"A QUASI-EXPERIMENTAL STUDY TO ASSESS THE EFFECTIVENESS OF DANCE THERAPY ON THE LEVEL OF STRESS AMONG NURSING STUDENTS OF SELECTED NURSING COLLEGES OF SHIMLA (H.P.)."

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ABSTRACT

Background: Stress is inevitable to human and the reactions vary from individual to individual. During nursing education and training, students are frequently exposed to stressors which may affect their performance. Dance therapy has positive impact on stress.

Aim: A quasi-experimental study was conducted in selected nursing colleges of Shimla, (H.P) with objective to assess the effectiveness of dance therapy on the level of stress.

Methodology: The study adopted quasi-experimental design. Convenience sampling technique was used to select 60 Nursing students. Modified Perceived Stress Scale was used to assess the level of stress before and after the dance therapy.

Result: The present study findings have shown that in pre- test, majority of nursing students 80% were in moderate level of stress in experimental group and 87% of nursing students were in moderate level of stress in control group. In post- test, 60% of nursing students were in low level of stress in experimental group. On the other hand, 73.3% of nursing students were in moderate level of stress in control group. Significant association was found between age and level of stress in experimental group. Dance therapy is more effective in age >20 years than in age <20 years as nursing students of age group >20 had shown decreased level of stress after dance therapy as compared to nursing students of age group <20.

Conclusion: Since the study has shown that dance therapy was effective in reducing the stress level of nursing students.

Keywords: Quasi-Experimental Study, Assess, Effectiveness, Dance Therapy, Stress, Nursing Students.

INTRODUCTION

"I believe dancing is the best stress reliever."

-Dylan Lauren

Stress is defined as "a state of psychological and physiological imbalance resulting from the disparity between situational demand and the individual's ability and motivation to meet those needs."[1]Stress occurs when the demands of life that person experiences exceed their ability to cope. A variety of factors can contribute to the feeling of being 'stressed'. How a person thinks about a problem, the different ways a person tries to cope with difficult situations, experiences of life, person's self-esteem and the support system, these are the factors that affects the response of individual to stressful situations.[2]

Admission to a professional program marks the beginning of fulfilling a career goal. However, the rigors of professional education can be demanding. Stress, depression, and anxiety (SDA) can interfere with learning, affect academic performance, and impair clinical practice performance.[3]

During nursing education and training, students are frequently exposed to stressors which may affect their performance. The factors associated with stress can be environmental, interpersonal, intra-personal, academic and clinical. Stress if continues for longer period could result to various symptoms such as sleep disturbance, absenteeism, psychological problems and even suicide.

Edward Abasimi et al; (2015) conducted a study in Tamale, Ghana to examine the levels and sources of stress on 273 nursing students. It was found that students experience severe levels of stress. They also reported significantly higher personal stressors, followed by academic stressors and finally social stressors.[4]

Dance therapy is a form of expressive therapy that involves the use of dance and movement in order. Dance therapy is based on the premise that healing is facilitated and enhanced when people are encouraged to express themselves openly and freely in safe and supportive atmosphere.[5]**Emma Emily de wit, Adithy, Joske G.F. Bunders - Aelen and Barbara J. Regeer, (2016)** conducted a pilot study in pune, India on the effects of a university-based intervention (drama, dance, poetry) to deal with stress and anxiety. The sample size for the study was 33 students. Results have shown that there was significant decrease in average stress scores in students (p- value is 0.044>0.05).[6]

OBJECTIVES

1. To assess the level of stress among nursing students in experimental and control group.
2. To find out the effectiveness of dance therapy on level of stress among nursing students in experimental and control group.
3. To determine the association of level of stress among nursing students with selected demographic variables in experimental and control group.

METHODOLOGY

A quasi-experimental non- randomised research design was adopted to accomplish the main objective of the study that is to assess the effectiveness of dance therapy on the level of stress among nursing students. The study was conducted in two different nursing colleges of Shimla that is Sister Nivedita Government Nursing College, I.G.M.C., Shimla and Shimla Nursing College, Annandale, Shimla (H.P.). The sample of the study consisted of 60 nursing students, 30 nursing students in experimental group and 30 in control group. The sample was selected using convenient sampling technique.

