A pre experimental study to assess the effectiveness of progressive muscle relaxation technique on selected psychological parameters among patients with mental illness from selected rehabilitation centers and hospitals of pune city.

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Abstract

Mental health is critical to being a whole and healthy person, and increasing awareness is critical to reducing the stigma of mental health disorders and treatment. 1 in 5 adults lives with a mental illness. 10.7% of the world suffers from some form of mental illness. According to mental health statistics, 2021 Over 970 Millions of individuals worldwide suffer from a mental illness. **The present study title**: "A pre experimental study to assess the effectiveness of progressive muscle relaxation technique on selected psychological parameters among patients with mental illness from selected rehabilitation centers and hospitals of Pune city". The objective of the study was evaluate the psychological status of a patient's condition before to the progressive muscle relaxation test technique, to assess the psychological parameters of mentally ill patient after the test of progressive muscle relaxation technique, to compare the pre and post test of psychological parameters, to associate the pretest psychological parameters with selected demographical variables. To find out the association with selected demographic variables. **Material and Methods:** In present study, researcher adopted Pre- experimental research design was used. It was carried out on 50 samples. The Non-probability purposive sampling strategy was adopted. Data was collected using DASS 21 scale. **Result:** The findings shows that In depression patient's 31.25% was at normal level whereas in the level of anxiety 29.17% was at normal level of anxiety and in level of stress majority 31.25% was at normal level of stress. In schizophrenia patients 27.45% was at normal level of depression whereas in level of anxiety 29.41% was at normal level of anxiety In substance abuse patients majority 25.49% was at normal level of depression whereas in the level of anxiety majority 27.45% was at normal level of anxiety and in level of stress majority 25.49% was at normal level of stress. There is a significant association between age and anxiety. **Conclusion:** The study's results indicated that there was a substantial difference in terms of effectiveness for lowering sadness, stress, and tension among mentally ill individuals. As a result of the study's findings, it was concluded that all nursing students should be taught progressive muscle relaxation in order to control the psychological parameters among patients with mental illness.

Recommendation: Same study can be done on the large group.

(Keywords: Assess, effectiveness, progressive muscle relaxation, mental illness)

Introduction

Mental health is critical to being a whole and healthy person, and increasing awareness is critical to reducing the stigma of mental health disorders and treatment. 1 in 5 adults lives with a mental illness. 10.7% of the world suffers from some form of mental illness. According to mental health statistics, 2021 Over 970 Millions of individuals worldwide suffer from a mental illness. According to gender-specific mental health data, women are twice more prone to depression than males. Since the worldwide pandemic breakout, the United States has taken the lead, with 33% of Americans feeling stress, worry, or despair.1 Nearly 1 in 7 (14 percent) of 15-24-year-olds in India report often feeling depressed or having little interest in doing things. As of 2015, on a global scale, about 322.48 million individuals suffer from some sort of depressive illness, The World Health Organization reported in 2017 that more than 14% of India's overall population suffers from various mental diseases. In India, the bulk of this proportion is made up of older adult females. For the mental health budget in Maharashtra In 2017-18, allocations were cut by 64% year over year. Between 2016-17 and 2017-18, there was a little increase in consumption. The Mental Health Care Act of 2017 is a positive step forward in the fight against mental health issues. According to a research, enacting the aforementioned legislation would provide a 6.5-fold return on investment. (Math et al., 2019). According to Nanded rural block study the The rate of depression, stress, and stress was 54 percent, 60 percent, and 44 percent, respectively, among these pupil. The prevalence of psychiatric diseases has been presented as a contemporary public health problem due to increased awareness of mental illness and its societal consequences in recen tyears (Melton, 2010). Depression and anxiety, in particular, are the most often observed and diagnosed mental illnesses globally (WHO, 2008), with a high prevalence in the United States(NIMH, 2011).

