

“ASSESS COPING MECHANISM AND RESILIENCE IN RELATION TO OCCUPATIONAL STRESS AMONG NURSES WORKING IN A TERTIARY CARE TEACHING HOSPITAL”.

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ABSTRACT

Introduction: Nurses in tertiary care hospitals experience high occupational stress. Coping mechanisms and resilience are important for managing stress and maintaining well-being. This study aimed to assess stress, coping, and resilience, and to determine their relationship.

Methods: A quantitative descriptive study was conducted among 150 nurses using a self-structured 5-point Likert scale. Data were analysed using frequency, percentage, and Pearson's correlation coefficient.

Results: Majority of nurses had high stress (55.3%), moderate coping (52.7%), and high resilience (57.3%). A strong positive correlation ($r = 0.64$, $p < 0.05$) was found between coping and resilience.

Conclusion: Nurses experience high stress, but better resilience is associated with improved coping. Strengthening resilience can enhance stress management and overall well-being.

INTRODUCTION

Nursing is the core of the health care system and plays an important role in health care system. Nursing is one of the most stressful jobs and nurses are under severe occupational stress. Occupational stress is one of the most important factors in physical and psychological complications in personal and reduction of the productivity of organization. On the other hand, nurses working in special wards may be stressed due to their specific working condition and patients. In order to overcome the challenges and master difficult situations in one's life, coping mechanism and resilience can be helpful.

In other word resilience is a positive adaptation to overcome conditions. High resilience in nurses enables them to use positive adaptation skills is coping with stress and helps them keep up with stressful environment of the special department. Every work place has the potential to cause stress, but work environment of nurse can be more stressful than other health care professionals. There are manifold factors that have been associated with stress specific to the nursing profession. Staff shortage, patient death and suffering, workload, time pressure, demands of patients and relatives, exposure to infections are few stressor which make nurses more vulnerable in workplace stress.

NEED OF THE STUDY

One to several contributing factors related to occupational stress among nurses and a huge scarcity of nurse patient proportion ratio deficit the quality of patient care. As the researcher's direct experience working as a health care provider in the critical care unit managing the stress is more burden than the ordinary units. All these above factors motivated the researcher to take up this study. Because of the nature of their work, nurses are constantly subjected to high amounts of stress.

MATERIAL AND METHOD

OBJECTIVES OF THE STUDY

- To assess the base line stress level among nurses working in a tertiary care teaching hospital.
- To assess the level of coping mechanism among nurses in a tertiary care teaching hospital.
- To assess the level of resilience among nurses working in a tertiary care teaching hospital.
- To find the correlation between coping mechanism and resilience among nurses working in a tertiary care teaching hospital.

OPERATIONAL DEFINITION

Coping Mechanisms: In this study, coping mechanisms refer to the cognitive and behavioural strategies adopted by nurses working in a tertiary care teaching hospital to manage occupational stress. These strategies will be assessed using the self-structured 5-point

Likert scale. Which measures various coping responses such as problem-focused coping, emotion-focused coping, and avoidant coping. The coping mechanism scores obtained through the tool will indicate the level and type of coping strategies used by the nurses.

Resilience: In this study, resilience refers to the ability of nurses working in a tertiary care teaching hospital to adapt positively and recover from occupational stress and challenging work situations. It will be measured using the Self-structured 5-point Likert scale. The scores obtained from the scale will indicate the level of resilience among nurses, with higher scores representing greater resilience.

Occupational Stress: In this study, occupational stress refers to the psychological strain and pressure experienced by nurses working in a tertiary care teaching hospital due to job-related demands and work environment factors. It will be measured using the Self-structured 5-point Likert scale. The scores obtained from the scale will indicate the level of occupational stress among nurses, with higher scores representing greater levels of stress.

Nurses: In this study, nurses refer to registered staff nurses working in various departments of a tertiary care teaching hospital who are directly involved in patient care and are available at the time of data collection.

Tertiary care teaching hospital: In this study, a tertiary care teaching hospital refers to a specialized healthcare institution that provides advanced medical services, clinical training, and educational facilities for healthcare professionals.

RESEARCH APPROACH: A Quantitative research approach was used for this study.

RESEARCH DESIGN: Descriptive research design is adopted in this study.

VARIABLES

Independent Variables; in this study, it refers to the Occupational stress level among nurses working in a tertiary care teaching hospital.

Dependent Variable; in this study, it refers to the Coping mechanisms and Resilience levels among nurses working in a tertiary care teaching hospital.

SAMPLE

Sample size: 150 Nurses

Sampling technique: Non probability purposive sampling technique

INCLUSION CRITERIA

Those nurses:

- working in a tertiary care hospital.
- Working for at least 6 months in a tertiary care hospital.
- Willing to participate and give informed consent.

EXCLUSION CRITERIA

Those nurses:

Who are absent on the day of data collection.

DESCRIPTION OF INSTRUMENT

The instrument used for the present study was a self-structured 5-point Likert scale developed by the researcher to assess coping mechanisms, resilience, and occupational stress among nurses working in a tertiary care teaching hospital.

The tool consists of **four sections**:

Section A: Socio-Demographic Variables

This section includes 15 items related to personal and professional characteristics such as age, gender, educational qualification, work experience, marital status, department, and type of family.

Section B: Occupational Stress Scale This section consists of **10 items** to assess the level of occupational stress among nurses. The items cover areas such as workload, shift duties, work environment, and patient care responsibilities.