The data collection tools were socio-demographic variables and modified perceived stress scale. The demographic variables were age, academic qualification, year of study in B.Sc. Nursing, marital status, selection of nursing profession, habitat, type of family, father's occupation, mother's occupation, family income/month, total number of sibling and schooling.

Content validity of the tool was determined by experts' opinions and suggestions on relevance of items. Tool was given to experts from the field of Psychiatry, Mental Health (Psychiatric) Nursing, statistics and psychology. Suggestions by experts were included in the tool. Modifications were made as per the need of the study. Prior permission was taken from the authority to use the standardized tool in research study and to make some modifications as per the need of the study. Reliability of the Modified Perceived Stress Scale was found to be -0.86. Informed written consent was taken from individual subject and confidentiality of theinformation was maintained.Pre-test and post-test were taken to assess the effectiveness of dance therapy on the level of stress in nursing students.

Analysis and interpretation of data was done according to the objectives by using descriptive and inferential statistics. Mean, frequency, standard deviation, paired t- test, unpaired t- test and chi square were used for analysis of obtained data.

RESULT

The collected data was tabulated and analysed using descriptive and inferential statistics under following headings:

Section I: percentage distribution of sample characteristics.

Section II: findings related to level of stress.

Section III: findings related to effectiveness of dance therapy on the level of stress.

Section IV: findings related to association of level of stress with selected demographic variables.

SECTION-I
Sample characteristics

In experimental group, out of 30 participants 67% were >20years in age and 33% were <20 years in age. Majority (97%) of the nursing students have joined B.Sc. Nursing after their completion of senior secondary education followed by 3% were graduate. 33% of nursing students were in first year and equal percentage of students were in second and third year of B.Sc. Nursing programme. 100% nursing students were unmarried. Majority (70%) of nursing students have selected nursing profession by self, 23% with force of relatives and 7% have other reasons. 100% of nursing students were staying in hostel. Majority (70%) of nursing students belonged to nuclear family followed by 30% belonged to joint family. Majority (63%) of the nursing student's fathers were government employee and 30% were private employee followed by 7% in other occupation. Majority (87%) of nursing student's mothers were homemaker followed by 3% government employee and 10% private employee. Majority (50%) of nursing students had >30,000 family income/ month, 23% had 10,000-20,000 family income/ month, 20% had 20,000 to 30,000 family income/month and 7% had <10,000 family income/month. Majority (43%) of nursing students had three siblings followed by 30% with one sibling and 27% with two siblings. Majority (57%) of nursing students were studied from private school followed by 43% from government school.

In control group, out of 30 participants 53% were <20 years in age and 47% were >20 years in age. 100% of the nursing students have joined B.Sc. Nursing after

their completion of senior secondary education. 33% of nursing students were in first year and equal percentage of students was in second and third year of B.Sc. Nursing programme. 100% nursing Students were unmarried. Majority (70%) of nursing students have selected nursing profession by self, 30% with force of relatives. 100% of nursing students were staying in hostel. Majority (87%) of nursing students belonged to nuclear family followed by 13% belonged to joint family. Majority (80%) of the nursing student's fathers were government employee and 17% were private employee followed by 3% in other occupation. Majority (70%) of nursing student's mothers were homemaker followed by 27% government employee and 3% private employee. Majority (47%) of nursing students had 20,000-30,000 family income/ month, 30% had 30,000 family income/ month, 20% had 10,000-20,000 family income/month and 3% had <10,000 family income/month. 33% of nursing students had one sibling and equal percentage of nursing students with two and three siblings. Majority (63%) of nursing students were studied from private school followed by 37% from government school.

SECTION- II

Findings related to Level of Stress

Table 1- Frequency and Percentage Distribution of Level of Stress of Pre-test Experimental and Control group

N= 60

Level of Stress	Score	Pre- test			
		Experimental Group		Control Group	
		(f)	(%)	(f)	(%)
High Perceived Stress	27-40	6	20	3	10
Moderate Stress	14-26	24	80	26	86.7
Low Stress	0-13	0	0	1	3.3

Maximum Score = 40   **Minimum Score= 0**

Table 1 reveals that majority (80%) of nursing students in pre- test were in moderate level of stress and 20% were in level of high perceived stress in experimental group. In control group, 87% were in moderate level of stress and 10% were in level of high perceived stress with 3% in low level of stress.

