



## EFFECTIVENESS OF YOGA TRAINING PROGRAMME ON LEVEL OF STRESS AMONG NEWLY ADMITTED UNDERGRADUATE STUDENT NURSES

Vatchala Devi M\*

Indira College of Nursing, Thiruvallur, Tamilnadu, India

### ABSTRACT

Stress is the health epidemic of the 21st century and it can affect anyone, at any time. Most of the undergraduate students experience considerable stress due to the demand associated with changes such as leaving home, becoming independent decision makers, and competing against new standards. No person is immune to stress but they can minimize the level of stress by practicing yoga regularly. This pre-experimental study was conducted to assess the effectiveness of the yoga training programme in reducing levels of stress among newly admitted undergraduate student nurses in the selected colleges in Tiruvallur district. A purposive sampling technique was used to select 100 student nurses and their level of stress was measured using the Student Stress Scale. Findings of the study revealed that the pre-test, mean value was 64.93 with S.D 15.65 and post-test mean was 38.4 with S.D 13.03. The calculated 't' value was 19.3 which indicates that it was significant at  $p < 0.005$  level between the pre and post-test level of stress. Results of this shows the effectiveness of Yoga Training Programme in reducing the stress. It is recommended to conduct further studies with larger samples, including follow-up measurements.

**Key words:** Yoga Training Programme, Stress, Undergraduate Student Nurses.

Corresponding Author

**Vatchala Devi M**

Email:- [vatchala.ragavan@gmail.com](mailto:vatchala.ragavan@gmail.com)

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### INTRODUCTION

Adolescence is a stage of 'Storms and Stresses'. The period of adolescence is of ultimate importance in human's life. The young nursing students are faced with challenging issues involving the identity, puberty, formation and transition from childhood to adulthood. Unmanaged stress can cause nursing adolescents with potentially significant health impacts and higher risk for behavioral problems, suicide and risky sexual behavior, smoking, substance abuse, college dropout, self-harm, and poor eating habits.[1]

WHO reported that 10% of adolescents experience a mental disorder worldwide, but the majority of them do not seek help or receive care. [2] The consequences of not addressing mental health and psychosocial development for children and adolescents extend to adulthood and limit opportunities for leading fulfilling lives.

Worldwide, 10% of children and adolescents experience a mental disorder, but the majority of them does not seek help or receive care. Half of all mental health conditions start by 14 years of age. WHO (2020) reported that one in six people are aged 10-19 years.[3] Mental health conditions account for 16% of the global burden of disease and injury in people aged 10-19 years. Half of all mental health conditions start by 14 years of age but most cases are undetected and untreated. Stress is a major underlying factor in the manifestation of many mental disorders. The prevalence of stress among Indian adolescents varies from 13% to 45%.[4]

Academic stress is very common among nursing students in India causing mental and emotional pressure, tension, or stress that occurs due to the huge syllabus, exams and high demands and expectations set by the Indian parents and teacher to secure more marks in the exams and it can in turn negatively affect academic



performance including impaired judgment, absenteeism self-medication, and addiction to substances like smoking cigarettes and alcohol drinking. Chronic exposure to stressful conditions leads to deterioration of academic performance, loss of memory, poor relationship with peers and family members, and overall dissatisfaction with life. It can also lead to serious health problems like hypertension, heart attack and stroke, diabetes mellitus and obesity, accelerated aging, impaired immune system, suppressed fertility, digestive problem, loss of appetite, increased anxiety, and depression that finally leads to suicide.[5]

The nurse's plays significant role in the health care industry and the student nurses shown increased level of stress compared to other allied health professionals because of the curriculum they undergo gives more emphasis on hands-on-experience in the different health care settings and caring the patients of all groups. Globally, Nursing students are facing major stress and they experience depression, anxiety, barriers in language, strange environments, insomnia and too many written works to be submitted during their course. Yoga, a mind-body practice is found to reduce the level of stress. Several studies report that yoga improves stress management, life satisfaction and quality of life.