Responses are recorded on a 5-point Likert scale:

Section C: Coping Mechanism Scale

This section consists of 10 items to assess coping strategies used by nurses, including problemfocused and emotion-focused coping.

Responses are recorded on a 5-point Likert scale:

Section D: Resilience Scale

This section consists of 10 items to measure resilience, i.e., the ability to adapt and recover from stress.

Responses are recorded on a 5-point Likert scale:

Section I

Description of samples (nurses working in a tertiary care teaching hospital) based on their personal characteristics

Table 1: Distribution of samples based on their personal characteristics in terms of frequency and percentage

N=150

Demographic	Variable	Freq	%
Age	21-30 years	124	82.7%
	31-40 years	18	12.0%
	> 40 years	8	5.3%
Gender	Female	113	75.3%
	Male	37	24.7%
Marital status	Married	54	36.0%
	Single	96	64.0%
Education	ANM	6	4.0%
	GNM	56	37.3%
	BSc N	65	43.3%
	DNP	1	0.7%
	PB BSc	19	12.7%
	NPCC	3	2.0%
Experience	Upto 1 year	34	22.7%
	1-3 years	62	41.3%
	3-5 years	17	11.3%
	5-10 years	34	22.7%
	> 10 years	3	2.0%

Table 1 cont.

Demographic variable	Freq	%
Casualty	2	1.3%
CVTS	7	4.7%
EMS	4	2.7%
EMSICU	8	5.3%
ENT	4	2.7%
ER	3	2.0%
FSW	9	6.0%
Male ortho	7	4.7%

Male surg	3	2.0%
MICU	10	6.7%
MMW	6	4.0%
MS-1	4	2.7%
MS-2	2	1.3%
MSW-2	2	1.3%
OBGY	15	10.0%
OMFS	4	2.7%

OPD	3	2.0%
OPHTHAL	6	4.0%
Ortho	11	7.3%
OT	1	0.7%
Paediatric ward	3	2.0%
Psychiatric	3	2.0%
SICU	22	14.7%
Special ward	4	2.7%
TRAUMA	7	4.7%

Shift

7 H/D	1	0.7%
8H/D	147	98.0%
9 H/D	2	1.3%

Income

Upto Rs. 20000	8	5.3%
Rs. 20001 -30000	111	74.0%
Rs. 30001 -40000	14	9.3%
> Rs. 40000	17	11.3%

Residence

Rural	13	8.7%
Urban	137	91.3%

Family type

Joint	26	17.3%
Nuclear	124	82.7%

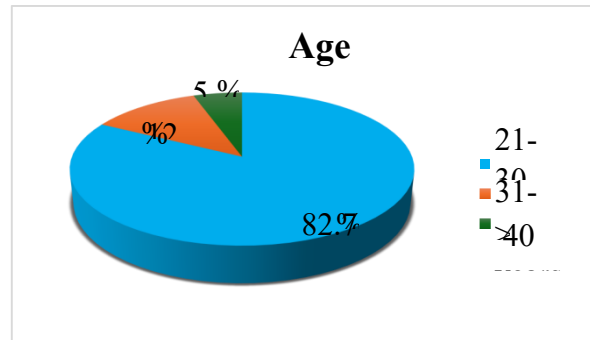


Figure 1 Frequency and percentage distribution of samples according to age.

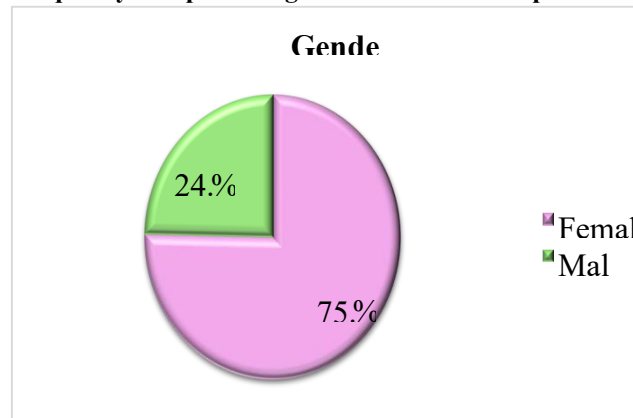


Figure 2 Frequency and percentage distribution of samples according to Gender

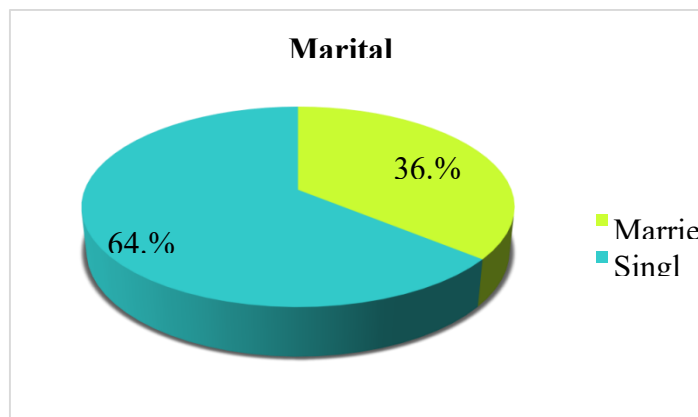


Figure 3 Frequency and percentage distribution of samples according to Marital status

