A STUDY TO ASSESS THE EFFECTIVENESS OF GUIDED IMAGERY AND PROGRESSIVE MUSCLE RELAXATION THERAPY ON STRESS AMONG STAFF NURSES WORKING IN SELECTED HOSPITALS AT SRI GANGANAGAR RAJASTHAN

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ABSTRACT

Introduction: Stress is a multidimensional phenomenon which is focused on dynamic relationship between the individual and the environment. It is also defined as a stressor, individual's response to the stimuli and interaction between the individual and the environment.

Material & Methods: Pre Experimental Design was used. Study was conducted at Sihag hospital Sri Ganganagar. 40 staff nurses were selected by using Non- probability convenient sampling Technique.

Result: The findings of the present study showed the mean post-test stress score (30.60) was lower than the mean pre-test stress score (64.78).

Conclusion: The comparison of pre-test and post-test stress score showed that there was a significant reduction in stress scores of staff nurses after administration of Guided Imagery and Progressive Muscle Relaxation and Therapy .

KEY WORDS: Staff nurses, stress.

INTRODUCTION

Stress is a multidimensional phenomenon which is focused on dynamic relationship between the individual and the environment. It is also defined as a stressor, individual's response to the stimuli and interaction between the individual and the environment. It should be noted that some degree of stress can be effective on increasing and improving individual's performance. Evidences indicate that most of the human successes are created in stressful conditions; but high rate of stress would followed by numerous consequences, including mental and physical illnesses, sleep disorders, restlessness, irritability, forgetfulness, abnormal fatigue, reduced individual's resistance and recurrent infections, headaches, poor concentration, memory impairment and reduce in problem solving ability[2].

Stress is the process through which environmental demands tax or exceeds the

adaptive capacity of an organism, resulting in distress. Distress may manifest as psychological and biological changes that place individuals at risk for disease. Hans Selye defined stress as "the nonspecific response of the body to any demand,"[3] and stated that distress occurs when stress is overwhelming or persistent and not dealt with in a positive manner. Related to stress is the stress response, described by Walter B. Cannon as the "fight-or-flight" response, which is a cascade of coordinated physiological changes that occur when animals, including humans, perceive threat. These changes involve several structures within the brain and a redirection of neural activity from the "self-regulating center" to lower regions within the limbic system, which causes an increase in stress hormones and a resulting increase in metabolism, blood pressure, and heart rate. Researchers studying the long-term effects of a prolonged or severe stress response have concluded that it may lead to harmful physiological changes such as increasing the risk for heart disease or diabetes[4].

Studies indicated that medical professionals such as medical students, nurses and nursing students experience many stressor agents[5].

RESEARCH STATEMENT

"A study to assess the effectiveness of guided imagery and progressive muscle relaxation therapy on stress among staff nurses working in selected hospitals at Sri Ganganagar [Rajasthan]".

OBJECTIVES

01. To assess the pre-test level of stress among staff nurses working in selected hospitals at Sri Ganganagar, Rajasthan during pre-test.

02. To administer guided imagery therapy and progressive muscle relaxation therapy to staff nurses working in selected hospitals at Sri Ganganagar, Rajasthan.

03. To assess the level of stress among staff nurses working in selected hospitals at after post-test Sri Ganganagar, Rajasthan.

04. To evaluate the effectiveness of guided imagery therapy and progressive muscle relaxation therapy on the level of stress among staff nurses working in selected hospitals at Sri Ganganagar, Rajasthan.

05. To find out the association between the post-test stress score with selected demographical variables.

OPERATIONAL DEFINITIONS

Assess – The statistical measurement of level of stress among staff nurses as determined by stress assessment rating scale.

Effectiveness- The significant decrease in the level of stress among staff nurse after administration of guided imagery and progressive muscle relaxation therapy as evidenced by the mean pretest and post test score.

Guided imagery- Guided imagery therapy can train staff nurse to reduce their stress level by deliberately inducing relaxation in their mind.

Progressive muscle relaxation therapy- progressive muscle relaxation therapy can train staff nurse to reduce their stress level by deliberately inducing relaxation in their muscle.

Stress - The word stress as a state of disequilibrium to an emotional or physical disturbance experienced by the staff nurses.

