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A CROSS SECTIONAL STUDY TO ASSESS THE STRESS AND COPING AMONG CRITICAL CARE NURSES IN SELECTED HOSPITAL OF AURANGABAD CITY

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ABSTRACT
Stress and coping are intertwined processes that influence how individuals respond to challenging situations. Stress can arise from various sources such as work pressures, relationship issues, health concerns, triggering emotional, physical, and cognitive reactions. Coping mechanisms are strategies people use to manage stress and reduce its negative effects. Critical care nurses play a pivotal role in the healthcare industry, providing essential care to patients in intensive care units (ICUs) and other critical care settings. Beyond technical skills, critical care nurses offer compassionate support to patients and their families, navigating the emotional challenges of intensive care. In other hand, critical care nurses face significant stress due to the demanding nature of their work and the high stakes involved in caring for critically ill patients. These healthcare professionals often deal with intense situations, such as life-threatening emergencies, complex medical conditions, and the emotional strain of supporting patients and their families through difficult times. The stressors can include long work hours, heavy workload, rapid decision-making, and exposure to suffering and death. Chronic stress can significantly impact their well-being, leading to burnout, decreased job satisfaction, and potentially compromising patient care. By assessing stress levels, healthcare institutions can identify early signs of burnout and intervene with appropriate support measures. This proactive approach not only helps in retaining experienced nurses but also ensures the delivery of high-quality patient care. Thus, the present study is to aim to assess the stress and coping among critical care nurses and association of stress with their demographic variables. The study was conducted in selected hospital of Aurangabad city. Non probability convenient sampling technique was used and obtained 90 critical care nurses. The study result shows that high level of stress was prevalent among critical care nurses 73.33%, 26.67% nurses experienced moderate stress. Level of coping was low among 85.56% nurses and 14.44% nurses had medium coping.

Keywords: Stress, Coping, Critical Care Nurses.

INTRODUCTION
Stress is an unavoidable part of life, often rising from various sources such as work, family, or health challenges. How individuals cope with stress greatly influences their well-being. Intensive care nurses face exceptional and extreme stressors due to the high-pressure environment of their work. They manage critically ill patients, making quick decisions under pressure while dealing with life-and-death situations daily.

Health care industries is one of the largest service providers to the public and the nurses are the major group of employees in health care organizations. Nurses need to have good working condition and must appreciate work place satisfaction so that they can able to take care of the patients well. Hence, nurses as an individual and health care organization need to pay the attention towards nurses' working life.[1]

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In the 1930's, the endocrinologist Hans Selye first used the term stress. Nowadays, we often use this term casually. How someone deal with stress depends on many factors. These factors lead to positive stress or may result negative stress. He is involved in adjusting and responding to the stress.[2]
The individual's handling stress depends on their level of control, self-esteem, a support from others. These factors can minimize the effect of stress on health and well-being. So, policy should focus on teaching coping skills, providing support, and educating employees about stress management.[3]

