



# “Effectiveness Of Body Scan Meditation On Stress Among Staff Nurses Working In Operation Theater Of Selected Tertiary Care Hospital Of City”

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**Abstract:** Nursing is adjudged as an arduous job. A strenuous or a stressful job is defined as one when demands do not match the resources, capabilities and needs of an employee. Socioeconomic factors, occupation, day to day scheme of things, tough assignments having strict deadlines and affective disorders have escalated the stress levels in the present day lifestyle. The aim of the study was to assess the effectiveness of body scan meditation on stress among staff nurses working in operation theatre of selected tertiary care hospital of city.

**Methods :** The present study was based on Quantitative research approach with One group pre test post test research design. The population was all staff nurses working in tertiary care hospitals present during the study period. The sample consisted of 80 staff nurses working in tertiary care hospitals. The sampling technique used in this study was Non probability Convenience sampling technique. The Standardized perceived stress scale (SPSS) was used to assess the stress level of staff nurses. The content validity of the tool was done by 13 expert from Department of Mental Health Nursing. The reliability of the questionnaire was done by test retest method. Based on the objectives and the hypothesis the study data were analyzed by using various statistical tests such as frequency, percentage, mean, and standard deviation, t' test, one way analysis of variance (ANOVA)

**Result :** The study result reveals that, 90 % Staff nurses were female. Majority 70 % of the Staff nurses were completed their GNM. 51.20 % of the staff nurses were having above 5 years of experience in operation theatre. In pre test 93.75 % of the staff nurses had moderate stress Whereas in post test 82.50 % of the Staff nurses had low stress. In the pre test the mean of the Stress score obtained by the Staff nurses was 20.73 and in the post test it markedly reduced to 11.52. The Stress of the Staff nurses were reduced after giving Body Scan Meditation.

**Conclusion :** The nurses commonly more prone to get stress while working in hospital, for the reason of work load and shortage of nursing personnel, time pressure, death dying uncertainty of treatment , lack of knowledge in advancement of technology and equipments. The study was carried out to assess the effectiveness of Body Scan Meditation on stress among staff nurses working in operation theatre of selected tertiary care hospital. In the pre test the mean of the Stress score obtained by the Staff nurses was 20.73 and in the post test it markedly reduced to 11.52. The Stress of the Staff nurses were reduced after giving Body Scan Meditation..

**Keywords:** Effectiveness, body scan meditation, stress, staff nurses, operation theatre.

## I. INTRODUCTION

Nursing is adjudged as an arduous job. A strenuous or a stressful job is defined as one when demands do not match the resources, capabilities and needs of an employee. Socioeconomic factors, occupation, day to day scheme of things, tough assignments having strict deadlines and affective disorders have escalated the stress levels in the present day lifestyle. Job related stress leads to loss of empathy for patients and escalates practice errors adversely affecting quality of care.<sup>1</sup>

Stress is fact of everyday life and is known as either as a reaction or as a stimulus. As reaction the meaning of stress is specific changes that human biological system is experiencing as stimulus is related to environment events that cause those changes.<sup>2</sup>

Sources of stress are called as stressors these are biological, chemical, microbial, psychological, developmental, socio cultural, and environmental. Stress is defined by Folkman and Lazarus as a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well being.<sup>3</sup>

Nurses in India are overworked as the nurse-to-patient ratio is low. They are responsible for the treatment, protocols, standard operating procedures, safety, and recovery of acutely or chronically ill, injured, health maintenance, treatment of life-threatening emergencies, equipment maintenance, biomedical waste disposal and medical and nursing research. Nurses are not only caregivers but are also administrators and supervisors for the paramedical staff and the patients. These multiple work roles, immense responsibilities with too little authority contribute to stress among nurses, particularly those working at the bottom of the hierarchy. Shift duties, odd working hours, time pressures, family pressures, lack of respect from patients, doctors as well as hospital administrators, inadequate staffing levels, interpersonal relationships, death of patient, and a low pay scale add to their stress levels.<sup>4</sup>