Staff Nurse - Basic B.Sc. Nursing or GNM & working with a designation of Staff Nurse in selected hospitals at Sri Ganganagar, Rajasthan.

Rajasthan-

Rajasthan is first largest state of India total area of Rajasthan 3, 42,239 .74 sq/km population of the state 6, 86, and 21,012 as per census. Total literacy rate of Rajasthan 67.06% as per 2011 census. Sex ratio of the state 926 number of females as each 1000 male as 2011 census.

METHODOLOGY

RESEARCH APPROACH: The selected research approach for this study is Quantitative approach.

RESEARCH DESIGN: The research design selected for the present study was pre experimental design.

SETTING OF THE STUDY: This study was conducted in the Sihag hospital at Sri Ganganagar, Rajasthan.

POPULATION: In this study, the accessible population is staff nurse from Sihag hospital at Sri Ganganagar, Rajasthan.

SAMPLE TECHNIQUE: The samples of the study were selected by using Non probability convenient sampling technique according to inclusive criteria as availability of samples.

CRITERIA FOR SAMPLE SELECTION

The inclusion as well as exclusion criteria used for the present study is as follow:

Inclusion criteria

1. Staff nurses those are qualified and registered.

2. Staff nurses who are willing to participate in the study.

3. Staff nurses, who can read, write and understand English language.

Exclusion criteria

1. Staff nurse who do not want to participate and practice guided imagery therapy and practice progressive muscle relaxation therapy.

2. Staff nurses who are having problems regarding pulled muscles, broken bones, or any medical contraindication for physical activities.

3. Staff nurses who receives any other alternative therapy.

4. Staff nurses who have no stress in the result of pre-test.

DEVELOPMENT OF TOOL

The investigator reviewed the literature of various study on various stress scales made for assessing stress. Investigator reviewed books, articles, website, published and unpublished thesis to develop the tool to assess stress among staff nurses.

Section - I - The Demographic Data Collection Tool.

The investigator developed this tool as per the objectives of this study, six demographic variables selected for association with pre-test stress score.

Those are age, sex, marital status, monthly family income, working area and total work experience.

Section-II- Stress Assessment Rating Scale.

The investigator prepared this tool based on the objective of the study to assess the stress experienced by staff nurses working in the Sihag Hospital at Sri Ganganagar, Rajasthan.

1. This Scale consist 30 statements to measure the level of stress experienced by sample in their daily professional life.

2. The samples have to state how far it is true in his or her case feel stressed. This tool is a five-point rating scale with responses Samples have to select one of the suitable answer as

Almost never - 0, Rarely -1, Sometimes- 2, Often-3, Almost always-4 in their case and put a tick mark (give answers of all statements).

3. All questions are positive. There is no negative question in this tool.

4. Thus, the total score was count for each sample. Finally, the level of score was assessed as per the following criteria. The stress of sample was graded into

No Stress (00 - 30), Mild Stress (31 - 60), Moderate Stress (61 - 90), Severe Stress (091- 120)

RESULTS

Section I: frequency and percentage distribution of demographic variables

This section deals with the analysis of the demographic variable according to their age, sex, marital status, monthly family income, working area and total work experience.

Sr no.	Demographic Variables	Categories	Frequency	Percentage
1	Age (in years)	21-25 26-30 31-35 36-40	18 17 5 0	45.0 42.5 12.5 0.0
2	Sex	Male Female	15 25	37.5 62.5
3	Marital Status	Married Unmarried Divorced Widow	32 6 2 0	80.0 15.0 5.0 0.0
4	Income of the family per month	Up to 5000 5001-10000 10001-15000 Above 15000	4 17 11 8	10.0 42.5 27.5 20.0
5	Working area	Med. Surg. Ward Emergency ward O.T. Pediatric ward	13 17 10 0	32.5 42.5 25.0 0.0
6	Working experience (in years)	1-2 3-5 6-8 Above 8	18 15 7 0	45.0 37.5 17.5 0.0

Section II: Analysis and interpretation of the stress level of the sample collected on stress assessment rating scale before and after administration of progressive muscle relaxation and guided imagery therapy.

During pre-tests zero (00%) samples showing no stress, nineteen (47.5%) samples showing mild stress and seventeen (42.5%) samples showing moderate stress and four (10.0 %) samples having severe stress.

