

Occupational Stress and Coping among Nurses

Dutta B¹, Khanikor MS²

¹PhD Scholar, Srimanta Sankaradeva University of Health Sciences/
Lecturer, Regional College of Nursing, Guwahati.

²Former Vice Chancellor, IGTMUSU, Arunachal Pradesh & Former Principal,
Regional College of Nursing, Guwahati.

Corresponding Author: Baby Dutta

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ABSTRACT

A descriptive study to identify perceived occupational stress and adopted coping strategies among nurses in a selected hospital of Guwahati, Assam.

The present study was designed to identify the perceived occupational stress and adopted coping strategies among nurses in a selected hospital of Guwahati. The objectives of the study were: (1) To identify the common stressors perceived by the nurses. (2) To find out the common coping strategies adopted by them to overcome stress. (3) To determine the association between perceived job stress and selected demographic variables. (4) To find out the association between adopted coping strategies and selected demographic variables. (5) To find out the association between perceived job stress and adopted coping strategies by nurses.

The sample comprised of 100 conveniently selected nurses working in various wards of a selected Govt Hospital in Guwahati city. Descriptive survey design was adopted for the study. Data was collected through a structured questionnaire which consisted of three parts. PART A of the tool was the Demographic proforma. The PART B included the OSI- Occupational Stress Index scale and the PART C of the tool consisted of Coping Check List (CCL).

In the study majority of the participants were working in the capacity of staff nurse and were having more than 5 years of professional experience. The participants perceived 'unprofitability' & 'role overload' as the main stressors in their work environment. 'Unreasonable group & political pressure' ranked 3rd, followed by 'under participation' which ranked 4th. Among coping strategies, emotion focussed strategies ranked 1st in the order, problem focussed strategies ranked 2nd, and problem & emotion focussed ranked 3rd in the order. It reflected that the most commonly used coping strategy under emotion focussed strategies, was positive distraction. Findings suggested that there is significant association between perceived occupational stress and demographic variable of 'professional qualification'. Significant association was also observed between coping scores and general academic qualification. There was a statistically significant relationship between perceived job stress and adopted coping strategies.

Based on the finding of the above study it is recommended that studies may be undertaken considering other variables and may be replicated on a large sample.

Key words: Occupational stress, Coping strategies, Nurses.

INTRODUCTION

The experience of stress in the workplace has long been an area of concern and research interest. Stress is defined as any physical or psychological event perceived as being able to cause us harm or emotional

distress. Many real and imagined dangers pose such treats, and individuals engage in coping behaviour in an attempt to deal with stressful situation and their emotional reactions to them.

Stress and coping are concepts that have sustained the interest of nurses and researchers for several decades. These concepts are highly relevant to the workforce in general and nursing in particular. Workplace stress is an important area of research and it is especially so in the nursing profession as stress can affect performance in the job and that in return can affect quality patient care.

Statement of the Problem: “A descriptive study to identify perceived occupational stress and adopted coping strategies among nurses in a selected hospital of Guwahati, Assam”.

The objectives of the study were

1. To identify the common stressors perceived by the nurses.
2. To find out the common coping strategies adopted by them to overcome stress.
3. To determine the association between perceived job stress and selected demographic variables.
4. To find out the association between adopted coping strategies and selected demographic variables.
5. To find out the association between perceived job stress and adopted coping strategies by nurses.

MATERIALS AND METHODS

The sample comprised of 100 nurses working in various wards of a selected Govt hospital in Guwahati city. The technique non probability convenience sampling was adopted to gather samples for collecting data for the present study.

The Tool used for collecting data was a structured questionnaire consisting of three parts. PART A of the tool The part A of the structured questionnaire is the demographic proforma consisting of 14 items. The PART B included the OSI-Occupational Stress Index scale, constructed by Dr. A. K. Srivastava & Dr. A. P. Singh.

The tool consists of 46 items. The PART C of the tool consists of Coping Check List (CCL) prepared by Prof K. Rao containing total of 70 items.

The data obtained was analysed in terms of frequencies and percentages and chi-square.