Nurses working in the operating room did experience stress from different sources such as work overload and shortage of staff among others. Fatigue and reduction of performance were among the effects of stress identified and listening to music, radio and meditation were some of the coping strategies used by nurses working in the operating theaters.<sup>5</sup>

Body scan meditation is one type of mindfulness meditation which promotes greater awareness of the physical body. It uses physical sensations and visualization as an anchor to root the mind in the physical body and in the present moment. It may be incorporated into a yoga class or used as a practice in its own right. Body scan meditation helps to identify and relieve stress. Body scan meditation alone won't suddenly melt away your stress. Meditation can have beneficial effects on a person's emotional and physical well-being.<sup>6</sup>

According to the Chinese National Centre for Nursing Care Quality Control, says nurses experience extreme level of stress and lack of sleep, due to 12 hours shift, high shift timings, poor diets, and heavy work load are some of the key contributors to the high stress levels. The national survey result indicated that the nurses are experiencing poor sleep patterns and have poor nutritional habits. For instance 64% of survey respondents said that they rarely get seven to eight hours sleep a night, and only 17% able to achieve sleep, 77% don't regularly eat properly, which 31% rarely eat at least two balanced meals per day. Balancing personal and professional lives also seemed to be an issue for respondent with 82% saying it is difficult to strike a work-life balance.<sup>7</sup>

Nurses were selected for the study because nursing is an occupation with a constellation of circumstances leading to stress. Stress affecting nurses across the globe has been convincingly documented in many literature's.<sup>8</sup>

Nurses in India are overburdened as the nurse to-patient ratio is low (1:2250). In India, one study identified 87.6% of the nurses to be experiencing stress, in which 2.1% had severe stress.<sup>9</sup>

A study conducted by **McVicar (2013)** on To identify nurses' perceptions of workplace stress, shows that workload, professional conflict and the emotional burden of caring, pay, and shift work are the major work stressors in the nursing profession. Occupational stress is a serious problem affecting nurses, and literature review shows that this is connected with absence from work and intentions to quit a hospital. Consequently more research into identifying the most effective way of detecting when individuals are experiencing early Difficulties, and of improving their stress management techniques so as to prevent the transition to severe stress.<sup>10</sup>

**National Health Services (NHS) 2013** In England issued a report about nurses leaving the profession due to occupational stress and inability to provide nurse assessed quality care .The Royal College of nursing revealed that in a survey carried out in 2013 involving 10,000 nurses. 62% of them contemplated resigning from their previous year citing stress 61% cited hectic schedule as being a hindrance to providing good quality of care 83% felt an increase in workload make nurses leaving the profession in a three years period.<sup>11</sup>

Based on the above reviews and prevalence rate of occupational stress, it is very well known that, the nurses who are working in intensive care unit most probably exposure to occupational stress, thus the nurses working in intensive care unit need stress management strategies to deal with the stress occurring in their work environment. Due to So the investigator felt that the need to conduct this study to provide psycho education of stress management to improve physical and mental well being of nurses, and improve their quality of patient outcome on reduction of occupational stress.

## PROBLEM STATEMENT

“Effectiveness of body scan meditation on stress among staff nurses working in operation theater of selected tertiary care hospital of city.”

## OBJECTIVES OF THE STUDY:

The objectives of the study were -

1. To assess the stress among staff nurses working in operation theater of selected tertiary care hospital of city.
2. To assess the effectiveness of body scan meditation on stress among staff nurses working in operation theater of selected tertiary care hospital of city.
3. To evaluate the association between study findings with selected demographic variables.

## MATERIALS & METHODS

The methodology of research indicates the general pattern of diagnosing the procedure for gathering valid and reliable data for the purpose of investigation.