Need of the Study

According to current epidemiological statistics, about 15 million Americans suffer from severe depression, while 40 million people suffer from some kind of anxiety y(NIMH,2011).These findings become even more a astonishing when one considers the number of instances of mental illness that go untreated or undetected. Psychological coping mechanisms, such as stress management and relaxation strategies, are all examples of stress responses. It has been more obvious in recent years that anxiety disorders affect a sizable proportion of the adult population. The prevalence of any mental illness during a one-year period and throughout a lifetime disability, according to recent global estimates, are 10.6% and 6.6%,respectively, indicating that a size able proportion of the population suffers from mental illnesses on a regular or recurring basis. Women outnumber males by around two to one, with broad age-specific rates staying mostly steady or growing throughout life.[9] Anxiety disorders cause morbidity, long-term use of health-care services, functional impairment, and personal anguish, according to studies, resulting in a financial burden on both private and public health-care systems. Jacobson's Relaxation (PMR) is a commonly used technique for

reducing stress and tension in the muscles and anxiety alleviation. The Jacobson PMR Progressive Muscle Relaxation is simple to learn, and its benefits include, but are not limited to, reduced anxiety and sadness, improve demotions of self-control, and improved coping abilities in stressful situations. Jacobson's Progressive Muscle Relaxation has also been shown to have a good influence in studies involving a variety of mental diseases, with positive changes such as anxiety relief, reduced psychological stress, and an increase in psychological well-being. So, therefore, now a day there is an increased number of mentally ill patients and also there is many therapeutic therapies area available in treatment. But to see the more effect of progressive muscle relaxation technique among them because it not only relaxes the mind as well as muscles & body and also induce sleep. There are many studies done on progressive muscle relaxation on various aspects but many few studies have been found on mentally ill patients on different psychological parameters.

Aim of the study

To assess the effectiveness of progressive muscle relaxation technique on selected psychological parameters among patients with mental illness.

Methodology

Pre-experimental research design is adopted. The study was conducted in chaitaniya rehabilitation center pune and alcoholic centre, Pune district. Total 50 samples were selected from selected hospitals and rehabilitation centers areas of Pune city. The reliability was done inselected hospitals and rehabilitation centres of Pune city from 1/08/2021 to 14/08/2021...The pilot study was conducted 16/09/2021 to 30/09/2021 at selected hospitals of Pune city, to assess the feasibility of the study, to test the proficiency of instrument to be used for data collection and to decide plan for data analysis. In the data analysis, descriptive and inferential statistics were to be applied. The statistical profile of patients was analysed using descriptive analysis.

Result

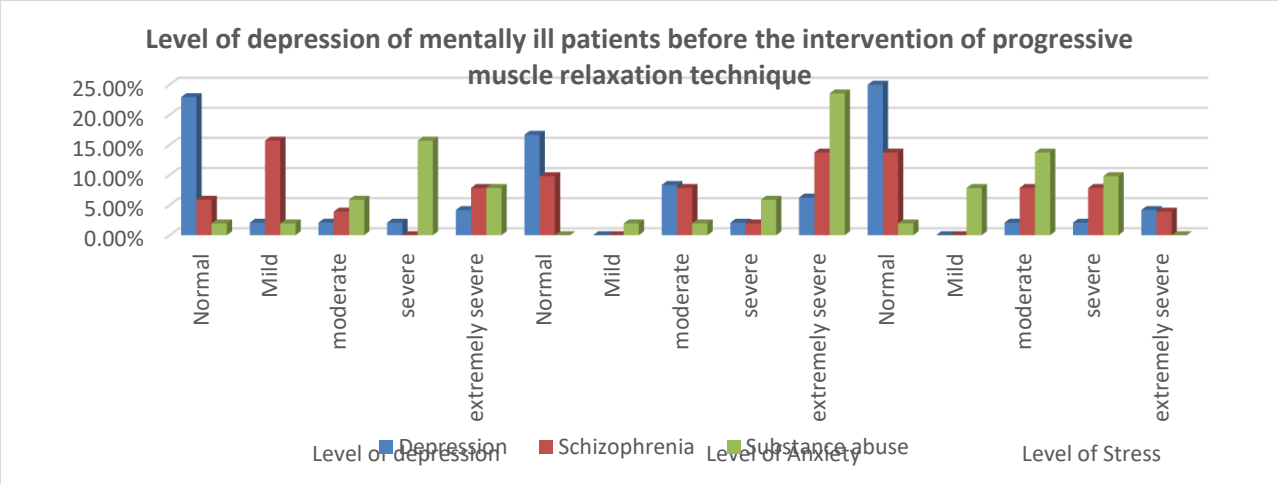
Section I: Demographic profile of mentally ill patients.