RESULTS

Data shows that out of 100 nurses 45 nurses (45%) fell in the age group of 21-35 years, 39 nurses (39%) fell in the age group of 39- 50 years, and 16 nurses (16%) of the total belonged to the age group above 50 years. Majority of the participants, 73 nurses i.e., (73%) were having general academic qualification of Higher Secondary. Out of 100 participant nurses, 85 nurses (85%) were GNM Diploma holders, and only 15 nurses (15%) possessed B. Sc Nursing degree. Majority (83%) of the participant nurses were working in the capacity of staff nurse. 64% participants were having more than 5 years of professional experience, whereas 36% were having 2-5 years of professional experience. The majority of nurses i.e. 69 nurses (69%) were working in shifts and majority of them were married. 28 nurses (28%) availed hostel accommodation whereas, 72 nurses (72%) stayed at home. Majority of the nurses belonged from nuclear family system.

Each participant nurse in the study experienced certain levels of job stress and majority of them belonged to the category of high stress. The following table depicts the level of job stress.

Table 1- Distribution of nurses by their level of job stress. N= 100

Occupation stress scores	Number of nurses	Percentage
46 - 122 (Low)	-	-
123 – 155 (Moderate)	31	31.00
156 - 230 (High)	69	69.00
Total	100	100.00

Age & Level of Stress-

The following Table depicts the distribution of nurses by their age and level of job stress.

Table 2 - Distribution of nurses by their age and level of job stress. N= 100

Occupation Stress Scores	Age						Total	
	21-35 years		36-50 years		Above 50 years		Count	%
	Count	%	Count	%	Count	%		
46-122 (Low)	-	-	-	-	-	-	-	-
123-155 (Moderate)	10	10.00	14	14.00	7	7.00	31	31.00
156-230 (High)	35	35.00	25	25.00	9	9.00	69	69.00
Total	45	45.00	39	39.00	16	16.00	100	100.00

The data presented in Table shows that the majority of the nurses in every age group experienced high stress. Out of 31 nurses experiencing moderate stress, 10 belonged to the age group 21- 35 years, 14 nurses were between 36- 50 years of age, and 7 nurses were above 50 years of age. Similarly, out of 69 nurses reporting high stress, 35 belonged to the age group 21- 35

years, 25 nurses were between 36- 50 years of age, and 9 nurses were above 50 years of age.

General academic qualification & level of job stress-

Table below shows the distribution of nurses by their general academic qualification and level of job stress.

Table 3 – Distribution of nurses by their general academic qualification and level of job stress. N= 100

Occupation Stress Scores	General Education								Total	
	Higher Sec.		Graduate		Post Grad.		Any other		Count	%
	Count	%	Count	%	Count	%	Count	%		
46 - 122 (Low)	-	-	-	-	-	-	-	-	-	-
123-155(Moderate)	23	23.00	7	7.00	1	1.00	-	-	31	31.00
156 - 230 (High)	50	50.00	18	18.00	-	-	1	1.00	69	69.00
Total	73	73.00	25	25.00	1	1.00	1	1.00	100	100.00

Out of 31 participants experiencing moderate stress, 23 were higher secondary passed, 7 participants were graduates, and 1 participant was a post graduate. Similarly, out of 69 nurses experiencing high stress, 50 were higher secondary passed, 18 were graduates, and 1 belonged to ‘any other’ category.

Professional qualification and level of job stress-

Table below explains the distribution of nurses by their professional qualification and level of job stress.

Table 4 - Distribution of nurses by professional qualification and level of job stress. N= 100

Occupation Stress Scores	Professional Education						Total	
	Diploma/GNM		B.Sc. Nursing		Others		Count	%
	Count	%	Count	%	Count	%		
46 - 122 (Low)	-	-	-	-	-	-	-	-
123-155(Moderate)	25	25.00	6	6.00	-	-	31	31.00
156 - 230 (High)	60	60.00	9	9.00	-	-	69	69.00
Total	85	85.00	15	15.00	-	-	100	100.00

The Table shows that out of 31 nurses experiencing moderate stress, 25 were GNM Diploma holders, and 6 were BSc nurses. Similarly, out of 69 nurses experiencing high stress, 60 were GNM Diploma nurses, and 9 nurses had BSc Nursing degree.