**Research Design:** Pre Experimental, one group pre-test post-test Research Design

**Research Approach:** Descriptive Evaluatory approach was used in present study

**Sample:** staff nurses working in operation theater

**Sample Size:** 80 staff nurses

**Sampling Technique:** Non Probability Convenience sampling.

**Data collection tool:** The Standardized perceived stress scale were used for data collection.

## Criteria for Sample selection:

### a. Inclusion criteria:

1. Nurses whose age between 22–58 years.
2. Male and female nurses working in operation theater of selected tertiary care hospital of city.
3. Staff nurses those who are available at the time of data collection.
4. Staff nurses who are willing to participate in research study.

### b. Exclusion criteria:

1. Staff nurses those are already practicing any relaxation techniques.
2. Staff nurses working in other than operation theater.
3. Staff nurses those are having co morbidity.

The researcher personally approached each subject and explained the purpose of the study and explained how it will be beneficial for them. She confirmed their willingness to participate in the study. The researcher collected a group of samples, made them comfortable and oriented them to the study and administered Standardized perceived stress scale (SPSS) to them, instructed them not to interact with each other and their doubts were clarified. Once the scale was completed, researcher collected them back. The samples required approximately 15 - 20 min duration to complete the Standardized perceived stress scale (SPSS). After the pre test body scan meditation was initiated by the researcher. Descriptive and inferential statistics was used for data analysis. The collected data was organized and tabulated by using descriptive statistics, that is frequency, percentage, mean and SD.

## RESULT

The data collected is entered in the master sheet for tabulation and statistical processing. In order to find out relationship, the data was tabulated, analyzed and interpreted using descriptive and inferential statistics.

**Table 1 : Description of the Staff nurses according to their demographic Variables**

n=80

Demographic variable	Frequency	Percentages
<b>Age in years</b>		
22 - 30 years	04	05.00
31 - 40 years	26	32.50
41 - 50 years	27	33.80
51 – 58 years	23	28.70
<b>Gender</b>		
Male	08	10.00
Female	72	90.00
Transgender	00	00
<b>Marital status</b>		
Married	73	91.20
Single	04	05.00
Divorcee	01	01.30

Widow	02	02.50
<b>Type of family</b>		
Nuclear family	49	61.30
Joint family	28	35.00
Extended family	01	01.30
Single parent family	02	02.40
<b>Mode of conveyance</b>		
Walking distance	02	02.40
Own vehicle	38	47.60
Public transportation	40	50.00
Hospital transportation	00	00
<b>Educational status</b>		
GNM	56	70.00
B.Sc. nursing	09	11.30
P. B. B.Sc. nursing	10	12.50
M.Sc. Nursing	05	06.20
<b>Years of experience in operation theater</b>		
Less than 1 year	18	22.50
1 to 5 years	21	26.30
Above 5 years	41	51.20
<b>Designation</b>		
In charge Sister	21	26.30
Staff Nurse	59	73.70

The above table 1 shows that the majority of the Staff nurses under study were between the age group of 31-50 years. Mostly Staff nurses were female and 10 % of the Staff nurses were male. Majority 91.20 % of the Staff nurses were married, 5 % of the staff nurses were single. Majority 61.30 % of the Staff nurses were belongs to nuclear family. 35 % of the staff nurses were belongs to joint family. Highest percentage 50 % of the staff nurses were come to hospital by public transportation. Majority 70 % of the Staff nurses were completed their GNM and 11.30 % of the Staff nurses were completed their B.Sc. nursing. Majority 51.20 % of the staff nurses were having above 5 years of experience in operation theatre. Mostly 73.70 % of the samples were staff nurses and 26.30 % of the samples were In Charge Sister.

