An Experimental Study Was To Assess The Level Of Stress And Anxiety Among Staff Nurses In Selected Settings, Tiruvannamalai.

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Abstract

Hatha yoga is an effective intervention for reducing stress and anxiety among staff nurse.This study was aim to evaluate the effectiveness of hatha yogain stress among staff nurses.The increasing prevalence of stress in health care settings need to incorporate the intervention to support staff wellbeing.The study was conducted involving 60 staff nurses.stress levels were measured using modified stress assessment scale and anxiety using zung self rating anxiety scale.Nurse after intervention on hatha yoga training showed significant reduction in stress, anxiety and overall well being.

Key words: Hatha yoga, stress and anxiety.

Introduction

It is well known that nursing as a profession is considered stressful. Multiple factors such as patient-care demands, professional issues, work environment, organisation policies and procedures are associated with job stress in nursing. Personal- and family-related issues also play a vital role in causing stress for nurses. Job stress can inadvertently affect patient care as well as health of nurses. Appropriate coping strategies are needed to mitigate job stress and ensure optimal patient-care outcomes. Organisational and nurse supervisor's support is essential to enable nurses to cope with job stress.

1. Review of Literature

1) A descriptive cross sectional study was conducted among 500 nurses selected in eight hospitals in mysore city. Majority of the participants (55.4%) had a moderate level of perceived stress and 49.8% had moderate stress. Significant positive correlation (r=0.144, P<0.001).

2) A study to evaluate the effectiveness of structured yoga programme on stress and professional quality of life among staff nurses in selected settings at delhi. The results showed that structured yoga programme was efficacious to reduce stress.

3) A study to assess the effectiveness of pamphlets on stress and coping strategies among the Nurses at selected hospitals of dehradun.the results revealed that the mean posttest level of stress score was 15.85 and the posttest score score of coping strategies387.2 which shows a beneficial improvement among staff nurses.

2. Objectives of Study

1) To assess and evaluate the level of stress among saff nurses before and after the administration of "HATHA YOGA".;

2) To assess and evaluate the level of anxiety among saff nurses before and after the administration of "HATHA YOGA".

3) To determine the association between pre-test stressscore with selected personal variables.

4) To determine the association between pre-test anxiety score with selected personal variables.

5) To find out the association between post-test stress score with selected personal variables.

6) To find out the association between post-test anxiety score with selected personal variables.

3. Methodology

Quantitative   research   approach   and   pre-experimental research design was used in this study.

Population: Staff nurses
Sample:staff nurses working in Government tiruvannamalai medical college and hospital, tiruvannamalai
Sample:60
SamplingTechnique: Total enumeration

Hypothesis of the Study

H1: There will be a significant difference between pre-test mean stress score and posttest mean stress score of staff nurses after the administration of "HATHA YOGA" in GTMCH, Tiruvannamalai at 0.05 level of significance.

H2: There will be a significant difference between pre-test mean anxiety score and post test mean anxiety score of staff

nurses after the administration of "HATHA YOGA" in GTMCH, Tiruvannamalai at 0.05 level of significance.

Variables of the Study
1) Dependent Variables: stress and anxiety
2) Independent Variables: HATHA YOGA

Data Collection Tools and Technique

S.No.	Tools	Purpose	Data Collection Technique
1	Selected Personal Variables	To assess the personal information of staff nurses .	
2	Modified Stress Assessment Scale	To assess the stress level of staff nurses.	Paper and Pencil
3	Standardized zung self-rating anxiety scale	To assess the anxiety level of staff nurses	

Reliability

Name of the Tool	Method	Reliability
Zung self-rating scale	Karl Pearson Correlation Coefficient	.80
Modified Stress Assessment Scale	Test Re-test	.906

Content vaidity of the tool
The content validity of the tool was obtained by submitting the tools to seven (7) experts. All experts were agreed with statement except for few suggestions. Draft of the tool consisted of 20 items.

Final study
The final study was conducted in the **Government Tiruvannamalai medical college and hospital, Tiruvannamalai** .The data was collected by using total enumeration technique.