Need of the study
Stress is a common experience for critical care nurses, given the high stakes involved in caring for people health and lives. To understand how stress affects their ability to provide care, a study was conducted involving 253 nurses working in critical care units at Tehran University of Medical Sciences. The result shows that there is progressive correlation with professional quality of life and the variable like caring ability ($p<0.001$). This suggests that professional quality of life advances, patient's care giving abilities also improves.[4]
There has been growing focus on studying stress among health care professionals worldwide. A number of studies have been undertaken in other countries as well as in India, have looked into issues of stress among health care workers. These studies have shown that the healthcare profession can be very stressful[5].
Stress is a common part of our daily lives, but prolonged stress can lead to harmful changes in health. A descriptive study was conducted to identify out the prevalence rate of stress among Intensive Care Unit (ICU) staff including doctors and nurses in various hospitals in Pune. Investigator used the Depression Anxiety and Stress (DASS) rating scale as a study tool. The study found that overall, 52.43% of ICU staff experienced stress. Among ICU doctors, 36.58% experienced stress, while among nurses, it was higher at 68.29%. These result shows that stress is prevalent among ICU nurse. This study shed light on the issues of occupational stress among ICU staff, which is still a relatively new concept in India. Therefore, it is important to educate doctors and nurses about stress management.[6]
The health care professionals working in Intensive Care Unit (ICU) face a stressful workplace and it can result burnout syndrome. A study was aimed to find the stress and burnout syndrome among physicians, nursing staff, clinical druggists, respiratory therapist and physiotherapist working in ICU of hospitals in South India. Out of 204 health care professionals, 80% experience burnout, with 6% (12 doctors) and 69% (140 nurse). The study suggested that critical care fraternities and regulatory bodies should take action by creating plans and standards to address cause of stress, lessen burnout and improve job satisfaction.[7]
Occupational Burnout is frequently observed among nursing staff, especially in intensive care settings, where it can affect up to 80% of the nurses. The survey was carried out to determine incidence of burnout and relative factors associated among critical care nurses. The study was conducted in one of the largest Intensive Care Unit in western Gujarat, with 120 beds. Result showed that 47 (37.6%) participants experience high level of burnout. This indicated that burnout is significant problem among intensive care nurse. Providing advanced training and constraining work hours could benefit alleviate problem. Additionally, common physical symptoms may serve as primary warning signs of burnout.[8]
Occupational stress among nurses can arise from various factors, and research suggests that it can affects the quality of life and patient care. A study was conducted at Bhabha Atomic Research Centre Hospital to evaluate occupation stress. Occupational stress was assessed among 97 staff nurses. The findings revealed that a significant proportion, about 87.6% of nurses' experience stress. Among them, 51.5% experience mild stress, while 34% experience moderate stress. Therefore, the study recommended that prioritizing the exploration could be positive effects on the nurses and also on patient care. It improves the overall health care services.[9]

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Kakade S N et al in descriptive explorative study survey carried out to assess the job-related stress and coping strategies. The comprised 100 staff nurse working in Intensive Care Unit (ICU) area in Pune city. The study found that the 86% of the staff nurses in ICU were experiencing severe stress (Score ranging from 109-144) and 14% were experiencing moderate stress.[10]

A descriptive research study was done in Navi Mumbai, Maharashtra India to inspect the stress level among Intensive Care Nurses. The result revealed that severe stress was 42%, moderate stress was 34%, mild stress was 14%. Notably, the highest level of stress was associated with interaction with patient and their families (30%). Additionally, 22% of nurses reported experienced stress due to supervisory issues.[11]

A study was undertaken to explore the stress level and stress management strategies among staff nurses employed in various government hospital in South India. Out of 500 sample in study 400 were completed questionnaires. The findings indicated that 47.3% of the staff nurses had high level of stress in both major and minor cities selected hospitals. Moreover, the study revealed that staff nurses were only utilizing a limited number of coping techniques to manage their stress.[12]

Overall, the literature consistently portrays nursing occupation is stressful. A study was conducted to compare the stress level and job stressors within intensive care unit (ICU) and other wards of tertiary care hospital in North India. Study included 176 general ward staff and 109 ICU staffs. The study showed that ICU nurses experienced higher level of stress in the form of exhaustion, irritation and reduced self-confidence 11.9%, 11.9% and 0.9% respectively when it compared with staff nurses working in general wards. These finding provide valuable insight in to job related stress and its source. Suggesting the need for nurse manager to implement various stress management strategies to mitigate these stressors.[13]

Challenges like critical condition of patients and need for quick decision making in life threatening situations in Intensive Care Unit (ICU) put nurses in extreme stress. Sondhi et al investigated a quantitative research with cross sectional design to investigate coping strategies and factor associated with stress. The study involved ninety-six staff nurses from various ICU in selected hospital in New Delhi. The finding showed the highest coping strategies used by ICU nurses was positive reappraisal (51.57%), followed by accepting responsibilities (47.33) while escape-avoidance (35.70%) was the least used coping strategies.[14]

A research study was conducted by Amin, Amin et al, (2015) to find the perceived stress among Neonatal Intensive Care Unit (NICU) nurses in six cities of Gujarat and to find the association between the professional quality of life with stress. The study involved 129 nurses from nine NICUs. The study comprises three scales, a questionnaire on demographic variables perceived stress scale and Professional Quality of Life Scale. The study reveals that average perceived stress level among the nurses was 22.19(SD 7.17) on a scale from 3 to 39. About 19.4% of nurses reported high level compassion satisfaction, 23.3% reported high burnout and 23.3% reported high secondary traumatic stress. Majority of the nurses (70.5%) were experiencing moderate to high level of stress. It concludes that there is a correlation between professional quality of life with perceived stress.[15]