Majority 18 (36%) participants were age group from 19-30 years, 50 (50%) males were females whereas same percentage. 25 (50%) are Unmarried, 23(46%) are Graduation .20(40%) are Unemployed, 18(36%) monthly income is,21000– 30000, 26(52%) Duration of the illness is 1–5 years and 16 (32%) are 2 time of admission previously in hospital or rehabilitation centers.

Section II: To analyse the psychological parameters of mentally ill patient after the intervention of progressive muscle relaxation technique

In depression patient‘s majority 22.92% was at normal level whereas in the level of anxiety majority 16.67% was at normal level of anxiety and in the level of stress majority 25% was at normal level of stress. In schizophrenia patient majority 15.69% was at mild level of depression whereas in the level of anxiety majority 13.73% was at level of extremely severe anxiety and in level of stress13.73%was at normal level. In substance abuse patients majority

15.69% was at severe depression level whereas in the level of anxiety 23.53% was at extremely severe anxiety level and in level of stress majority13.73%was at moderate stress level.



Section III: To analyze the psychological parameters of mentally ill patient after the intervention of progressive muscle relaxation technique In depression patient‘s majority 31.25% was at normal level whereas in the level of anxiety majority 29.17% was at normal level of anxiety and in level of stress majority 31.25% was at normal level of stress. In schizophrenia patients majority 27.45% was at normal level of depression whereas in level of anxiety majority 29.41% was at normal level of anxiety and in level of stress majority 29.41% was at normal level of stress. In substance abuse patients majority 25.49% was at normal level of depression where as in the level of anxiety majority 27.45% was at normal level of anxiety and in level of stress majority 25.49% was at normal level of stress.

Schizophrenia						
Pre-test psychological parameters	Depression		Anxiety		Stress	
	Frequency	%	Frequency	%	Frequency	%
Normal	3	5.88	5	9.80	7	13.73
Mild	8	15.69	0	0.00	0	0
Moderate	2	3.92	4	7.84	4	7.84
Severe	0	0.00	1	1.96	4	7.84
Extremely Severe	4	7.84	7	13.73	2	3.92

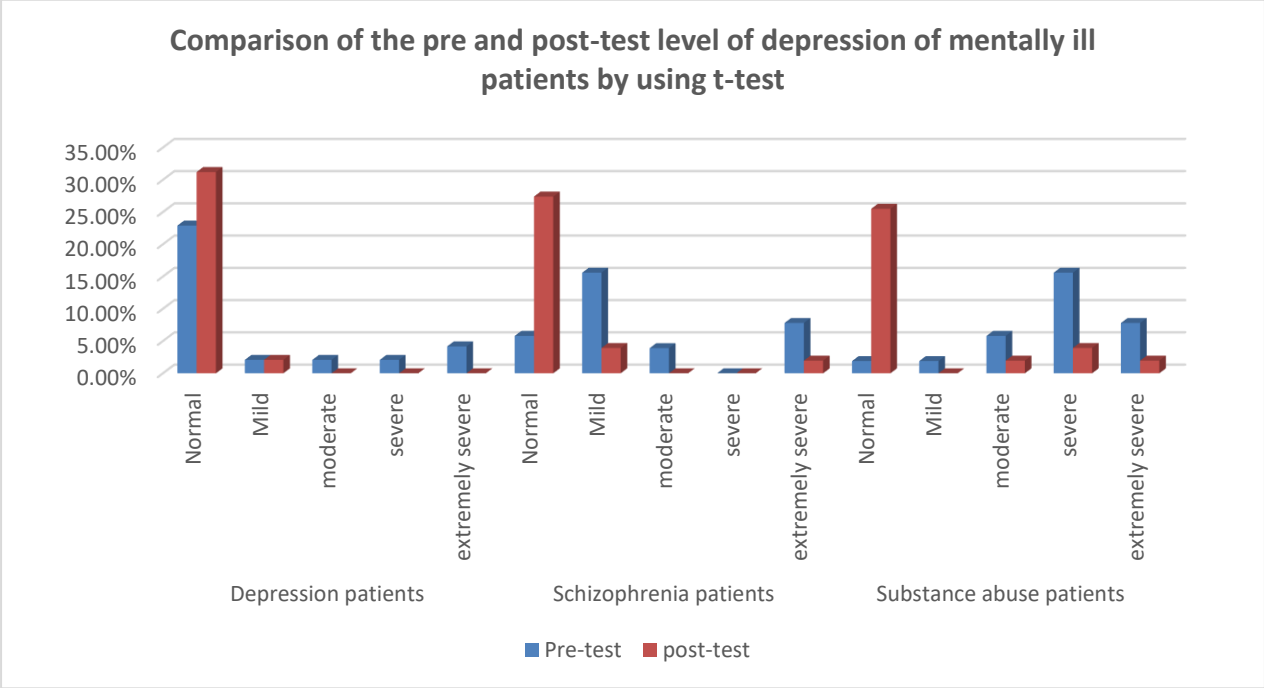
Section IV: To compared the pre and post-intervention all level of psychological parameters among mentally ill patients

