

Effectiveness Jacobson's progressive muscle relaxation technique (PMRT) to relieve anxiety among alcoholic patients MHI, SCB, Cuttack, Odisha"

Sikandar Kumar¹, Reeta rani Nayak², Mrs Sinmayee Kumari Devi³.

¹(Vice principal cum HOD of psychiatric nursing, Lord Jagannath Mission College of nursing, Bhubaneswar, Odisha, India),

²(Lecturer, Sum college of nursing, S 'O'A University, Bhubaneswar, odisha, India)

³(Associate professor, Dept. of obstetrics and gynecological nursing, Lord Jagannath Mission College of Nursing, Bhubaneswar, Odisha, India)

Abstract: A quasi experimental study with pre and post test without control group design was undertaken on 100 male alcoholic patients in de-addiction centre of MHI, SCB, Cuttack, Odisha, to assess the effectiveness video assisted teaching module on progressive muscle relaxation technique to relieve anxiety among alcoholic patients. The samples were selected by purposive sampling technique. Data were collected from 24.06.2014 to 07.07.2014 through DAAS scale. The data collected were analyzed by using descriptive and inferential statistics. Findings revealed that in pre-test the highest (67%) of the alcoholic patient had panic level of anxiety related to physical factor and highest 45% of them had severe level of anxiety in economical factor. whereas in post test none of them had panic level of stress related to any factor. Highly significant difference was found between pre and post test anxiety level related to PMRT. No Significant association was found between post test anxiety level and their demographic variables. Further, video assisted teaching module on progressive muscle relaxation technique was effective for all the areas to reducing the level of anxiety among the alcoholic patient.

Keywords: PMRT, Alcoholic patient, VATM, Anxiety

I. Introduction

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. It is recognized that certain amount of anxiety is desirable, productive and can facilitates the individuals to grow but when the anxiety exceeds disturb the normal functions.¹

Individuals face anxiety on a daily basis. Anxiety, which provides the motivation for achievement, is necessary force for survival. The term 'anxiety' is often used interchangeably with the word 'stress'; however, they are not the same. Stress, or more properly, a stressor, is an external pressure that is brought to bear on the individual. Anxiety is the subjective emotional response to that stressor.²

Relaxation has a significant psychological impact. Through relaxation we can improve specific aspects of our personality, strengthening the positive qualities and changing unwanted habits and attitudes. In a state of relaxation various physical phenomenon occurs, which are accompanied by a sense of response and pleasure. These feelings reinforce emotion stability because in a state of relaxation we react calmly and reasonably and adjust more easily to new situations. Our disposition is therefore more stable and we are less given to mood swings.³

Jacobson's progressive muscle relaxation is a technique where is one progressively relax each of the muscle groups and relaxation is attained by relaxing means letting go of any in all contraction in the muscles. Thus relaxation is not an effort is absence of any effort.³

Progressive Muscle Relaxation (PMR) is a great technique for reducing overall body tension. As we practice tensing and relaxing all the muscle groups in our body, we can move to a shortened procedure, Deep Muscle Relaxation where we rapidly relax our whole body. As we reduce the tension we carry in our body, our whole being will feel less stress and we will enjoy increased physical and emotional health. The dynamics of relaxation: some skills are used when you are in touch with your internal world, in a state of relaxation.³

Psychological effect of relaxation: Relaxation has a significant psychological impact; through relaxation we can improve specific aspects of our personality, strengthening the positive qualities and changing unwanted habits and attitudes. In a state of relaxation, various physical phenomenon occurs which are accompanied by a sense of response and pleasure. These feelings reinforce emotional stability because in a state of relaxation we react calmly and reasonably and adjust more easily to new situations. Our disposition is therefore more stable and we are less given to mood change.⁴

In addition relaxation brings about a positive change in our way of thinking, directing us towards an open approach. The first step towards anxiety management should be aimed at terminating identified stimuli. In some cases anti-anxiety drugs or agents may be necessary. Regular relaxing exercises and meditation are helpful in preventing relapse. So this study is selected to help the patient to reduce their anxiety with a simple relaxation technique without any side effects.⁴

The investigators during their community psychiatry experiences observed that many alcoholic patients were subjected to anxiety because of extraneous factors possess a unique capacity of their own anxiety management skills. The skill of the investigator emphasizes on progressive muscle relaxation technique as the intervention would be adopted to equip them to balance their emotional state

Objectives:

