

CHAPTER 4

ANALYSIS AND INTERPRETATION

In the next section, we will examine the processing and interpretation of data obtained from a survey that was given to sixty subjects who were living in an old people's home in the Trivandrum District of Kerala.

OBJECTIVES OF THE STUDY

Why To learn if the stressed levels of the elderly participants were lower after music relaxation therapy than in the control group.
The goal of this study is twofold: (a) to quantify the impact of stress on the elderly, and (b) to utilise that information to inform decisions about which individuals or populations would benefit most from muscle relaxation therapy.
• To assess the effect of administration on two groups and the degree to which treatment outcomes may be monitored in relation to demographic subgroups

Section I :   Socio- demographic variables

Section 2 :   Assessment of Pre and Posttest level of stress among Oldage
Section 3 :   Effectiveness of Progressive muscle relaxation therapy among oldage
The variables of the study were selected according to the demographics such as occupation, education, sex , age, duration and mariatal status.

Section I :   Socio- demographic variables
Percentage distribution of samples according to socio demographic variables

According to the variables of sample 1, it can be said that the study is dependent on the demographics.

There are near about 27.3% age group selected between 60 years to 65 years for this study. Additionally, 26.6% individuals are under 66 to 70 years and other individuals are under 71 to 75 years. On the other hand, sample distribution should be done also according to sex, male individuals are at 48.6% and female individuals are 53.3%. On the other process, marital status should be selected according to single, married and widowed. There are near about 11.6% were single, 50% were married , 23 % were widowed and 15% were separated.

According to the occupation, the employed samples were 9%,self-employed were 18.3% and unemployed were 71.6%. According to the achieved educational status the samples were distributed, hence the percentage of illiterate individuals were 60.1%, literate individuals were 36.6%.

SECTION B: Assessment of the Pre and Post Test Level of Stress Among Old AgeTable 2: The level of stress has been detected with the help of percentage and Frequency of pretest and post test scores. N= 60

SI. NO	Level of Stress	Pretest		Posttest	
		Frequency	Percentage	Frequency	Percentage
1	Mild	-	-	46	76.3 %
2	Moderate	29	48.3%	14	23.3
3	Severe	31	51.6%	-	-

Journal of Coastal Life Medicine

In this process, table 2 demonstrates the distribution of percentage and frequency of stress present among the old age group. Therefore, the pre test level of stress present at the rate of 48.3%, medium level of stress present at the rate of 51.6% and post level stress factors can be observed at the rate of 76.3%.
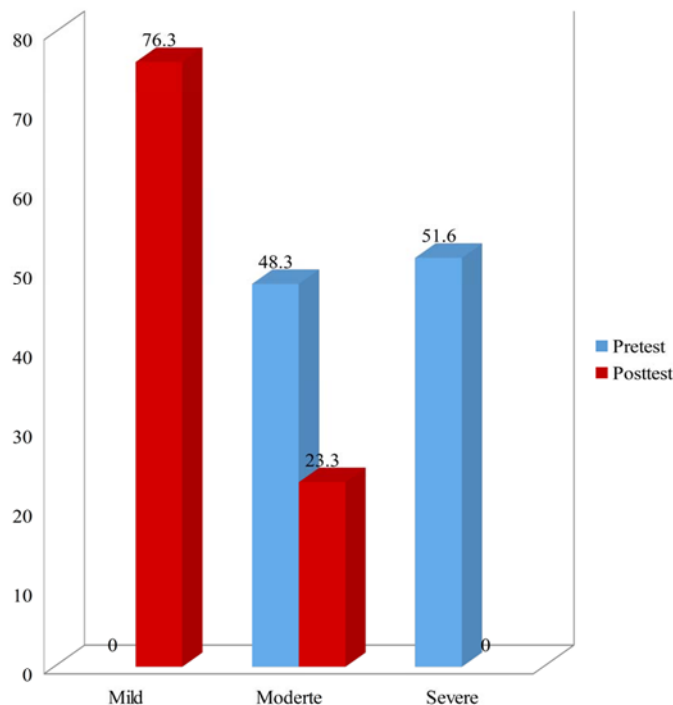
In Section C, compare the levels of stress experienced by older people before and after they participated in activity therapy.