Studies have shown that nursing students have high levels of stress mainly because of academic activities and clinical practices [6], and that perceived stress causes more psychological and physical symptoms in nursing students [7]. A consistent yoga practice can have a positive impact on body chemistry, disease prevention, symptom reduction or alleviation, and emotional health. Yoga promotes a strong mind-body connection, which improves overall mood and well-being. According to Lim et al. (2013), there have been many studies that have explored stress among professionals and the results have shown that nurses, in particular, experienced enormous levels of work stress.[8]

The undergraduate years for student nurses is a very vulnerable period wherein stress, depression, and anxiety can interfere with learning, affect academic performance, and degrade clinical practice performance. This could result in a temporary or permanent impediment to their pursuit of a nursing career.[9] Continued stress causes mental disorders, substance abuse, and eating disorder, sleep disorder, and drive the student to suicide. Yoga practice strengthens the mind and body. Hence, the researcher has decided to conduct the study on effectiveness of yoga on stress among student nurses.

#### OBJECTIVES:

- To assess the pre and post-test level of stress among newly admitted undergraduate student nurses
- To find the effectiveness of yoga training programme on level of stress among newly admitted undergraduate student nurses by comparing pre and post-test scores

- To find out the association between the selected socio-demographic variables and the level of stress among newly admitted undergraduate student nurses

#### METHODOLOGY

The research approach adopted for this study is evaluative research approach and the design used for this study is pre-experimental one group pre-test and post-test design.[10] The study was conducted among 100 newly admitted nursing students enrolled to pursue their undergraduate nursing programme in Indira College of Nursing at Thiruvallur. All the students who fulfil the inclusion criteria were selected using nonprobability-purposive sampling technique. Student Perceived Stress scale was used as a research tool to elicit level of stress among the students. A letter requesting permission was sent to the Managing Director of Indira Group of Educational Institutions prior to the data collection and the proposal was presented to the Institutional Ethical Review Board members. Study exclusion criteria were as follows: having a health problem that prevents yoga, participating in another therapy group, and not attending in five or more yoga sessions. [11] Each yoga session is composed of 10 minutes of breathing exercises (pranayama) and warming up, 40 minutes of postures (asanas), and 10 minutes of meditation. Asanas practiced includes Tadasana, Padhastana, Ardha chakrasana, Trikonasana, Shavasana, Bhujangasana, Bhadrasana and Padmasana. It was a ten hours of training programme and the module consisted of general principles of yoga practices (benefits, indication, contraindications, Do's and Don'ts), Prayer meditation. Every session was conducted for 60 minutes with 3 sessions in a week which spread out about 4 weeks from 04.02.2022 to 05.03.2023. The purpose of the study was explained and the questionnaire was distributed to the nursing students and they took around 10-15 minutes to complete the questionnaire. After conducting pretest, yoga training module was introduced and administered about 10 days. Posttest was conducted after 10 days by using the same tool used for the pre-test.

The table 1 showed the distribution of pre-test and post-test score. In the pre-test, majority of 81 (81%) student nurses had severe level of stress, about 19 (19%) student nurses had moderate level of stress and none them having mild level of stress. In the post-test, the majority of the student nurses had mild level of stress 97 (97%), whereas only 3 (3%) had moderate level of stress and none had severe level of stress.

The table 2 shows the comparison of pre and post-test level of stress to determine the effectiveness of yoga training programme. It shows that in the pre-test, mean value was 64.93 with S.D 15.65 and post-test mean was 38.4 with S.D 13.03. The calculated 't' value was 19.3 which indicates that it was significant at  $p < 0.005$  level between the pre and post-test level of stress which shows the effectiveness of Yoga Training Programme.



Table.3 illustrates that there is a significant association between post-test level of stress and age, religion, educational status of the parents, occupational status of the

parents, family income and selection of course. There is no significant association between the medium of study with their post-test level of stress.

**Table 1: Frequency and percentage distribution of pre and post-test level of stress among newly admitted undergraduate student nurses. N=100**

Group	Mild		Moderate		Severe	
	No.	%	No.	%	No.	%
Pre-test	0	0	19	19%	81	81
Post-test	97	97%	3	3%	0	0

**Table 2: Comparison of pre and post-test level of stress among newly admitted undergraduate student nurses**

Level of stress	Mean	S.D	Calculated Value of “t”	Level of Significance
Pre-test	64.93	15.65	19.3	t= 1.98P<0.005 S***
Post-Test	38.4	13.03		