Designation & level of job stress-

Table below shows the distribution of nurses by their designation and level of job stress.

Table 5 - Distribution of nurses by their designation and level of job stress. N= 100

Occupation Stress Scores	Designation						Total	
	Staff		Shift-In- Charge		Unit/Ward-in-Charge		Count	%
	Count	%	Count	%	Count	%		
46 - 122 (Low)	-	-	-	-	-	-	-	-
123-155(Moderate)	21	21.00	-	-	10	10.00	31	31.00
156 - 230 (High)	62	62.00	1	1.00	6	6.00	69	69.00
Total	83	83.00	1	1.00	16	16.00	100	100.00

The Table reflects that, out of 31 nurses experiencing moderate stress, 21 were working in the capacity of staff nurse, and 10 were working as unit/ward in- charges. Similarly, out of 69 nurses experiencing high stress, 62 nurses were working in the designation of staff nurses, 1 was shift in-charge, and 6 were working in the capacity of unit/ward in-charge. Majority of the

nurses experiencing high stress, were working in the capacity of staff nurses.

Years of professional experience & level of job stress –

Table below depicts the distribution of nurses by their years of professional experience and level of job stress.

Table 6 - Distribution of nurses by their years of professional experience and level of job stress. N= 100

Occupation Stress Scores	Experience						Total	
	0 – 1 year		2-5 years		More than 5 yrs		Count	%
	Count	%	Count	%	Count	%		
46 - 122 (Low)	-	-	-	-	-	-	-	-
123-155(Moderate)	-	-	9	9.00	22	22.00	31	31.00
156 - 230 (High)	-	-	27	27.00	42	42.00	69	69.00
Total	-	-	36	36.00	64	64.00	100	100.00

The above Table shows that, out of 31 nurses experiencing moderate stress, 9 were having 2- 5years of professional experience and 22 had above 5 years of experience. However out of 69 nurses experiencing high stress, 27 had 2-5 years of professional

experience, and 42 nurses been having more than 5 years of professional experience.

Type of duty & level of job stress -

The following Table reflects the distribution of nurses by their type of duty and level of job stress.

Table 7 - Distribution of nurses by their type of duty and level of job stress. N= 100

Occupation Stress Scores	Type of Duty				Total	
	Fixed duty		Shift duty		Count	%
	Count	%	Count	%		
46 - 122 (Low)	-	-	-	-	-	-
123-155(Moderate)	16	16.00	15	15.00	31	31.00
156 - 230 (High)	15	15.00	54	54.00	69	69.00
Total	31	31.00	69	69.00	100	100.00

The Table shows that, out of 31 nurses experiencing moderate stress, 16 were engaged with fixed duty; however, 15 were engaged with shift duty. Similarly, 69 nurses experiencing high stress, 15 were engaged with fixed duty; however, 54 were engaged with shift duty. Therefore it can be inferred that majority of the nurses

experiencing high stress, were engaged in shift duty.

Marital status & level of job stress –

Table below depicts distribution of nurses by their marital status and level of job stress.

Table 8 - Distribution of nurses by their marital status and level of job stress. N= 100

Occupation Stress Scores	Marital Status						Total	
	Unmarried		Married		Widow		Count	%
	Count	%	Count	%	Count	%		
46 - 122 (Low)	-	-	-	-	-	-	-	-
123-155(Moderate)	6	6.00	23	23.00	2	2.00	31	31.00
156 - 230 (High)	26	26.00	42	42.00	1	1.00	69	69.00
Total	32	32.00	65	65.00	3	3.00	100	100.00

Among 31 nurses experiencing moderate stress, 6 nurses were unmarried, 23 were married, and 2 were widow. Similarly, out

of 69 nurses experiencing high stress, 26 were unmarried, 42 were married, and 1 was widow. From the total 32 unmarried

participants, 6 experienced moderate stress, and 26 experienced high stress. Out of 65 nurses, 23 experienced moderate stress, whereas, 42 experienced high stress.

Type of accommodation & level of job stress –

Table below depicts the distribution of nurses by type of accommodation and level of job stress.