Table 5: Frequency and Percentage Distribution of Selected Personal Variables of staff nurses
N=60

Personal Variable	Categories	Frequency (f)	Percentage (%)
Age	25-30	23	38.3
	31-35	26	43.4
	36-40	11	18.3
Sex	Female	60	100
Religion	a) Hindu	47	78.4
	b) Muslim	8	13.3
	c) Christian	5	8.3
Type of Family	Nuclear	39	65
	Joint	21	35
Family income/ Month	a) Below Rs.10,000	23	38.4
	b) Rs.10,001-20,000	25	41.6
	c) RS.20,001-30,000	12	20
History of stress disorder	Yes	5	8.4
	No	55	91.6
History of anxiety disorder	No	60	100
Previous exposure to yoga	Yes	23	38.4
	No	37	61.6

Table 5 depicts that majority of staff nurses 26(43.4%)were in the age group of 31-35year, All the staff nurses were female and 47(78.4%) belong from Hindu religion. 39(65%) of staff nurses were belong from nuclear family. 17(45.9%) staff nurses have 10,001 to 20000 family income per month. 5(8.4%) of the staff nurses has previous history of stress and no one had any previous anxiety disorder and 37(61.6%) staff nurses has not previously exposed to any Yoga session before.

Table6: Findings Related to Level of Stress of staffnurses Before and After the Administration of " HATHA YOGA"
N=60

Categories	Pre-Test		Post-Test	
	Frequency (f)	Percentage (%)	Frequency (f)	Percentage (%)
Mild	0	0	24	40
Moderate	20	33.3	36	60
Severe	40	66.7	0	0

Table-6 reveals that before the administration of "HATHA YOGA", 10(27%) of staffnurses have20(33.3%) moderate level of stress and 40(66.7%) of staffnurses have severe level of stress, whereas after the administration of "HATHA YOGA" 24(40%) of staffnurses have mild level of stress,36 (60%) of staffnurses have moderate level of stress.

Table7: FiningsRelatedtoEffectivenessof"YOGA" on Level of Stress among staffnurses, N=60

Pairedt-Test	Mean	SD	Mean Difference	df	t-test Value	p-Value
Pre-Test Stressscore	78.66	7.9	27.83	59	14.63	.038*
Post-Test Stressscore	38.56	11.6			S***	

(P<0.05),*significanceat0.05levelofsignificance

Table-7showsthatthecomputed"t"value("t"=14.63), (P=.038) was significant at 0.05 level of significance. Thus it is established that difference obtained in the mean stress score before and after the administration of "HATHA YOGA" waseffective in reducing the stress level of staffnurses.

Hence the research hypothesis H$_1$ was accepted.

Table8: FindingsRelatedtoAnxietyLevelof staffnurse Before and After the Administration of "YOGA", **N=60**

Categories	Pre-Test		Post-Test	
	Frequency (f)	Percentage (%)	Frequency (f)	Percentage (%)
NormalRange Anxiety	10	16.6	43	71.6
Mild toModerate Anxiety	40	66.7	17	28.4
Marked Severe Anxiety	10	16.7	0	0
Extreme Anxiety	0	0	0	0

Table-8 reveals that before the administration of "HATHA YOGA" 10(16.6%) of staffnurses have normal level of anxiety and Marked Severe Anxiety and 40(66.7 %) of stsffnurses have mild to moderate level of anxiety, whereas after the administration of "HATHA YOGA" 43(71.6%) of students have normal level of anxietyand 17(28.4%) students have mild to moderate level of anxiety.

Table7: Finings Related to Effectiveness of "YOGA" on anxiety among staff nurses, N=60

Pairedt-Test	Mean	SD	Mean Difference	df	t-test Value	p-Value
Pre-Test Stressscore	29.30	9.61	7.78	59	11.2	2.02*
Post-Test Stressscore	37.02	7.44			S***	

(P<0.05),*significanceat0.05levelofsignificance

Table-7showsthatthecomputed"t"value("t"=11.2), (P=2.02) was significant at 0.05 level of significance. Thus it is established that difference obtained in the mean anxiety score before and after the administration of "HATHA YOGA" was effective in reducing the anxiety of staffnurses.