In 2018, Noha S et al, studied relationship between job stress and burnout syndrome among eighty-two staff nurses and health care technicians. Study included surgical emergency and intensive care units of critical care departments at Alexandria University hospital. The result showed that 84.15% of the participants experienced workload variation, 76.8% faced quantitative overload, 69.5% felt responsible for their lives, and 63.41% lacked perceived control. Despite this, 85.4% samples satisfied with their job. Most participants (80%) stated highest degree of emotional exhaustion, while less than one third experienced high depersonalization or low personal accomplishment. The study concluded that reducing intergroup conflicts, improving skill utilization and increasing job satisfaction are crucial to decreasing burnout syndrome among workers in critical care health departments.[16]

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In 2019, Saravanabavan L, Sivakumar M N and Hishma M done cross sectional survey among healthcare workers in different Intensive Care Unit (ICUs) of multidisciplinary tertiary care hospital in South India. 204 health care professionals included in the survey, includes 164 nursing staff, 21 physicians, 15 respiratory therapists, 2 physiotherapists and 2 pharmacologists. The result showed that 1.96%(n=4) of the participants never experienced stress, 30.88% of samples (n=25) fairly often experienced stress. The study concluded that the stress level observed were similar to those in western data and found association with stress level and job satisfaction ($p<0.05$). The study highlighted ICU environment is stressful not only for patients and their families but also for the health care workers.[17]
In 2019, Bai J Hepsi and Ravindran Vinitha identified the prevalence rate of stress among nurse. The study revealed that majority 87.6% of staff nurses were experienced stress, with 2.1% experiencing severe stress. Additionally, among the nurses experiencing stress, 92% reported moderate to severe stress. The results suggested that wide spread of work associated stress among nurses across the country and emphasizing the important of further exploration into the job stress and related factors.[18]
Alharbi H and Alshehry A (2019) carried out a cross sectional survey to identify the perceived stress and coping strategies among Intensive Care Unit (ICU) nurses in government tertiary hospitals at Saudi Arabia. The survey included the nurses working at cardiac, surgery and pediatric intensive care units. Perceived Stress Scale and the Brief COPE tool were used as research tools. 154 nurses provided complete answers. The 14 predictor variables were statistically significant calculated by using multiple regression model $p<0.001$ and it showed 19.6% of the sample variance in the perceived stress ($R2=0.270$; adjusted $R2=0.196$). The nurses perceived stress level was moderate. The association was found between patient care in ICU with the experience of stress. The findings suggested ways to create healthier work environments by reducing stress and improving coping strategies.[19]
Kaushik A et al (2021) explored in research article to find the impact of chronic job stress on physical and mental health of workers, particularly in India. The study also highlighted depression, anxiety and stress among participants and how these factors associated to workplace. Total 368 nurses included in the study working in critical care and other department at tertiary care hospitals. The result showed that 50.8% staff nurses had stress, anxiety level was 74%, and 70.8% had depression. Overall, 79.1% experienced at least one of these conditions. The demanding work conditions in both Intensive Care Unit (ICU) and non-ICU settings as well as in both private and government hospitals contributed extreme stress level, anxiety and depression among nurse.[20]
Saffari M, et al, (2021) conducted randomized control trial to find the effect of skill-based educational program on stress and anxiety. The study included 160 staff nurses working in critical care units. The result shows that control group did not showed significant difference in pre and posttest, whereas stress and anxiety were reduced after intervention in the intervention groups. The study suggested that training program focused on skill and knowledge could help improve the mental health and performance.[21]
Christopher Mathew and Christina Mathew (2023) conducted a research study to compare the mental wellbeing of nurses working in critical care units with working in less stressful areas like wards. The study included three large tertiary care hospitals in south India, covering 383 Intensive Care Unit nurses (ICU) and 220 ward nurses. Investigator examined the prevalence of post-traumatic stress disorder (PTDS), depression, and anxiety. The result showed that 29% of the ICU nurses were found to have symptoms PTSD, comparison to 15% of the ward nurses. The results were statistically significant ($p<0.05$). These findings can help hospital managers and nursing leaders improve the mental health and job satisfaction of ICU nurses who working in demanding conditions.[22]
Many studies and literatures appealed to identify the stress among critical care nurses deal with stress since they are constantly exposed to tough and stressful working conditions. Hence present study was cross sectional study to assess the stress and coping among critical care nurses in selected hospital of Aurangabad city. The aim of study is to assess the stress and coping among critical care nurses.