During post-tests that the twenty (50%) samples were showing no stress and seventeen (42.5%) samples showing mild stress and three (7.5 %) samples showing moderate stress. there is no samples having severe level of stress.

Section III -Evaluate the effectiveness of the guided imagery and progressive muscle relaxation therapy.

The value is compared and paired - t - test is applied at 0.05 level of significance. The tabulated - t -value for 39 degree of freedom is 2.02 and calculated value is 37.78 much greater than in area wise distribution of stress score.

The calculated value were much higher than tabulated value at 0.05 level of significance which was statistically acceptable level of significance. So there is significance difference in stress score of nurses. so statistically prove that there was significant difference in stress score of the staff nurses after administering the Guided Imagery and Progressive Muscle Relaxation Therapy. Hypothesis was tested by using paired -t test. The value of -t was calculated to analyze the difference in stress level of the staff nurses with their

pre-test and post-test scores. The research hypothesis H1was formulated to evaluate the effectiveness of Guided Imagery and Progressive Muscle Relaxation Therapy on stress among staff nurses working in selected hospitals at Sri Ganganagar, Rajasthan.

Section IV -To find an association between post-test stress scores of the staff nurses with selected demographic variables

Sr no	Demographic variables	Stress level								X^2 value
		No		Mild		Moderate		Severe		
		F	%	F	%	F	%	F	%	
1	Age (in years) a. 21-25 b. 26-30 c. 31-35 d. 36-40	1 14 5 0	2.5 35.0 12.5 0.0	14 3 0 0	35.0 7.5 0.0 0.0	3 0 0 0	7.5 0 0 0	0 0 0 0	0 0 0 0	26.62 S
2	Sex a. Male b. Female	9 11	22.5 27.5	6 11	15.0 27.5	0 3	0.0 7.5	0 0	0 0	2.31 NS
3	Marital status a. Married b. Unmarried c. Divorced d. Widow	19 0 1 0	47.5 0.0 2.5 0.0	10 6 1 0	25.0 15.0 2.5 0.0	3 0 0 0	7.5 0.0 0.0 0.0	0 0 0 0	0 0 0 0	10.12 S
4	Income of family/month a. Up to 5000 b. 5001-10000 c. 10001-15000 d. Above 15000	1 13 8 8	2.5 7.5 20.0 20.0	3 12 2 0	7.5 30.0 5.0 0.0	1 2 0 0	2.5 5.0 0.0 0.0	0 0 0 0	0 0 0 0	21.12 S
5	Working area a. Med.surg. ward b. Emergency ward c. O.T. d. Pediatric ward	2 8 10 0	5.0 20.0 25.0 0.0	11 6 0 0	27.5 15.0 0.0 0.0	0 3 0 0	0.0 7.5 0.0 0.0	0 0 0 0	0 0 0 0	22.02 S
6	Working experience(in years) a. 1-2 b. 3-5 c. 6-8 d. Above 8	1 12 7 0	2.5 30.5 17.5 0.0	14 3 0 0	35.0 7.5 0.0 0.0	3 0 0 0	7.5 0.0 0.0 0.0	0 0 0 0	0.0 0.0 0.0 0.0	26.97 S

IMPLICATION

Nursing Practice

Nurses play a vital and major role in healthcare delivery system and taking measures to prevent psychiatric problems. Community has to be strengthened by emphasizing health education and awareness programmes.

The findings of this study indicate that there is a need for Guided Imagery and Progressive Muscle Relaxation Therapy for clients who are affected by Stress.

From the present study it was found that Guided Imagery and Progressive Muscles Relaxation Therapy was an effective stress reduction method.

Nursing Education

The healthcare delivery system at present gives more emphasis on preventive rather than curative aspect. The study also implies that health personnel have to be aware of the various methods of stress reduction for prevention of stress rather than giving medicines..

Nursing Research

Many more research studies could be done to assess the efficacy of this highly feasible and less expensive therapy in various other conditions and settings. The present study is just an initial attempt

and it will encourage and motivate health personnel to do many more research studies in this area. The researchers can also explore similar therapies which increase the self-confidence and self-worth of sample. Future investigators can use the findings and the methodology as reference material.

Nursing Administration

. The nurse authors should take a keen interest in Guided Imagery and Progressive Muscle Relaxation Therapy for the effective use in various areas like clinical practice, community, and home Health care.

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