EFFECTIVENESS OF PRANAYAMA ON THE LEVEL OF STRESS AMONG THE 1ST YEAR B.SC NURSING STUDENTS AT NARAYANA COLLEGE OF NURSING, NELLORE

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RESEARCH ARTICLE

EFFECTIVENESS OF PRANAYAMA ON THE LEVEL OF STRESS AMONG THE 1ST YEAR B.SC NURSING STUDENTS AT NARAYANA COLLEGE OF NURSING, NELLORE

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ARTICLE INFO

ABSTRACT

Introduction: Stress is a common feature in all our lives. It is often seen as a negative emotion but stress plays an important role in the survival

Objectives: To assess the level of stress among the 1st year B.Sc nursing students.
2. To determine the effectiveness of Pranayama on the level of stress among the 1st year B.Sc nursing students.
3. To associate the pre and post test level of stress with socio demographic variables of 1st year B.Sc nursing students.

Material And Methods: Quantitative research approach with one group Pre test post test research design was adopted for the study which was conducted in Narayana College of Nursing. 60 students of 1st year B.Sc Nursing. Recruited in the study by simple random sampling by using lottery method. Sampling technique. Modified student stress scale, was used to assess the level of stress. Data was analysed by using descriptive and inferential statistics. Percentages of categorical variables were computed.

Results: It indicates that in pre test 15(25%) students had mild stress, 22(36.7%) students had moderate stress, and 23 (38.3%) students had severe stress. In post test 15(25%) students had very mild stress, 29(48.3%) students had mild stress and 16(26.7%) had moderate stress.

Conclusion : Pranayama is effective in reducing The Level Of Stress Among The 1st Year B.Sc Nursing Students

INTRODUCTION

Stress is a common feature in all our lives. It is often seen as a negative emotion but stress plays an important role in the survival. It helps to face threats and dangerous situations, makes the individual to get motivated and can even make the perform once better. Stress is a state of physical and psychological strain which imposes demands for adjustments upon the individual. It has been reported that student nurses are affected with the stressors in academic, clinical, financial, due to parental expectations, competition for grades, and career choices.

As a result of stress students are experiencing insomnia, frequent headaches, personality changes, irritability, anxiety, depression, hair loss, back pain, muscle spasms, mouth ulcers, gastritis, duodenal ulcers, ulcerative colitis, irritable colon, constipation, diarrhoea, difficulty in making decisions, feeling overloaded or overwhelmed, frequent crying spells, suicidal thoughts, and feelings of loneliness or worthlessness, menstrual problems. Stress also blocks the chemical reactions in the brain that are necessary for learning, and memory development.

effective coping strategies facilitate the return to a balanced state, reducing the negative effects of stress. Stress can be managed by the support from family members, developing a positive optimism attitude, time management, counseling, vacation when needed, playing games, yoga and meditation. Yoga is the wonderful stress reducer and Pranayama is one form of yoga.

Pranayama is one of the effective measures to manage the stress. It is derived from 2 Sanskrit words – Paraná (life force) and Ayama (control).Pranayama is basically a series of exercises, which aims at bringing more oxygen to blood and to the brain. Pranayama is an art and has techniques to make the respiratory organs to move, expand, intentionally, rhythmically which provides a deep relaxation to the body and mind, improves concentration, relieves stress depression, and strengthens the nervous system and respiratory system

Need For the Study

According to National League for Nursing, 2012, annual Survey of Schools of Nursing, 29% of students in 2009, 27% of students in 2010 and 24% of students in 2011 are enrolled in

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basic RN programs.[54] Lo (2002) investigated the perception and sources of stress, coping mechanisms, and self-esteem among 101 nursing students in Athens Medical School. The data were collected during class periods through questionnaires.

The results of the study revealed the top stressor to be the nursing studies with 81(80.1%), financial problems 61 (60%), lack of time for family/friends 49(48.51%) and health issues 37 (36.63%). Most students reported problem focused coping as their method of stress relief which included recreation/sports, problem solving, and social support. 73 (72.27%) had support from family and friends while 4 (3.96%) of the students had no support of any kind.[34]

The statistical survey conducted by South African Nursing Council (SANC) in 2010 to identify the stress related problems among 54,13, 586 student nurses in Australia, Canada, New Zealand, United Kingdom and the United States. They found that 28,30, 923 (52.29%) were suffering with head ache, 23,89,969 (44.14%) were suffering from gastro intestinal disorders like gastritis, gastric ulcers and ulcerative colitis and 1,92,694 (3.55%)students were having other problems like back pain, muscle cramps and hair loss. So it is very important to manage stress effectively by means of coping strategies like relaxation exercises, yoga and meditation.

Researchers at the All India Institute of Medical Sciences in New Delhi (2001) have discovered a clear link between rhythmic breathing process and a state of relaxed alertness and recommended the practice of Pranayama for beating stress.