Table 2 - Frequency & Percentage Distribution of Level of Stress of Post- test Experimental and Control Group

N= 60

Level of Stress	Score	Post- test			
		Experimental Group		Control Group	
		(f)	(%)	(f)	(%)
High Perceived Stress	27-40	1	3.3	5	16.7
Moderate Stress	14-26	11	36.7	22	73.3
Low Stress	0-13	18	60	3	10

Maximum Score= 40   **Minimum Score = 0**

Table 2 reveals that majority (60%) of nursing students in post–test was in low level of stress and 36.7% were in level of moderate level of stress and 3.3% in level of high perceived stress in experimental group. In control group, 73.3% were in moderate level of stress and 16.7% were in level of high perceived stress with 10% in low level of stress.

SECTION – III

Findings related to Effectiveness of Dance Therapy on the Level of Stress

Table 3- Comparison within the Group with Paired 't' test and Comparison between the Groups with Unpaired 't' test regarding Effectiveness of Dance Therapy on the Level of Stress

N= 60

		Stress Score				Paired 't' test		
		Pre-test		Post-test				
Group	N	Mean	SD	Mean	SD	df	T	Result
Experimental Group	30	22.47	4.674	15.50	5.316	29	7.381	**Significant**
Control Group	30	21.733	4.856	21.07	5.675	29	1.146	Non-Significant
Unpaired 't' test	Df	58		Df	58			
	T	0.596		T	3.921			
	Result	Non-Significant		Result	**Significant**			

Minimum Score= 40   **Maximum Score=0**

*Level of Significance ≤ 0.05

Table 3 reveals that by using paired t test, it was found that there is significant change in post level of stress in experiment group with t value 7.381 with degree of freedom at 29, which is significant at ≤ 0.05 level of significance. While paired t test was not significant for pre and post level of stress in control group where t value is 1.146 with degree of freedom 29, which is not significant at ≤ 0.05 level of significance.

It alsodepicts that by using unpaired t test, it was found that there was no significant difference between pre level of stress score of experimental and control group at t value 0.596 with degree of freedom 58 but there is significant difference in post level of stress score of experimental and control group at t value 3.921 with degree of freedom 58.

SECTION – IV (Findings related to Association of Level of Stress with Selected Demographic Variables)

Association of pre-stress score of experimental group and control group with selected demographic variableswas done using chi- square. As the calculated chi-square values were less than the table value at ≤ 0.05 level of significance. Hence, no significant association found between level of stress and demographic variable such as age, academic qualification, Year of study in B.Sc. Nursing, marital status, selection of nursing profession, habitat, type of family, father's occupation, mother's occupation, family income/ month, total number of sibling and schooling.

As calculated chi- square value was 7.295 in association of post-tress score of experimental group with selected demographic variables which is more than the table value (5.991) at ≤ 0.05 level of significance. Hence, significant association was found between age and level of stress in experimental group. No significant associations found between level of stress and other demographic variable such as academic qualification, Year of study in B.Sc. Nursing, marital status, selection of nursing profession, habitat, type of family, father's occupation, mother's occupation, family income/ month, total number of sibling and schooling.

On the other hand, in association of post-stress score of control group with selected demographic variablesthe calculated chi- square values were less than the table value at ≤ 0.05 level of significance. Hence, no significant association was found between level of stress and demographic variable such as age, academic qualification, Year of study in B.Sc. Nursing, marital status, selection of nursing profession, habitat, type of family, father's occupation, mother's occupation, family income/ month, total number of sibling and schooling.

CONCLUSION

Findings reveal that in experimental group,80% of nursing students were in moderate level of stress in pre-test. On the other hand, 87% nursing students were in moderate level of stress in control group.In post-test, 60% of nursing students were in low level of stress in experimental group. On the other hand, 73.3% of nursing students were in moderate level of stress in control group. there was significant difference between pre-test and post -test level of stress among nursing students in experimental group.Using chi- square test it was revealed that significant association was found between age and post-test level of stress in experimental group. No significant association found between the level of stress and other demographic variables.

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