**Table 2 : Level of Stress score of Staff nurses pre and post test**

n=80

Level of Stress Score	Pre test		Post test		$\chi^2$ value	p-value
	F	%	F	%		
Low stress 0-13	01	01.25	66	82.50	108.86	p <0.0000, Significant
Moderate Stress 14-26	75	93.75	14	17.50		
High Stress 27-40	04	05.00	00	00		

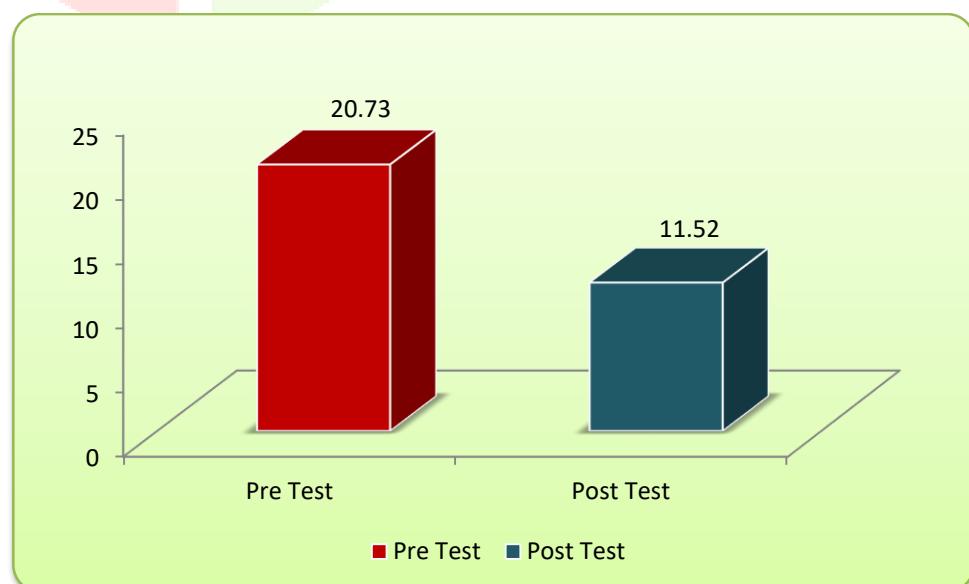
The above table 2 depicts that in pre test 1.25 % of the Staff nurses had low stress. 93.75 % of the staff nurses had moderate stress and 5 % of the staff nurses had high stress. Whereas in post test 82.50 % of the Staff nurses had low stress and 17.50 % of the Staff nurses had moderate stress. The difference between pre test and post test level of Stress score is found to be statistically significant ( $\chi^2$ -value= 108.86). Thus the  $H_1$  is accepted and  $H_0$  is rejected..

**Table 3 : Significance of Stress score of Staff nurses before and after Body Scan Meditation**

n=80

Overall	Maximum score	Mean	Standard deviation	Mean percent age	t-value	p-value
Pre Test	30	20.73	3.54	51.83	21.83	0.000 S, p <0.05
Post Test	15	11.52	1.69	28.80		

The above table 3 depicts that in the pre test the mean of the Stress score obtained by the Staff nurses was 20.73 and in the post test it markedly reduced to 11.52. The Stress of the Staff nurses were reduced after giving Body Scan Meditation. From the above table, it is evident that the calculated 't' value is greater than the table value of 't' (1.66) at 0.05 level. Hence it is statistically interpreted that, the Body Scan Meditation on Stress among Staff nurses were effective. Thus the  $H_1$  is accepted and  $H_0$  is rejected.



## DISCUSSION

### Description of the Staff nurses according to their demographic Variables

In present study, Majority of the Staff nurses under study were between the age group of 31-50 years. Mostly Staff nurses were female and 10 % of the Staff nurses were male. Majority 91.20 % of the Staff nurses were married, 5 % of the staff nurses were single. Majority 61.30 % of the Staff nurses were belongs to nuclear family. 35 % of the staff nurses were belongs to joint family. Highest percentage 50 % of the staff nurses were come to hospital by public transportation. Majority 70 % of the Staff nurses were completed their GNM and 11.30 % of the Staff nurses were completed their B.Sc. nursing. Majority 51.20 % of the staff nurses were having above 5 years of experience in operation theater. Mostly 73.70 % of the samples were staff nurses and 26.30 % of the samples were In Charge Sister.