The percentage of stress alleviation that was reported by elderly citizens before and after the test is outlined in Table 3, which compares the pre- and post-test levels.

Variables	Pretest		Post test		
	Mean	Standard deviation	Mean	Standard deviation	Mean difference
Stress	60.41	6.08	28.51	7.35	34.9

Journal of Coastal Life Medicine

The table 4 helps individuals to understand that, the pre test value of stress was 61.41 and the value of standard deviation was 6.08. The post stress value of the examination process was 26.41 and the other value of standard deviation was 7.35.

Table 4: the stress level of elderly individuals are depicting by mean, paired t test , pre and post test

N = 60

Variables	Pre Test		PostTest		Tvalue
	Mean	Standard Deviation	Mean	Standard Deviation	
Stress	61.41	6.08	27.51	7.35	27.09

df = 59   p < 0.05

According to the value of t test , the level was calculated at 28.09 and the mean value of pre test was 61.41. Along with the standard deviation was 6.08. The post stress phase was 27.51 and the standard value for the stress factor was 7.35.

Section E: The demographic variables were selected after the calculation of post test stress level.

Table 5 shows the correlation between older people's post-test levels of stress and the demographic factors that were studied. N=60

Sl. No	Demographic Variables	x^2	df	Table value	Significance
1	Age	5.5	3	7.81	P < 0.05
2	Sex	2.24	1	3.84	P < 0.05
3	Marital status	2.31	3	7.81	P < 0.05
4	Previous occupation	3.72	2	5.99	P < 0.05
5	Educational status	0.248	1	3.84	P < 0.05
6	Duration of stay old age home	1.198	2	5.99	P < 0.05

From the above mentioned table,it can be observed that the demographic value of the individuals according to age was df=3, and chi square value 5.5 and the non-significant table value is < 0.05. Therefore, it can be stated that the values associated with demographics are not totally related with post test scores.. The value of the sex-based table does not meet the criteria for statistical significance (P >.05) when compared to the value of the chi-square statistic (2.24), and the df = 1 distribution produces the same outcome. As a consequence, this

Journal of Coastal Life Medicine

socioeconomic component does not have any bearing on the results of the post-test.

The value of the table does not meet the criteria for statistical significance at P >.05 when the sample is segmented according to marital status (df = 3, chi square = 2.31), provided that the sample distribution is normal. Therefore, this socioeconomic aspect does not play any role in determining the results of the evaluation. The result of a chi-square test with df = 2 is 3.72, however the table value does not meet the criteria for statistical significance at P > o.o5. As a consequence of this, the socioeconomic variable does not have any effect on the results of the post-test.

The table value for a distribution sample based on level of education has the following values: P > o.o5 for df = 1, chi square = 0.248, and P > o.o5 for chi square. As a result, the outcome of the evaluation is not affected in any way by the socioeconomic component in question. When compared to the value in the table, which is 0.5, the chi-square test for a sample distribution by length of time spent in an elderly care facility yields a value of 1.198 (df = 2). This value does not meet the criteria for statistical significance (P >.05), so the test is considered to be statistically inconclusive. As a consequence of this, the socioeconomic aspect of the test has no influence whatsoever on the results..

8. Summary

In this chapter, we looked at how to make sense of numerical data in light of the study's goals and assumptions. The stress levels of seniors were analysed by frequency and percentage distribution based on the selected demographic variable. The effectiveness of progressive muscle relaxation in reducing stress was evaluated using a paired t-test. A Chi-square test was performed to see if there was a connection between their preferred demographic variables and their stress levels.

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