**Table 3: Distribution of newly admitted undergraduate student nurses based on the association between the posttest level stress and their selected demographic variables**

Demographic Variables	Mild Stress		Moderate Stress		Chi-square value
	No	%	No	%	
<b>1.Age</b>					$\chi^2=20.55$ df=6; S
a)16 Years	0	0	0	0	
b)17 Years	25	25	25	25	
c)18 Years	55	55	55	55	
d) 19 Years and above	17	17	17	17	
<b>2.Religion</b>					$\chi^2=0.468$ df=6; S
Hindu	79	79	02	02	
Christian	16	16	00	00	
Muslim	03	03	00	00	
others	00	00	00	00	
<b>3.Education of the parents</b>					$\chi^2=15.51$ df=8; S
a)Primary Education	13	13	01	01	
b) Secondary Education	36	36	00	00	
c)Higher secondary Education	32	32	00	00	
d)Graduate and above	03	03	00	00	
e) No formal Education	14	14	01	01	
<b>4.Occupation of the parents</b>					$\chi^2=0.08$ df=4; S
Government Sector	12	12	12	12	
b)Private sector	86	86	86	86	
<b>5.Family Income</b>					$\chi^2=1.138$ df=8; S
Less than 5000	08	08	00	00	
5000-10,000	43	43	01	01	
10,000-20,000	19	19	01	01	
20,000-30,000	15	15	00	00	
30,000 and above	13	13	00	00	
<b>6. Selection of Course</b>					$\chi^2=0.405$ df=8; S
a) Self-Choice	62	62	01	01	
Parent Choice	30	30	01	01	
Media Influence	01	01	00	00	
Peer group influence	02	02	00	00	
School Influence	03	03	00	00	



Medium of Study					$\chi^2$ 0.305 df=4; <b>NS</b>
Tamil	31	31	01	01	
English	66	66	01	01	
Other language mention	01	01	00	00	

## DISCUSSION

This study aimed to compare the pre and post-test level of stress for determining the effectiveness of yoga training programme. The result of the study shows that in the pre-test, mean value was 64.93 with S.D 15.65 and post-test mean was 38.4 with S.D 13.03. The calculated value was 19.3 which indicates that it was significant at  $p < 0.005$  level between the pre and post-test level of stress which shows the effectiveness of Yoga Training Programme. This result of the study is consistent with the study conducted by Ruchika Rani et al in 2013, Sukhdeep Kaur<sup>1</sup>, Amandeep Kaur Bajwa et al in 2018 and Gomathi in 2020 and these studies also found that yoga is an effective mind-body skills technique in reducing the level of stress among student nurses. [12]

## IMPLICATIONS

Nursing is a demanding profession and nursing students may experience considerable amount of stress to meet the demands in academic and clinical fields. Yoga is an effective practice to reduce stress and improve physical and mental well-being. Indian Nursing Council demands every Nursing institution to hire part time/full time yoga teacher to teach the faculty and students during co-curricular activities provided in various academic years/semesters. They have also prepared ten hours of yoga modules as per the directions of MOHFW and Ministry of AYUSH. Implementing yoga in the curriculum helps the students to manage with academics and study related stressor.

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## CONCLUSION

On conclusion, nursing students are exposed to high levels of stress compared to other students. It is essential to inculcate yoga intervention in the nursing education to meet demands of the profession. This experimental study suggested that daily Yoga practice in the college for a short duration helps to decrease the level of stress among student nurses. The authors suggested that yoga is one of the best strategies for improving the academic performance. The use of yoga techniques can be expanded among other senior college students also. Yoga training was helped to improve the mutual well-being of the students and teachers and also to foster the learning and creativity. Introducing adolescents to this practice may better prepare them for present and future challenges. Hence, there is an urgent need for physical activity, especially regular yoga practices and improving skills in stress management in nursing students is paramount.

## RECOMMENDATIONS:

A comparative study on stress management can be conducted using yoga training among interns since it is considered as one of the elective modules to be taken by the Student nurses in their VII and VIII semester. A longitudinal study on the impact of yoga on personality development among student nurses can be conducted since it is also considered as one of the elective modules to be taken by the students. Future research should focus on larger sample sizes, training the students with certified yoga teachers, in-person compulsory yoga instructions at entry and exit level of the student nurses.



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