A similar study conducted by Gurmeet Singh Sarla and Manreet Sandhu. to evaluate the level of stress among the nurses working in selected hospitals of Ferozepur district of Punjab. The study shows that 30% of the nurses were in the age group of 20-30 years, 50% in the age group between 30-40 years and 20% were above 40 years of age. 40% of nurses were GNM qualified and 60% of them possessed a degree of B.Sc. Nursing. 38% of the nurses considered in the study were married and 62% of them were unmarried. 48% nurses had a work experience between 10-20 years.<sup>12</sup>

### Assessment of Stress of Staff nurses working in operation theater of selected tertiary care hospital

In present study, in the pre test the mean of the Stress score obtained by the Staff nurses was 20.73 and in the post test it markedly reduced to 11.52. It reveals that, Body scan meditation is helpful for staff nurses to reduce stress.

A similar study conducted by Treesa Joseph, Savita Angadi, Deelip S Natekar. to assess the occupational stress among staff nurses. Result indicates that majority 70% of respondents had mild stress level. The overall mean stress score was found to be 56.82% with SD as 7.3%.The mean stress score was found to be higher 64.1% in the aspect of interaction, followed by 63.8% in professional status and 60.3% payment and 56.4% in organizational policies.<sup>13</sup>

### Evaluate the effect of Body Scan Meditation on stress among staff nurses working in operation theater of selected tertiary care hospital

In present study, In the pre test the mean of the Stress score obtained by the Staff nurses was 20.73 and in the post test it markedly reduced to 11.52. The Stress of the Staff nurses were reduced after giving Body Scan Meditation.  $H_1$  is accepted and  $H_0$  is rejected.

A similar study conducted by Alyssa A Green, Elizabeth V Kinchen. explores current knowledge on the effectiveness of mindfulness meditation on stress and burnout in nurses. Findings reveal evidence that mindfulness meditation is effective in decreasing stress and burnout in nurses. Mindfulness-based interventions have been shown to significantly decrease stress, improve all aspects of burnout, and increase self-compassion and compassion satisfaction in practicing nurses.<sup>14</sup>

### Level of Stress of Staff nurses in pre test and post test

In present study, In pre test 1.25 % of the Staff nurses had low stress. 93.75 % of the staff nurses had moderate stress and 5 % of the staff nurses had high stress. Whereas in post test 82.50 % of the Staff nurses had low stress and 17.50 % of the Staff nurses had moderate stress. Hence  $H_0$  is rejected and  $H_1$  is accepted.

A similar study conducted by Gurmeet Singh Sarla and Manreet Sandhu. to evaluate the level of stress among the nurses working in selected hospitals of Ferozepur district of Punjab. The study shows that

22% of the working nurses have no stress, 24% of them have mild levels of stress, 12% suffer from moderate levels of stress and 42% nurses have severe stress.<sup>12</sup>

### Associate the findings with demographic variables

In present study, by applying one way ANOVA to post test stress score with selected demographic variable of staff nurses. Result shows that, There was no significant difference found in pre test stress score with selected demographic variables. H<sub>2</sub> is rejected.

### CONCLUSION

The nurses commonly more prone to get stress while working in hospital, for the reason of work load and shortage of nursing personnel, time pressure, death dying uncertainty of treatment , lack of knowledge in advancement of technology and equipments. The study was carried out to assess the effectiveness of Body Scan Meditation on stress among staff nurses working in operation theatre of selected tertiary care hospital. In the pre test the mean of the Stress score obtained by the Staff nurses was 20.73 and in the post test it markedly reduced to 11.52. The Stress of the Staff nurses were reduced after giving Body Scan Meditation.

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