Hence the research hypothesis H$_2$ was accepted.

Table 10: Fisher"s Exact Value Showing Association of post-test Stress Score with Selected Personal Variables of staff Nurses.
N = 60

PersonalVariable	Categories	Mild	Moderate	severe	Fisher"s Exact
Age	25-30	20	3	0	1.82
	31-35	24	2	0	
	36-40	8	3	0	
Sex	Female	53	7	0	1.677
Religion	a) Hindu	41	6	0	1.532
	b) Muslim	7	1	0	
	c) Christian	4	1	0	

Typeof Family	Nuclear	36	3	0	0.687
	Joint	18	3	0	
Family income/ Month	a) Below Rs.10,000	19	4	0	1.235
	b) Rs.10,001-20,000	23	2	0	
	c) RS.20,001-30,000	8	4	0	
Historyofstress disorder	Yes	2	3	0	1.645
	No	51	4	0	
Historyofanxiety disorder	No	56	4	0	0.324
Previousexposure to yoga	Yes	21	2	0	2.065
	No	35	2	0	

Table 10 shows that Fisher"s Exact computed between stress score after the administration of "Hatha YOGA" with selected personal variables. It shows that significant association with previous exposure to Yoga and rest of others were not significant at 0.05 level of significance.

Table 11: Fisher"s Exact Value Showing Association of post-test anxiety Score with Selected Personal Variables of staff Nurses.N = 60

Personal Variable	Categories	Normal range anxiety	Mild to moderate anxiety	Marked severe anxiety	Extreme anxiety	Fisher"s Exact
Age	25-30	21	1	1	0	0.209
	31-35	22	3	1	0	
	36-40	7	3	2	0	
Sex	Female	51	7	1	0	1.764
Religion	a) Hindu	42	5	0	0	1.534
	b) Muslim	6	1	1	0	
	c) Christian	5	1	0	0	
Typeof Family	Nuclear	34	3	2	0	0.698
	Joint	17	3	1	0	
Familyincome/ Month	a) Below Rs.10,000	20	1	2	0	1.435
	b) Rs.10,001-20,000	20	2	3	0	
	c) RS.20,001-30,000	6	4	2	0	
Historyofstress disorder	Yes	2	3	0	0	0.287
	No	54	4	1	0	
Historyofanxiety Disorder	No	56	4	0	0	0.176
Previousexposure to yoga	Yes	23	2	0	0	1.209
	No	37	2	0	0	

Table 11 shows that Fisher"s Exact computed between anxiety score after the administration of "Hatha YOGA" with selected personal variables. It shows that all the variables are not significant at 0.05 level of significance

5.Discussion
Similar study conductedthat Hatha yoga is an effective method to improve stress management, life satisfaction and quality of life among nursing students. effect of "YOGA" on anxiety among nursing students.After Hatha yoga, the stress scores of nursing students in the experimental group decreased significantly (p=0.001), and their life satisfaction scores (p=0.006), physical dimension of quality-of-life scores (p=0.014), and mental dimension of quality-of-life scores (p=0.012) increased significantly and there was no significant difference for those in the control group during the same period (p>0.050).Hence Hatha yoga was very much effective in reducing stress.

6. Conclusion
The administration of „HATHA YOGA" was significantly effective in reducing the stress and anxiety level of staff nurses at the level of 0.05 significance.

7. Limitation
The study was confined to a small no. of samples (60) participating in the study. This limits the generalization of the findings.

8. Recommendations
1)The study can be replicated on a large sample of samples from different hospitals to make broader generalization.
2) A longitudinal study can be conducted by administering „HATHA YOGA" over a period of 3-6 months and there after result can be noted.

3) An experimental study can be conducted to evaluate the impact of „HATHA YOGA" on physiological parameter of staff nurses.

4) An experimental study can be conducted to evaluate the impact of „HATHA YOGA" on psychosomatic disorders (Insomnia, drug addiction, asthma etc.).

5) An experimental study can be conducted to evaluate the impact of „HATHA YOGA" on cardio-vascular stress response.

6) A comparative study can be conducted with other methods of relaxation.

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