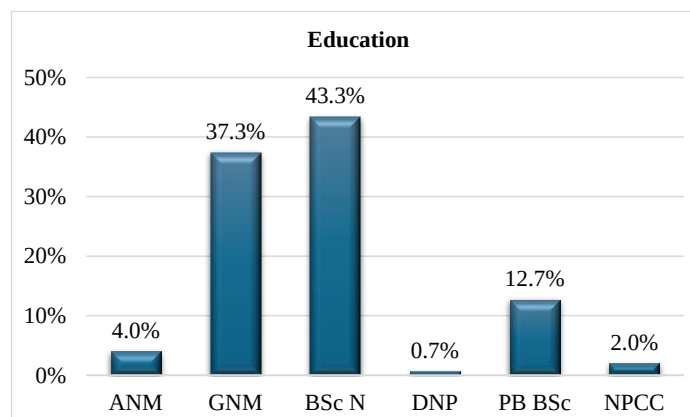


Figure 4 Frequency and percentage distribution of samples according to Education

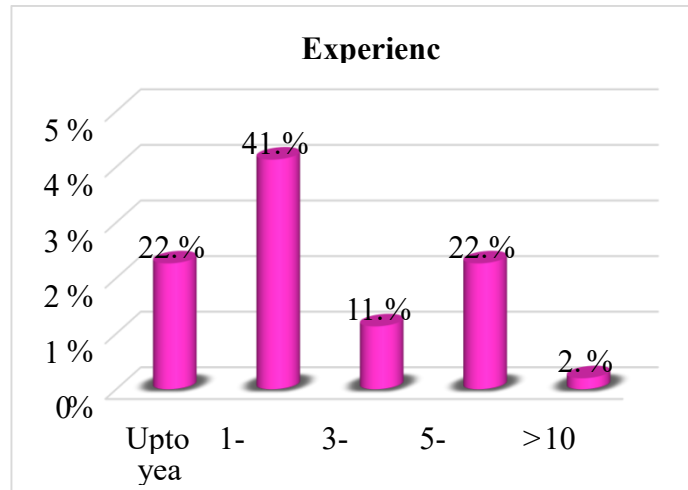


Figure 5 Frequency and percentage distribution of samples according to Experience

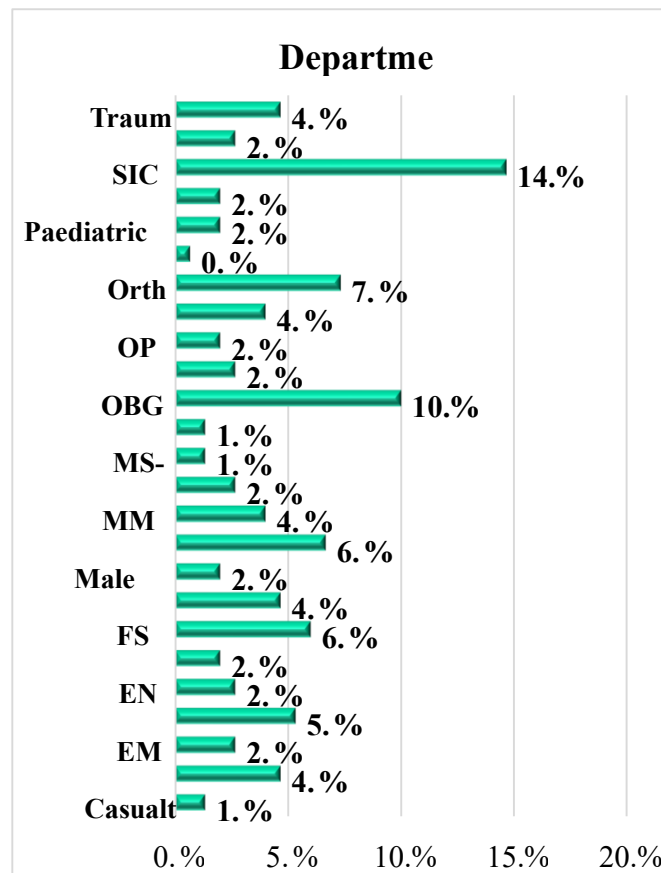


Figure 6 Frequency and percentage distribution of samples according to Department