In depression patients the level of depression is decreased from mean score 5.6 with SD 5.5 in preintervention to mean score 2.75 with SD 1.5 in post-intervention due to intervention of progressive muscle relaxation technique. In schizophrenia patients level of depression is

decreased from mean score 7.8 with SD 6.0 in pre intervention to mean score 3.76 with SD 3.0 in post-intervention due to intervention of progressive muscle relaxation technique. In substance abuse patients level of depression is decreased from mean score 11.2 with SD 3.2 in pre intervention to mean score 5.64 with SD 4.6 in post- intervention due to intervention of progressive muscle relaxation technique.

Comparison of the pre and post-test level of anxiety of mentally ill patients by using t-test

In depression patients the level of anxiety is decreased from mean score 6 with SD 5.4 in pre intervention to mean score 2.43 with SD 2.7 in post-intervention due to intervention of progressive muscle relaxation technique. In schizophrenia patients level of anxiety is decreased from mean score 7.82 with SD 5.3 in pre intervention to mean score 2.76 with SD 2.6 in post-intervention due to intervention of progressive muscle relaxation technique. In substance abuse patients level of anxiety is decreased from mean score 11.11 with SD 3.2 in pre intervention to mean score 3.82 with SD 3.4 in post-intervention due to intervention of progressive muscle relaxation technique.



Effectiveness of progressive muscle relaxation technique on psychological parameters of depressed patient

psychological parameters	Mean	SD	T value	P value	Remark
pre-test depression	5.68	5.55			
Post-test depression	2.75	1.53	2.35	0.03	S
pre-test anxiety	6	5.4			
post-test anxiety	2.43	2.75	3.27	0.005	S
pre-test stress	6.37	5.57			
Post-test stress	4	4.38	2.94	0.009	S

Section V: To associate the pre-interventional psychological parameters with selected demographical variables.

Association of depression with selected demographical variables.

Because the p value is greater than the 0.05 threshold of significance, there is no link between depression and demographic features.

Association of anxiety with selected demographical variables

There is a significant association between age and anxiety as the p value is less than 0.05level of significance and other demographic variables are not associated with anxiety as the p value Is more than 0.05 level of significance.

Association of stress with selected demographical variables

There is no association between the stress and demographic variables as p value are more than 0.05levelof significance.

Discussion

The study's results were addressed in relation to the stated goals and hypothesis. The purpose of this research was to determine the efficacy of muscle relaxation on selected psychological markers in individuals with mental illness from selected rehabilitation centers and hospitals.

LorenToussaint(2021) on The Effects of Progressive Relaxation Techniques, Deep Breathing, and Guided Imagery on Psycho physiological States of Relaxation Numerous studies indicate that a variety of Progressive muscular relaxation, meditation, and deep breathing are examples of relaxation methods, visualization, and auto genies) might assist people in reducing stress, enhancing relaxation states, and enhancing general well-being. We compared three widely used techniques for stiffness degradation muscle relaxation, breathing deeply, and guided imagery—are compared directly to one another and to a control condition. Sixty healthy students were randomly allocated to one of four treatment groups and had to complete 20 minutes of physical activity Training in muscle relaxation, deep breathing, or guided visualization provided through audio instruction that has been recorded. At base line and on a follow-up basis, mental relaxation states were examined. Additionally, we assessed continuous physiological relaxation using electro dermal Monitoring of activities and heart rate. When compared with control group, progressive muscle relaxation, taking deep breaths, and guided imagery all raised participants' level of relaxation. Each example was statistically significant, and although there was no difference in relaxation levels before to training, all groups reported being much more calm than the control group after training. In the future, comparable study might be conducted on stress relaxation techniques, using designs that allow for comparisons of many treatments in the same group.36 From the data studied in this research, it is clear that the demographic variable according to demographic profile Majority 18(36%) participants were age group from 19-30years,50(50%) males were females whereas same percentage. 25(50%)are Unmarried,23(46%) are Graduation.20(40%) are Unemployed,18(36%) monthly income is , 21000 – 30000, 26(52%) Duration of the illness is 1 – 5 years and 16(32%) are 2 time of admission previously in hospital or rehabilitation