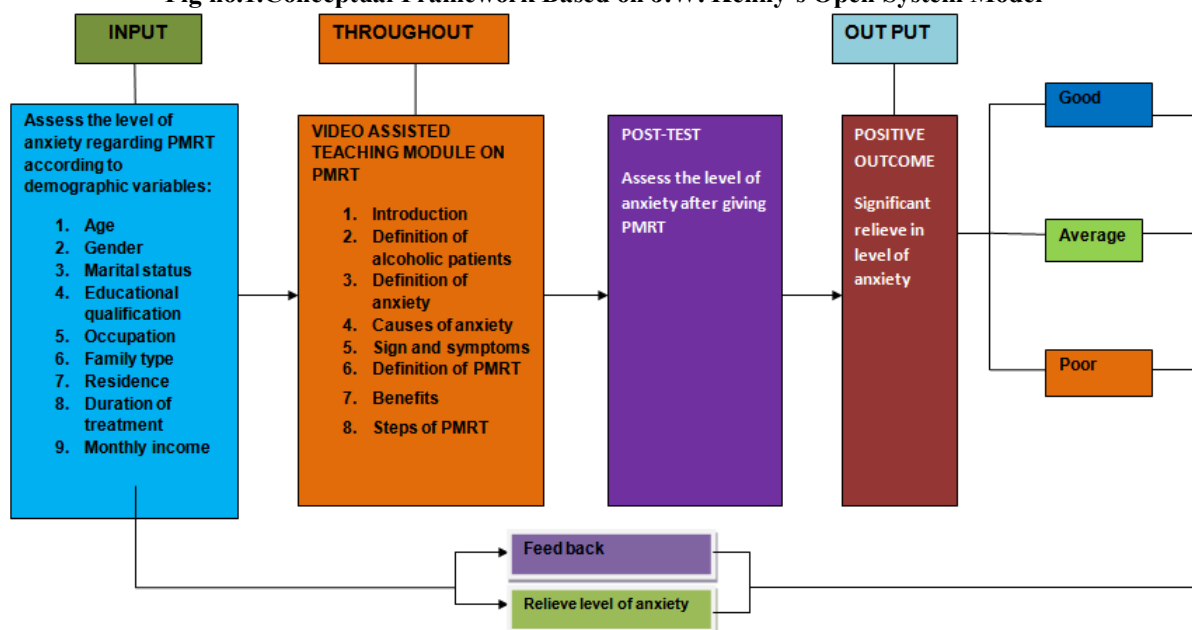
To

- Assess the level of anxiety among alcoholic patients. Prior to administration of PMRT admitted in de addiction center in IMH, SCB, MCH Cuttack, Odisha.
- Find out the effectiveness of PMRT on level of anxiety among alcoholic patients.
- Compare the level of anxiety level after implementation of PMRT with their selected demographic variables.
- Find out the association between the levels of anxiety prior to administration of PMRT with their selected demographic variables.

Hypotheses:

- **H₁**=Their will be significant difference between the level of anxiety in pre-test and post-test after administering Progressive Muscle relaxation Technique.
- **H₂**=There will be significant association between post test level of anxiety with their demographic variables.

Fig no.1. Conceptual Framework Based on J.W. Kenny's Open System Model



II. Material Methods

An evaluative research approach with pre-experimental research design was used to conduct the study. The study was conducted in de-addiction centre of MHI, SCB, Cuttack, Odisha, where 100 alcoholic patients were selected by purposive sampling technique. The tools were developed in 2 sections. Section -A includes the demographic variable and section-B includes DAAS scale to assess the level of anxiety. After having an extensive literature review, and consultation with medical and nursing experts, based on the specific purpose, tool was developed and validated by the experts of various fields. Inter rater method was used to calculate the reliability of the tool where spearman brown prophecy formula was used and found to be reliable (r=0.83). Pilot study was conducted in Institute of medical sciences and Sum hospital, S'O'A University, Bhubaneswar. A written permission was obtained from the concerned authority prior to the study.

Prior to data collection Permission was obtained from the superintendent of institute of mental health, SCB MCH, Cuttuck, Odisha and informed consent was taken from the respondents. Pretest was conducted by using DAAS scale followed by implementation of VATM on PMRT. After 7 days post test was done. Descriptive and inferential statistics was used for data analysis.

III. Findings

Table- 1: Frequency & percentage distribution of alcoholic patient according to their demographic variable.