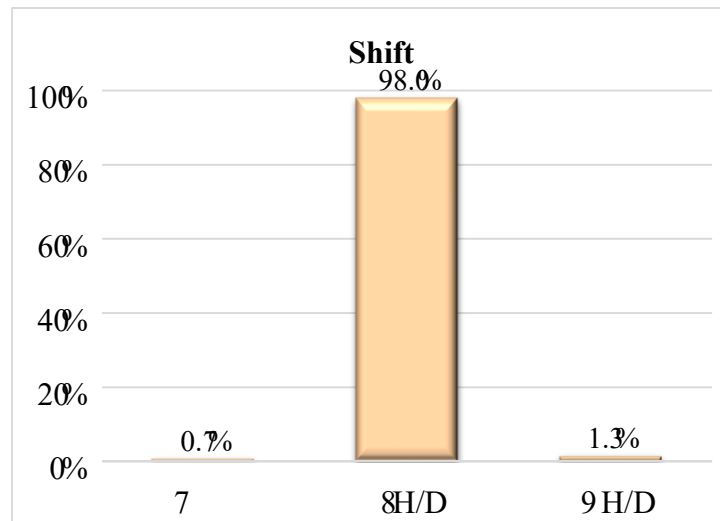


Figure 7 Frequency and percentage distribution of samples according to Shifts

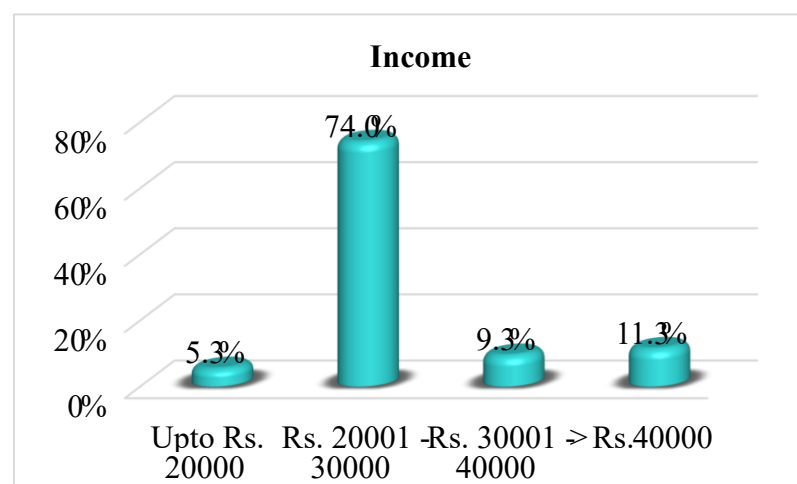


Figure 8 Frequency and percentage distribution of samples according to Income

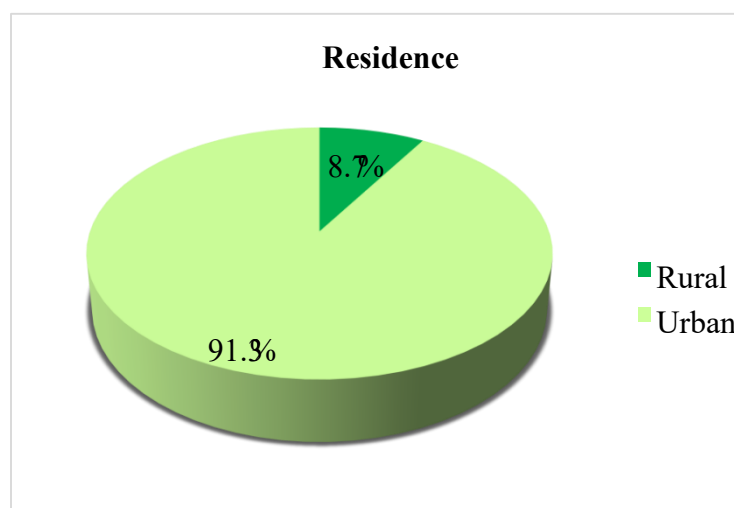
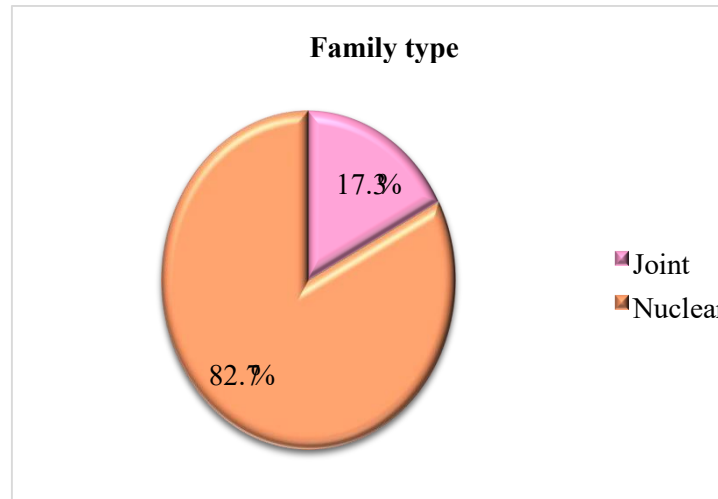


Figure 9 Frequency and percentage distribution of samples according to Residence



Section II

Analysis of data related to stress level among nurses working in a tertiary care teaching hospital

Table 2: Stress level among nurses working in a tertiary care teaching hospital

N=150

Stress	Freq	%
Low	10	6.7%
Moderate	57	38.0%
High	83	55.3%

6.7% of the nurses working in a tertiary care teaching hospital had low stress, 38% of them had moderate stress and 55.3% of them had high stress.