centers. In depression patient‘s majority 22.92% was at normal level whereas in the level of anxiety majority 16.67% was at normal level of anxiety and in the 55 level of stress majority 25% was at normal level of stress. In schizophrenia patient majority 15.69% was at mild level of depression whereas in the level of anxiety majority 13.73% was at level of extremely severe anxiety and in level of stress 13.73% was at normal level. In substance abuse patients majority 15.69% was at severe depression level whereas in the level of anxiety 23.53% was at extremely severe anxiety level and in level of stress majority 13.73% was at moderate stress level. In depression patient‘s majority 31.25% was at normal level whereas in the level of anxiety majority 29.17% was at normal level of anxiety and in level of stress majority 31.25% was at normal level of stress. In schizophrenia patients majority 27.45% was at normal level of depression whereas in level of anxiety majority 29.41% was at normal level of anxiety and in level of stress majority 29.41% was at normal level of stress. In substance abuse patients majority 25.49% was at normal level of depression whereas in the level of anxiety majority 27.45% was at normal level of anxiety and in level of stress majority 25.49% was at normal level of stress. In depression patients the level of depression is decreased from mean score 5.6 with SD 5.5 in pre intervention to mean score 2.75 with SD 1.5 in post-intervention due to intervention of progressive muscle relaxation technique. In schizophrenia patients level of depression is decreased from mean score 7.8 with SD 6.0 in pre intervention to mean score 3.76 with SD 3.0 in post intervention due to intervention of progressive muscle relaxation technique. In substance abuse patients level of depression is decreased from mean score 11.2 with SD 3.2 in pre intervention to mean score 5.64 with SD 4.6 in post-intervention due to intervention of progressive muscle relaxation technique.37 There is no correlation between depression and demographic characteristics, since the p value exceeds the threshold of significance of 0.05. Age and anxiety are connected significantly when the p value is less than the 0.05 level of significance, however other demographic characteristics are not affected by stress when the p value is more than the 0.05 level of significance.38 The relationship between stress and certain demographic factors. There is no correlation between stress and demographic characteristics, since the p value exceeds the threshold of significance of 0.05.3

Conclusion

The goal of this research was to see how effective progressive muscle relaxation is on selected muscle group’s psychological markers in selected individuals with mental illness rehabilitation centers and hospitals. The study's results indicated that there was a substantial difference in terms of effectiveness for lowering sadness, stress, and tension among mentally ill individuals. As a result of the study's findings, it was concluded that all nursing students should be taught progressive muscle relaxation in order to control the psychological parameters among patients with mental illness. Limitations- 1) the study was limited to 60 samples. 2) Analysis of the study will based purely on the basis of responses given by the patients 3) The study was limited to the experience level of the researches. 4) Data collection period was only for 6 weeks. Recommendations- 1. A similar study can be replicated on larger sample to generalize the study findings. 2. A similar study could be conducted for a longer duration. 3. A comparison research of PMR and other complementary treatments such

as meditation, yoga guided imaginative therapy, and other tactics may be done.4. More study is needed to identify the solutions that may be successfully used to alleviate stress across various sectors & age individuals in the country. 5. A longitudinal study can be done using post intervention after one month, six month, and after one year to assess the effectiveness of progressive muscle relaxation therapy.6. A comparative study can be done among patients with cardiac surgeries and other major surgeries. 7. Similar study can be conducted as comparative between caregiver's male client and female client in different settings. 8. Study can be conducted as comparative study between Nurses and caregivers of patients in family.9. The study can be carried out for a longer period of time.10. The study can be carried to assistive quality of life among caregivers of mentally ill patients

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