Demographic Variables	Frequency	Percentage
Age		
20-30	31	31%
31-40	30	30%
41-50	22	22%
Above 50	7	7%
Professional Qualification		
Illiterate	23	23%
Primary	40	40%
Secondary	27	27%
Above higher secondary	10	10%
Occupation		
Govt. employee	20	20%
Pvt. Employee	10	10%
Self employee	29	29%
Daily wages	41	41%
Marital status		
Married	65	65%
Unmarried	24	24%
Others	11	11%
Residence		
Urban	55	55%
Rural	30	30%
Slum	15	15%
Family type		
Nuclear	25	25%
Joint	35	35%
Extended	40	40%
Duration of treatment		
<1years	29	29%
1-5years	26	26%
>5years	45	45%

Figure No 1 : comparison of pre and post test level of anxiety among the alcoholic patients regarding PMRT.

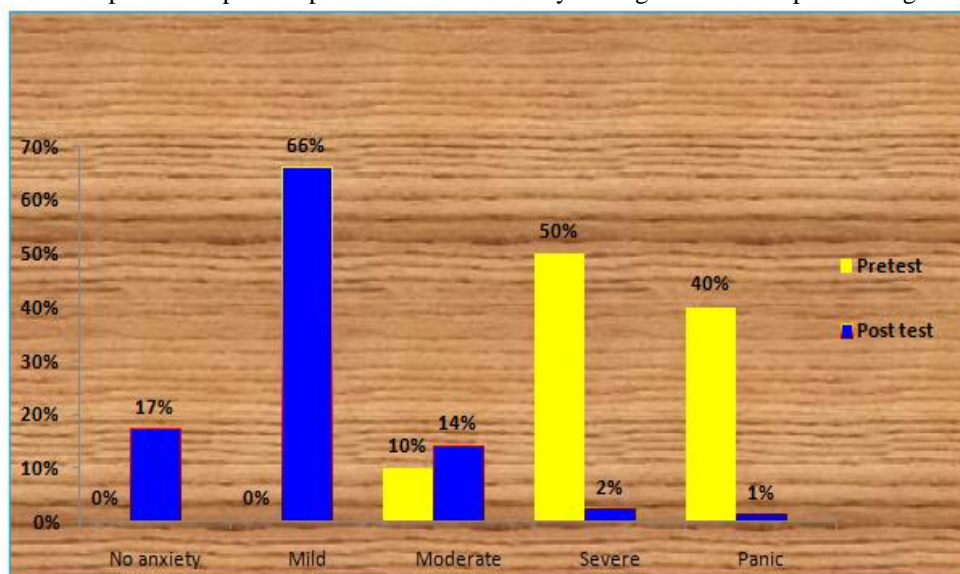
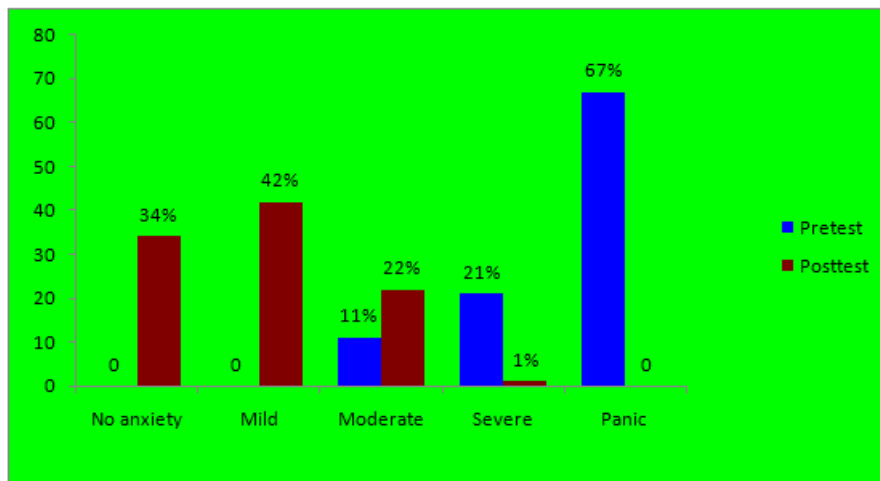