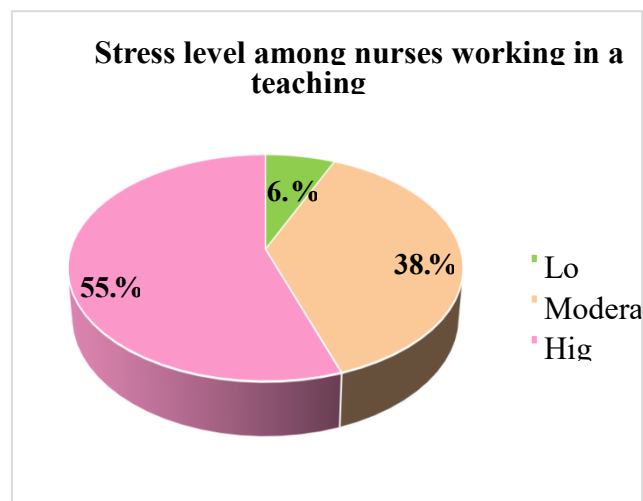


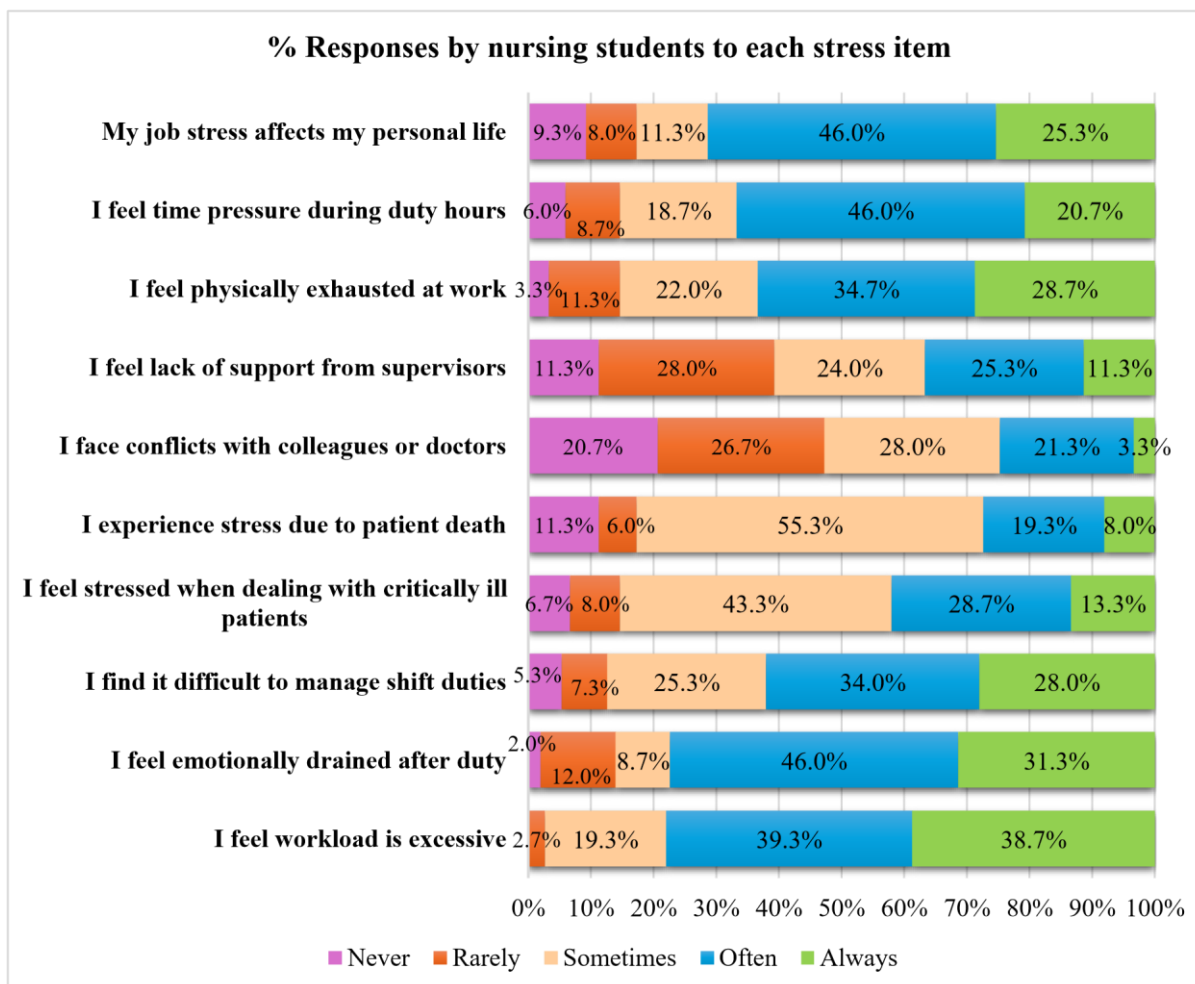
Figure 11 Percentage distribution of stress level among nurses in a tertiary care teaching hospital

Table 3: Stress item analysis

N=150

Stress item	Never		Rarely		Sometimes		Often		Always	
	f	%	f	%	f	%	f	%	f	%
I feel workload is excessive	0	0.0%	4	2.7%	29	19.3%	59	39.3%	58	38.7%

I feel emotionally drained after duty	3	2.0%	18	12.0%	13	8.7%	69	46.0%	47	31.3%
I find it difficult to manage shift duties	8	5.3%	11	7.3%	38	25.3%	51	34.0%	42	28.0%
I feel stressed when dealing with critically ill patients	10	6.7%	12	8.0%	65	43.3%	43	28.7%	20	13.3%
I experience stress due to patient death	17	11.3%	9	6.0%	83	55.3%	29	19.3%	12	8.0%
I face conflicts with colleagues or doctors	31	20.7%	40	26.7%	42	28.0%	32	21.3%	5	3.3%
I feel lack of support from supervisors	17	11.3%	42	28.0%	36	24.0%	38	25.3%	17	11.3%
I feel physically exhausted at work	5	3.3%	17	11.3%	33	22.0%	52	34.7%	43	28.7%
I feel time pressure during duty hours	9	6.0%	13	8.7%	28	18.7%	69	46.0%	31	20.7%
My job stress affects my personal life	14	9.3%	12	8.0%	17	11.3%	69	46.0%	38	25.3%



Section III

Analysis of data related to coping mechanism among nurses in a tertiary care teaching hospital

Table 4: Coping mechanism among nurses in a tertiary care teaching hospital

N=150

Coping	Freq	%
Poor	6	4.0%
Moderate	79	52.7%
Good	65	43.3%

4% of the nurses had poor coping mechanism, 52.7% of them had moderate coping mechanism and 43.3% of them had good coping mechanism.