Table 9 – Distribution of nurses by type of accommodation and level of job stress. N= 100

Occupation Stress Scores	Accommodation type				Total	
	Hostel		At home		Count	%
	Count	%	Count	%		
46 - 122 (Low)	-	-	-	-	-	-
123-155(Moderate)	7	7.00	24	24.00	31	31.00
156 - 230 (High)	21	21.00	48	48.00	69	69.00
Total	28	28.00	72	72.00	100	100.00

The data shows that, out of 31 nurses experiencing moderate stress, 7 were hostel boarders and 24 stayed at home. Similarly,

out of 69 nurses experiencing high stress, 21 were residing in hostel, and 48 stayed at home.

Type of family & level of job stress -

Table 10 - Distribution of nurses by type of family and level of job stress. N= 100

Occupation Stress Scores	Family type				Total	
	Nuclear		Joint		Count	%
	Count	%	Count	%		
46 - 122 (Low)	-	-	-	-	-	-
123-155(Moderate)	21	21.00	10	10.00	31	31.00
156 - 230 (High)	54	54.00	15	15.00	69	69.00
Total	75	75.00	25	25.00	100	100.00

The data shows that, out of 31 nurses experiencing moderate stress, 21 belonged to nuclear family and 10 were from joint family. Similarly, out of 69 nurses experiencing high stress, 54 were from nuclear family, and 15 had joint family. The study participants identified/ perceived ‘unprofitability’ & ‘role overload’ as the main stressors in their work environment. ‘Unreasonable group & political pressure’

ranked 3rd, followed by ‘underparticipation’ which ranked 4th.

Among coping strategies, emotion focussed strategies ranked 1st in the order, problem focussed strategies ranked 2nd, and problem & emotion focussed ranked 3rd in the order. It is reflected that the most commonly used coping strategy under emotion focussed strategies, is positive distraction.

Association between Occupational Stress and selected demographic variables

Table 11 – Chi- square tests of association between occupational stress and selected demographic variables. N= 100

Demographic Variable	Chi- Square	Value	df	P value
Age	Pearson Chi-Square	63.080	74	.813
General Academic qualification	Pearson Chi-Square	79.700	111	.989
Prof. Qualification	Pearson Chi-Square	138.452	74	.000*
Designation	Pearson Chi-Square	68.142	74	.670
Years of Professional Experience	Pearson Chi-Square	30.122	37	.781
Type of Duty	Pearson Chi-Square	34.276	37	.597
Marital Status	Pearson Chi-Square	61.929	74	.840
Type of Accommodation	Pearson Chi-Square	29.109	37	.819
Self Income	Pearson Chi-Square	90.958	74	.088

* Statistically significant at p<0.05 level

The data shows that p value is statistically significant (p<0.05) for only one demographic variable i.e., professional qualification; whereas for all other selected

demographic variables, the p value is statistically not significant (p>0.05) showing that these demographic variables are independent of occupational stress.

Association between Adopted Coping Strategies and selected demographic variables

Table 12 – Chi- square tests of association between adopted coping strategies and selected demographic variables. N= 100

Demographic Variable	Chi- Square	Value	Df	P value
Age	Pearson Chi-Square	71.411	66	.303
General academic qualification	Pearson Chi-Square	144.754	99	.002*
Prof. qualification	Pearson Chi-Square	43.215	66	.987
Designation	Pearson Chi-Square	72.767	66	.265
Years of professional Experience	Pearson Chi-Square	31.909	33	.521
Type of Duty	Pearson Chi-Square	34.460	33	.398
Marital Status	Pearson Chi-Square	80.528	66	.108
Accommodation type	Pearson Chi-Square	45.106	33	.078
Self Income	Pearson Chi-Square	66.546	66	.458

* Statistically significant at p<0.05 level.

The statistics reflect that, p value is statistically significant (p<0.05) for association between coping and general academic qualification; whereas for all other selected demographic variables, the p value

is statistically not significant. This shows that all other selected demographic variables, except general academic qualification, are independent of coping scores.