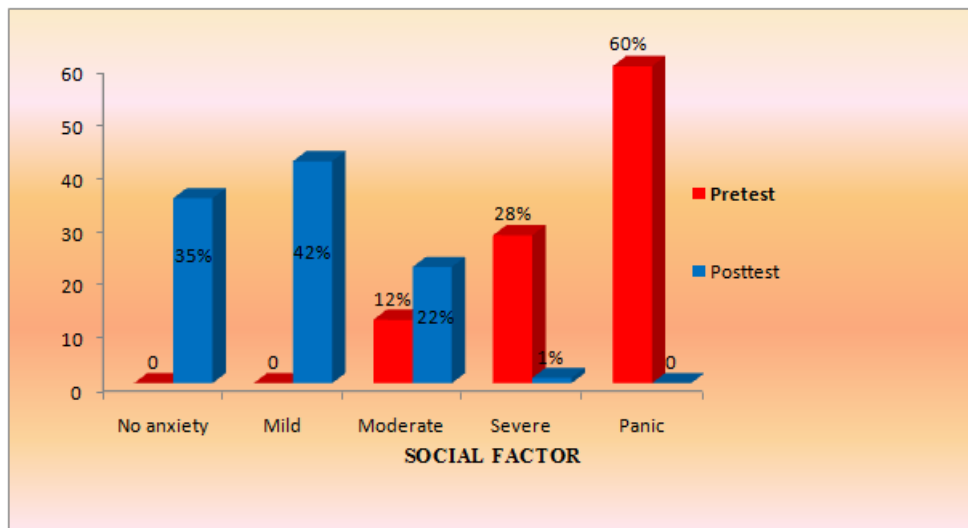
Fig- 1: Depicts that during pretest majority 50% of the alcoholic patient had severe level of anxiety and 40% of them had panic level of anxiety where as after implementation of PMRT only 1% of them had panic level of stress and 2% of them had severe level of stress revealing the effectiveness of VATM on PMRT.

Figure No-2: Bar Diagram Showing The Comparison Of Level Of Anxiety Related Their Physical Factor



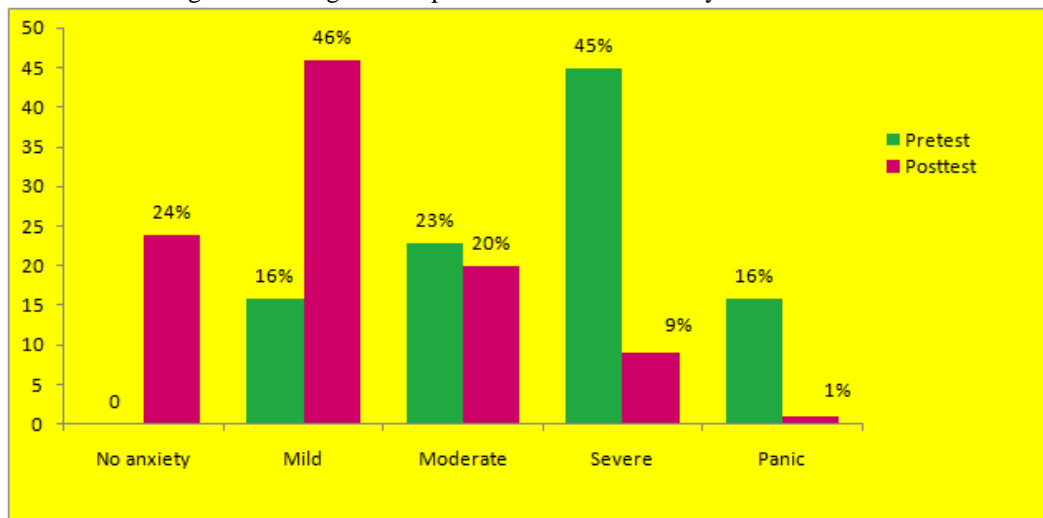
Physical Factor

Figure No-3: Bar Diagram Showing The Comparison Of Level Of Anxiety Related Their SOCIAL Factor



SOCIAL FACTOR

Figure No-4: Bar diagram showing the comparison of level of Anxiety related their ECONIMICAL Factor



Econimical Factor

Fig-1,2 and 3 :Comparison of level of anxiety in relation to Physical Factor, Social Factor and Economical Factor It shows that during pre-test highest percentage (67%) of alcoholic patient had panic level of anxiety whereas in post test only 1% of them had severe level of anxiety related to physical factor. In social factor during pre-test majority 60% of alcoholic patient had panic level of stress and none of them had panic level of stress in post test. In relation to economical factor highest 45% of them had severe level of anxiety in pre-test where as in post test only 1% of them had panic level of stress. It seems that severity of anxiety is more in pre-test than post-test. It might be due to practice of progressive muscle relaxation technique.