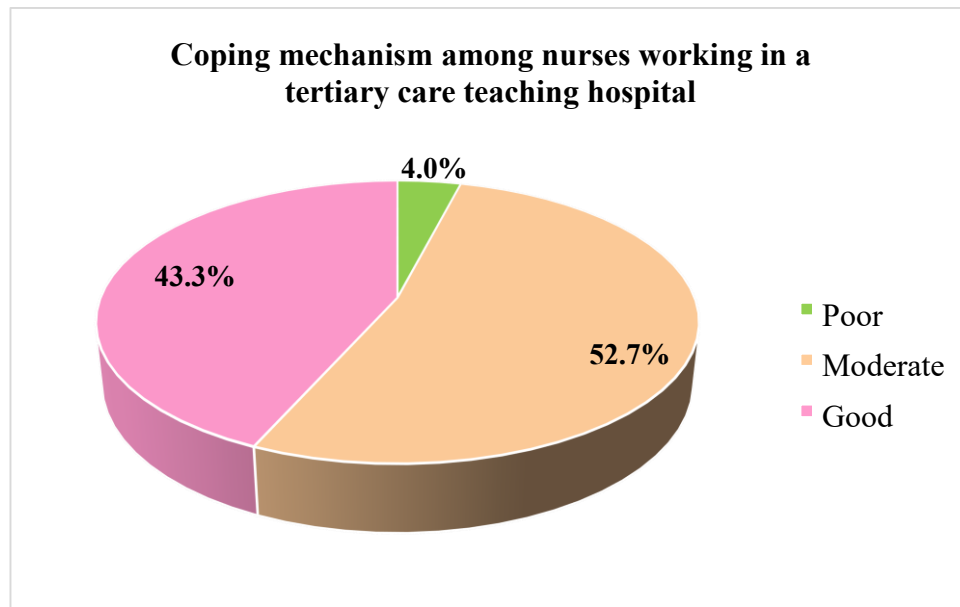


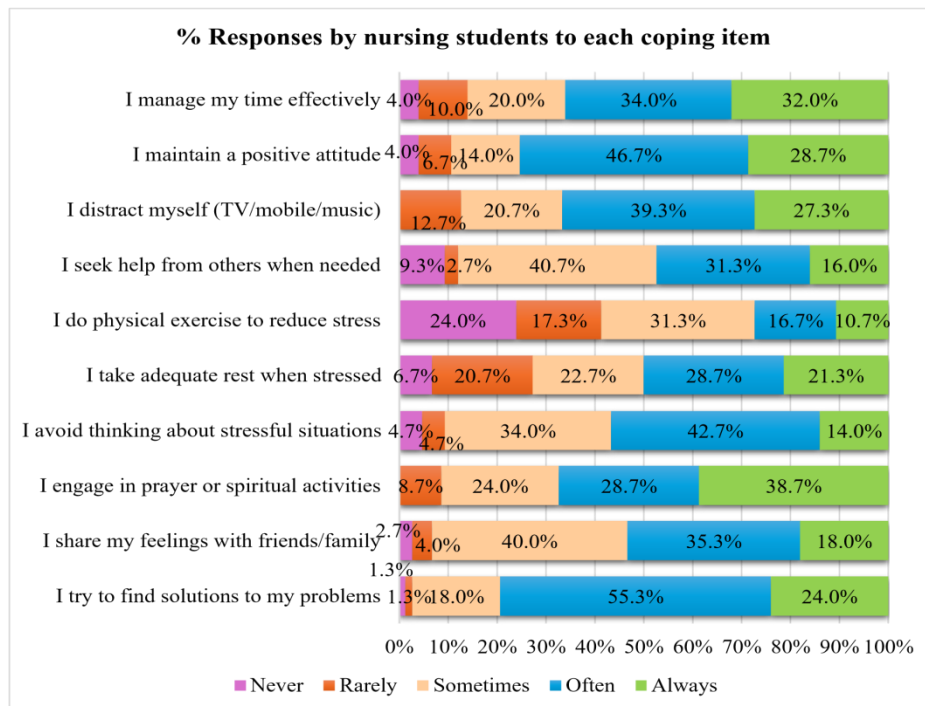
Figure 12 Percentage distribution of coping mechanism among nurses working in a tertiary care teaching hospital figure

Table 5: Coping item analysis

N=150

Coping item	Never		Rarely		Sometimes		Often		Always	
	f	%	f	%	f	%	f	%	f	%
I try to find solutions to my problems	2	1.3%	2	1.3%	27	18.0%	83	55.3%	36	24.0%
I share my feelings with friends/family	4	2.7%	6	4.0%	60	40.0%	53	35.3%	27	18.0%
I engage in prayer or spiritual activities	0	0.0%	13	8.7%	36	24.0%	43	28.7%	58	38.7%
I avoid thinking about stressful situations	7	4.7%	7	4.7%	51	34.0%	64	42.7%	21	14.0%
I take adequate rest when stressed	10	6.7%	31	20.7%	34	22.7%	43	28.7%	32	21.3%
I do physical exercise to reduce stress	36	24.0%	26	17.3%	47	31.3%	25	16.7%	16	10.7%
I seek help from others when needed	14	9.3%	4	2.7%	61	40.7%	47	31.3%	24	16.0%
I distract myself (TV/mobile/music)	0	0.0%	19	12.7%	31	20.7%	59	39.3%	41	27.3%
I maintain a positive attitude	6	4.0%	10	6.7%	21	14.0%	70	46.7%	43	28.7%