Objectives

1. To assess the level of stress among the 1st year B.Sc nursing students.
2. To determine the effectiveness of Pranayama on the level of stress among the 1st year B.Sc nursing students.
3. To associate the pre and post test level of stress with socio demographic variables of 1st year B.Sc nursing students.

Hypotheses

Null hypothesis

H_0: There is no statistically significant effectiveness of pranayama on the level of stress among the 1st year B.Sc nursing students.

Research Hypotheses

H_1: There is a statistically significant effectiveness of pranayama on the level of stress among the 1st year B.Sc nursing students.

H_2: There is a statistically significant association between the pre and post test level of stress with socio demographic variables of 1st year B.Sc. nursing students.

METHODOLOGY

Research Approach: quantitative research approach was adopted

Research Design: pre experimental - one group pre test - post test design

Setting: The study was conducted in Narayana College of Nursing, Nellore, A.P.

Population: 1st year B.Sc nursing students at Narayana College of nursing who have stress.

Sample: Students who are studying 1st year B.Sc Nursing in Narayana College of Nursing and those who meet the inclusion criteria are the sample for this study.

Sampling Technique: simple random sampling by using lottery method.

Sample Size: Sample size for this study was 60 students of 1st year B.Sc Nursing.

Criteria for sample selection

Inclusion criteria

- Nursing students between 17-22years.
- Who are willing to participate in the study.
- Who scores between 15-69 in student stress scale (mild, moderate and severe.)

Exclusion criteria

- Who are suffering from any other illness.
- Who are already in practice of Pranayama.
- Who scores below 14 in student stress scale (very mild stress)

Description of Tool

- Investigator developed tool with the help of extensive review from various text book, journals and websites, the tool was developed to assess the level of stress. Tool consists of two parts.
- ***Part-I:*** It includes socio demographic variable such as age, religion, education f parents, occupation of parents, family income, type of family, number of siblings, selection of course, medium of study, previous experience of hostel stay.
- ***Part-II:*** Consists of modified student stress scale, it consists 29 items which covers the areas of physical, psychological, academic, and sociological factors. Minimum score is 14, maximum score is 70.

Data Analysis

The data was analyzed in terms of objectives of the study by using various descriptive statistics (mean, standard deviation) and inferential statistics (chi – square) methods.

RESULTS AND DISCUSSION

The data was organized, tabulated, analyzed and interpreted by using descriptive and inferential statistics based on the objectives of the study. The findings were presented in the following sections.

The analysis of the data was mainly classified as

Section I: - Distribution of socio demographic variables of the 1st year B.Sc nursing students.

Section II: - Distribution of the level of stress among the 1st year B.Sc nursing students.

Section III:- Effectiveness of pranayama on the level of stress among the 1st year B.Sc nursing students.

Section IV: Association between the pre and post test level of stress with socio demographic variables of 1st year B.Sc nursing students.

Section I

Table 1 Frequency and percentage distribution demographic variables of the 1st year B.Sc nursing students. (N=60)

Re ligion	Fre frequency	%
1. Hi Hindu	15	25
2. M M uslim	2	3.3
3. C chistrian	43	71.7
Tototal	60	100

Table 2 shows that in relation to religion, 15 (25%) were Hindus, 2 (3.3%) were Muslims, and 43 (71.7%) were Christians
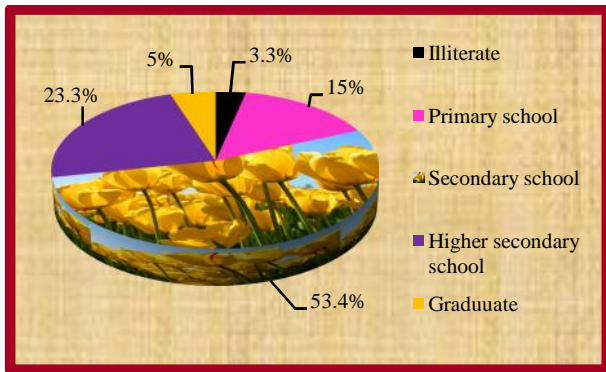

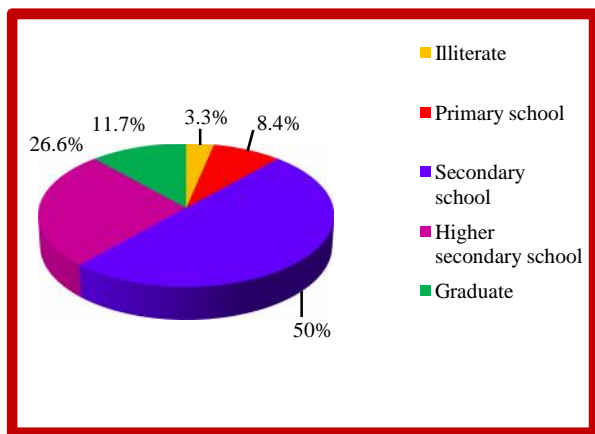**Fig.1** Percentage distribution based father's Education