H01: There was significant difference between pre and post test anxiety scores of the alcoholic patients.

Table 2: comparison between difference of pre and post test anxiety score of the alcoholic patients.

Factor wise distribution	'Z' value	Level of significance
Physical factor	6.07	Highly significant
Social factor	25.08	Highly significant
Economical factor	13.17	Highly significant
Overall	30.39	Highly significant

(Table value=2.0), ($p \leq 0.05$)

Table-2: Z test was calculated to assess the significant difference between pre and post test anxiety scores which shows highly significant difference between all factor wise scores values of pre and post test values. Hence, the null hypothesis is rejected ($p < 0.05$) and statistical hypothesis is accepted. Thus, it can be interpreted that video assisted teaching module was effective for all areas.

H02: There was significant association between post test anxiety score with their selected demographic variables.

Table 3: Association between post test anxiety scores selected demographic variables.

DEMOGRAPHIC VARIABLES	Calculated χ^2 value	df	Table value	LEVEL OF SIGNIFICANCE
Age	0.97	3	7.82	Not significant
Gender	0	1	3.84	Not significant
Education qualification	0.58	3	7.82	Not significant
Occupation	4.43	4	9.49	Not significant
Marital status	2.08	2	5.99	Not significant
Family type	5.72	2	5.99	Not significant
Residence	4.96	2	5.99	Not significant
Monthly income	5.22	2	5.99	Not significant
Duration of treatment	0.04	5	11.07	Not significant

($p > 0.005$ not significant)

Table-3: Chi square was calculated to find out the association between post test level of anxiety scores of the alcoholic patients with their selected demographic variables, it was found that there was no significant association between level of anxiety scores among alcoholic patients on PMRT in post test when compared to age, gender, education qualification, occupation, marital status, family type, residence, monthly income, duration of treatment on PMRT ($p > 0.005$). Hence, it can be interpreted that the difference in mean score related to the demographic variables were only by chance and not true and the null hypothesis is rejected regarding PMRT in pretest and post test. It is inferred that alcoholic patients had significantly reduce anxiety scores after implementation of video assisted teaching module.

IV. Nursing Implication

Most patients with physical disorder suffer from anxiety which has not been revealed during hospitalization. The nurse has to assess all the alcoholic patients about their level of anxiety.

- Progressive muscle relaxation technique need as a part of other therapies and to be practiced by the nurse in the day-to-day activities. The nurses need to motivate the alcoholic patients to practice the progressive muscle relaxation technique in their daily life.
- The concept of prevention is better than cure need to be concentrated among the alcoholic patient.
- 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 an anxiety. The administrator can communicate this finding 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.

- Practice emerges from research, evidence based practice to improve the quality of nursing care. 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.

V. Recommendations

- ✓ Replication of the study could be done with a larger sample to validates and generalize the findings.
- ✓ This study can be carried out among the alcoholic patients in the community set up.
- ✓ The study can be done by maximizing the time period of progressive muscle relaxation technique.
- ✓ The study can be conducted to determine the effectiveness at progressive muscle relaxation technique on specific illness patients.
- ✓ This study can be conducted on various psychiatric conditions.
- ✓ An experimental study can be undertaken with control groups

VI. Conclusion

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

Reference

- [1]. Evren C, Sar V, Evren B, Dalbudak E. Self-mutilation among male patients with alcohol dependency: the role of dissociation. *Comprehensive Psychiatry*, 2008 Sep-Oct; 49(5):489-95.
- [2]. Leboduf A, Lodge J. A comparison of frontal Emg feedback and progressive relaxation. *American Journal of psychotherapy*. 27 (2) ; 1999. pp 170 – 4.
- [3]. Rapp MS, Thomas MR. Muscle Relaxation Techniques in treatment of anxiety. Pender NJ. *Effects of Progressive Muscle Relaxation Technique on anxiety*. *Research of Nursing health* 8 (1); 2005. pp 67 – 70.
- [4]. De Berry (2007). Evaluation of progressive muscle relaxation on stress related symptoms. *Journal of clinical psychology*, 10(7) 342-346
- [5]. Stone P. Relaxation Technique in general practice. *Australian family physician*. 12 (10); 1983. pp 730.
- [6]. De Berry S. An evaluation of progressive muscle relaxation on anxiety. *International journal of aging human development*. 14 (4); 1982. pp 255 – 69.