I manage my time effectively	6	4.0%	15	10.0%	30	20.0%	51	34.0%	48	32.0%
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Section IV

Analysis of data related to resilience among nurses working in a tertiary care teaching hospital

Table 6: Resilience among nurses working in a tertiary care teaching hospital

N=150

Resilience	Freq	%
Low	6	4.0%
Moderate	58	38.7%
High	86	57.3%

4% of the nurses had low resilience, 38.7% of them had moderate resilience and 57.3% of them had high resilience.

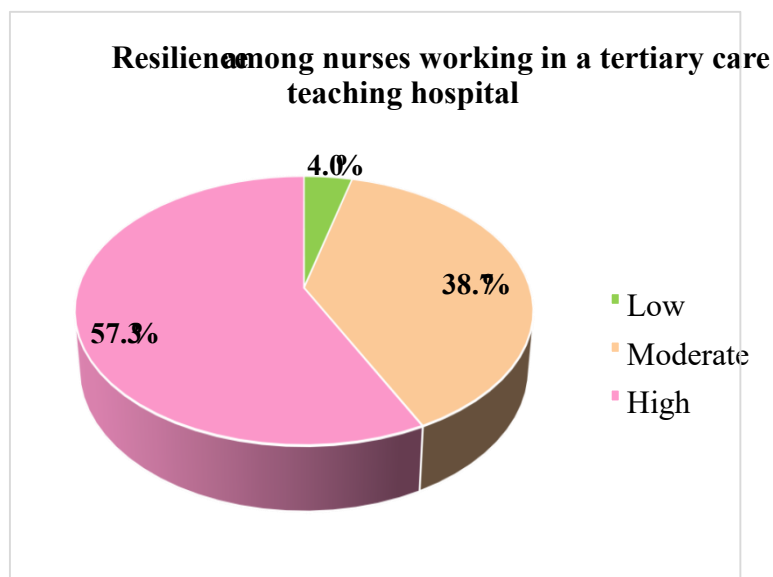


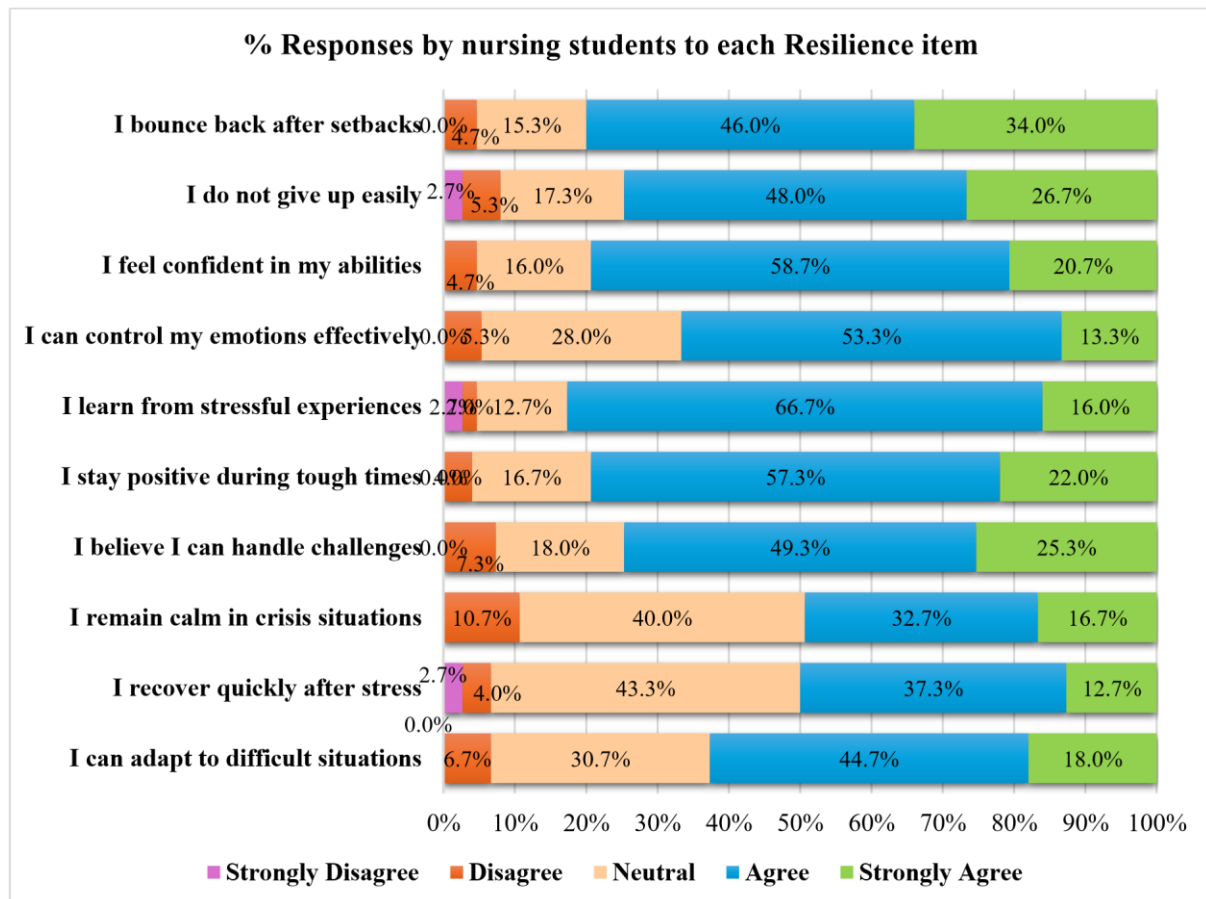
Figure 13 Percentage distribution of Resilience among nurses working in a tertiary care

teaching hospital.