Fig.2 Percentage distribution based on mother's education

Table-3 Frequency and percentage distribution based on father's occupation of the 1st year B.Sc nursing students. (N=60)

Father's Occupation	Frequency	%
a. Un employed	4	6.7
b. Coolie	37	61.7
c. Private employee	11	18.2
d. Govt. employee	3	5
e. Business	5	8.4
Total	60	100

Regarding father's occupation, 4 (6.7%) were unemployed, 37 (61.7%) were coolie, 11(18.2%) were in private job, 3 (5%) were Govt employee and 5 (8.4%) were doing business

Table-4 Frequency and percentage distribution based on family income per month of the 1st year B.Sc nursing students. (N=60)

Income per month	Frequency	%
a. Rs <1,500	21	35
b. Rs 1,501 -4000	11	18.3
c. Rs 4, 001-6,500	15	25
d. Rs 6,501 - 9000	12	20
e. Rs >9001	1	1.7
Total	60	100

In relation to family income 21(35%) had below Rs 1,500 rupees, 11 (18.3%) had between Rs 1,501 and Rs 4000, 15 (25%) had income between Rs.4, 001- Rs 6500, 12 (20%) had between Rs 6,501-Rs9000 and 1 (1.7%) had income above Rs.9001.
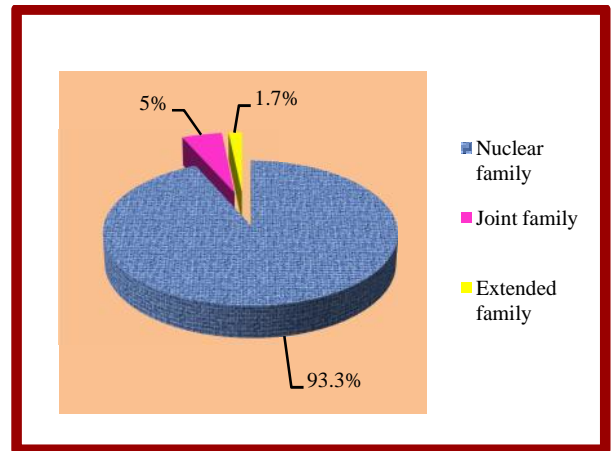

Fig.3 Percentage distribution based on type of family

Table 5 Frequency and percentage distribution based on medium of study in intermediate of the 1st year B.Sc nursingstudents. (N=60)

Medium of study in intermediate	Frequency	%
a. English	49	76.7
b. Telugu	5	8.3
c. Malayalam	6	10
Total	60	100

Regarding the medium of study in intermediate, 49 (76.7%) studied in english medium, 5 (8.3%) studied in telugu medium, and 6 (10%) studied in malayalam medium.
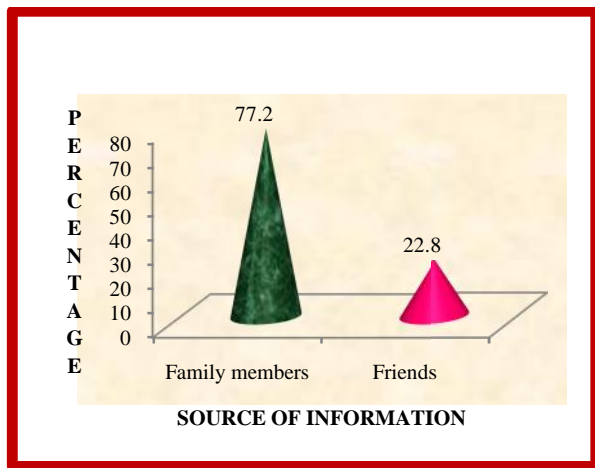
Fig.4 Percentage distribution based on source of information

Section II Frequency and percentage distribution of pre test level of stress among the 1st year B.Sc nursing students

Results Indicates that 15(25%) students had mild stress, 22(36.7%) students had moderate stress, 23 (38.3%) students had severe stress.

Section III Effectiveness of pranayama on the level of stress among the 1st year B.Sc nursing students   (N=60)

Results indicates that in pre test 15(25%) students had mild stress, 22(36.7%) students had moderate stress, 23 (38.3%) students had severe   stress. In post test 15(25%) students had very mild stress, 29(48.3%) students had mild stress and 16(26.7%) had moderate stress.

Section IV Association between the Level Of Stress And Socio Demographic Variables

Results Shows that there is a statistically significant association between the post test level of stress and socio demographic variables such mother's education, family income per month, selection of course and previous experience of hostel stay. So **H₂ is accepted**.

CONCLUSION

Pranayama is effective in reducing the stress level of the students as it can be practiced easily, less time consuming and cost effective.

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