Association between Occupational Stress and Coping Strategies

Table 13 - Association between Occupational Stress and Coping Strategies. N= 100

Variables	Mean	N	Std. Deviation	Std. Error Mean	T	Df	P value
Total Coping Scores	39.53	100	7.660	.766	-101.362	99	.000*
Total Stress Score	161.50	100	12.241	1.224			

*Significant level is at P<0.05

The findings of the T- test suggest significant difference between Total Coping Scores and Total Occupational Stress. Therefore it can be said that the two dependent variables under study i.e. occupational stress scores and coping scores are dependent on each other.

DISCUSSION

The analysis of the data revealed that most of the nurses who participated in the study perceived stress in their work life. Majority of the nurses (69%) scored high in the occupational stress index, indicating higher levels of job stress and 31% experienced moderate levels of stress. Similar findings of high perceived job stress are reported by Supe A¹ (2000) in a study on 90 staff nurses at K.E.M. Hospital, Mumbai, where majority of nurses (65.5%) perceived stress. Gandhi S and K Lalitha² (2008) also found the total percentage of stress index was 48% indicating an overall moderate level of stress perception by the study subjects. Lu Luo, Shiau Chi, Cooper Cary L³ (1997) examined occupational stress in clinical nurses who worked in various hospitals and

found that, nurses experienced higher work stress, more and also made more efforts to cope with work stress.

In the present study findings, ‘Unprofitability’ ranked first among all the stressors. In the subscale ‘Unprofitability’, there were two items/questions ‘I get less salary in comparison to the quantum of my labour/ work’ and ‘I am seldom rewarded for my hard labour and efficient performance’. ‘Role overload’ ranked 2nd in the list of stressors perceived by the nurses. The items under this category included – “I have to do a lot of work in this job”, “Owing to excessive workload I have to manage with insufficient number of employees and resources”, “I have to dispose off my work hurriedly owing to excessive work load”, “Being too busy with official work I am not able to devote sufficient time to my domestic and personal problems”, “I have to do such work as ought be done by others”, and “I am unable to carry out my assignment to my satisfaction on account of excessive load of work and lack of time”.

Callaghan P, T-Y Shiu Ann, Peggy AW⁴ (2001) in his study among Chinese nurses also identifies that 'too much work', is one of the major sources of job stress. Parikh P, Taukari A, Bhattacharya T⁵ (2004) identified common occupational stressors as workload, role ambiguity, and interpersonal relationships.

Among coping strategies, emotion focussed strategies ranked 1st in the order, problem focussed strategies ranked 2nd, and problem & emotion focussed ranked 3rd in the rank order. It is reflected that the most commonly used coping strategy under emotion focussed strategies, is positive distraction. Bianchi⁶ (2004) also found that nurses used positive reappraisal, self-controlling skills, and social support to cope with job stress.

Social support as coping is reported by Callaghan P, T-Y Shiu Ann, Peggy AW⁴ (2001). However in the present study social support ranked 6th in the order. Santos SR, Carroll C, Cox KS, Teasley SL, Simon SD, Bainbridge L⁷ et al. (2003) conducted a cohort analysis of stress, strain and coping across institution types found that respondents had poorer coping on the social support segment of the coping subscale unlike the present study.

In the present study, problem solving ranked 3rd in the order of coping strategies adopted by nurses. Parikh, Taukari, & Bhattacharya⁵ (2004) finds that nurses' common coping mechanisms include problem solving, social support and avoidance.

Sullivan⁸(1993) reported that the coping strategies used by nurses to manage or counteract their stress and dissatisfaction included-seeking social support, painful problem solving, accepting responsibility, positive reappraisal and avoidance. Study conducted by Varghese S⁹ (1998), revealed that student nurses used both problem focused and emotional focused coping strategies to deal with stressful experiences.

CONCLUSION

In the present investigation work it has been observed that occurrence of stress is common among nurses. Nursing is

acknowledged to be stressful work, and there is a need to understand the nature of that problem and to better manage it. A large proportion of nurses reported high stress. Education programmes on stress management and positive coping strategies are recommended for nurses in order to reduce the rate of occupational hazards and also promote efficiency in patient care. There is a great need for comprehensive studies that will examine these dynamics in a way that will yield more solid evidence on which to base practice. The study makes following recommendations for future study.

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