Table 7: Resilience item analysis

N=150

Resilience item	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree	
	f	%	f	%	f	%	f	%	f	%
I can adapt to difficult situations	0	0.0%	10	6.7%	46	30.7%	67	44.7%	27	18.0%
I recover quickly after stress	4	2.7%	6	4.0%	65	43.3%	56	37.3%	19	12.7%
I remain calm in crisis situations	0	0.0%	16	10.7%	60	40.0%	49	32.7%	25	16.7%
I believe I can handle challenges	0	0.0%	11	7.3%	27	18.0%	74	49.3%	38	25.3%
I stay positive during tough times	0	0.0%	6	4.0%	25	16.7%	86	57.3%	33	22.0%
I learn from stressful experiences	4	2.7%	3	2.0%	19	12.7%	100	66.7%	24	16.0%
I can control my emotions effectively	0	0.0%	8	5.3%	42	28.0%	80	53.3%	20	13.3%
I feel confident in my abilities	0	0.0%	7	4.7%	24	16.0%	88	58.7%	31	20.7%
I do not give up easily	4	2.7%	8	5.3%	26	17.3%	72	48.0%	40	26.7%
I bounce back after setbacks	0	0.0%	7	4.7%	23	15.3%	69	46.0%	51	34.0%



Section V

Analysis of data related to the correlation between coping mechanism and resilience among nurses working in a tertiary care teaching hospital

Table 8: Correlation between coping mechanism and resilience among nurses working in a tertiary care teaching hospital

N=150

Pair	r	t	df	p-value
Coping X Resilience	0.64	10.15	148	0.000

Researcher used Pearson's correlation coefficient to study the correlation between coping mechanism and resilience among nurses working in a tertiary care teaching hospital. Pearson's correlation coefficient was found to be 0.64 which is positive (greater than 0), there is positive correlation between coping and resilience among nurses working in a tertiary care teaching hospital. The strength of this correlation was tested using t-test for the significance of correlation coefficient. T-value for this test was 10.15. Corresponding p-value was small (less than 0.05), the null hypothesis is rejected. There is strong positive correlation coefficient between coping and resilience among nurses working in a tertiary care teaching hospital. More the resilience better is the coping among nurses working in a tertiary care teaching hospital.

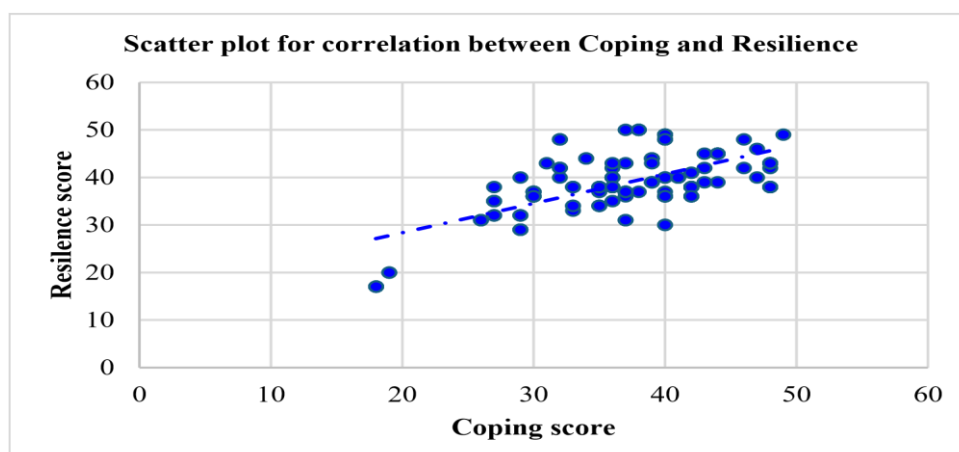


Figure 14 Correlation between Coping and Resilience

DISCUSSION

The study assessed stress, coping mechanisms, and resilience among nurses working in a tertiary care teaching hospital. Most nurses experienced high stress, mainly due to workload and workplace demands, while the majority demonstrated moderate to good coping abilities and high resilience. A strong positive correlation ($r = 0.64$) was found between coping mechanisms and resilience, indicating that nurses with greater resilience are better able to cope with occupational stress. These findings suggest that resilience-building strategies and organizational support can enhance coping skills, reduce stress, and improve nurses' overall well-being and work performance.

CONCLUSION

The findings of the study indicate that there is a strong and statistically significant positive correlation between coping mechanism and resilience among nurses. This suggests that nurses who possess higher levels of resilience are better able to cope with occupational stress and challenges in the workplace. Improving resilience can therefore play a crucial role in enhancing coping abilities, reducing stress levels, and promoting the overall mental health and professional effectiveness of nurses. Hence, strategies aimed at strengthening resilience should be encouraged in clinical settings.

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