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Objectives of the study

1. To assess the stress and coping among critical care nurses.
2. To find association of selected demographic variables with stress and coping among critical care nurses.

The study approved from research and recognition committee as well as ethical committee. Ref. No. DYPV/EC/06. The study was carried out from September 2023 to December 2023. Approval was obtained from head of the institution/ hospital authorities during data collection. Consent was obtained from the participants and ensure about confidentiality.

MATERIALS AND METHODS

Research approach and design

The quantitative approach with cross sectional study was adopted to assess the stress and coping among critical care nurses.

Setting of the study

The settings for this study is selected hospitals of Aurangabad city.

Population and sample

The population under the investigation consists of registered nurses employed in Intensive Care Units working in hospitals of the city. In this study samples are nurses' who are working in critical care unit of selected hospital at Aurangabad city.

Sample Size

The study enrolled 90 critical care nurses in who fulfilled the study criteria.

Sampling technique

Non probability convenience sample technique is used to select the sample for the study who fulfills the inclusion criteria of the study. Initially the hospitals from Aurangabad city was selected and obtain the permission.

Sample Criteria

Study included nurses working in critical care unit more than 6 months of experience and excluded the nurses who are not willing to participate in the study.

Description of tool

The study involves two main instruments. Section A- Demographic items consist 9 items. Section B- Sheldon Cohen Perceived Stress Scale. It consists of 10 items and the scores extending from 0-13 considered low stress, moderate stress score ranging from 14-26 high stress would be is 27-40. Section C: Brief Resilience Coping Scale. It comprises the 4 items and low resilient coping would be 4 to 13 scores, medium resilient coping score ranging from 14 to 16 and high resilient score from 17 to 20.

Reliability

The questionnaire was validated and reliability was obtained by following the administrative approval from the hospital authority, the tool was administered to 20 critical care nurses with informed and written consent. The internal consistency was checked for selected tools by using the Cronbach's alpha reliability test. The obtained α value was 0.81 and found to be reliable.

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Procedure for data collection

A written formal approval was obtained from the hospital authorities to conduct the main study. The main study was conducted among 90 critical care nurses meeting the inclusion criteria of the study. The investigator was approached the Nursing Superintendent/ Nursing Director and scheduled the sessions according to the duty shifts. An informed and written consent was gained from the nurses and explained about the study aim and objectives. The assurance is given to study participants regarding the information given by them and confidentiality about the data. Tools were introduced and explained difficulties if any.

Data analysis

The data analysis was intended to encompass both descriptive and inferential statistical analysis. The analysis was done based on the study objectives.

- Demographic variables are analyzed with the descriptive statistics. The data is presented in frequency and percentage.
- Mean, median and SD were calculated to describe the stress and coping.
- Chi square test was applied to find the association with selected demographic variables.
- Study findings were presented by using the tables, graphs and pie diagrams.

RESULT

Description regarding demographic variables of critical care nurses in frequency with percentage.

Table 1: Description of critical care nurses according to their socio demographic data

N=90

Sr. No	Demographic Variable	Category	Frequency	Percentage
1	Age in Years	23-25 years	35	38.89
		26-30 years	16	17.78
		31-35 years	18	20.00
		35 and above	21	23.33
2	Gender	Male	35	38.89
		Female	55	61.11
		Other	0	0.00
3	Marital status	Married	51	56.67
		Unmarried	39	43.33
		Divorced	0	0.00
		Widow/ widower	0	0.00
4	No. of children	None	40	44.44
		1	21	23.33
		2	26	28.89
		3 & above	3	3.33
5	Type of family	Joint family	41	45.56
		Nuclear family	49	54.44

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		Extended family	0	0.00
6	Professional qualification	GNM	45	50.00
		B.B.Sc. Nursing	34	37.78
		P.B. B.Sc Nursing	8	8.89
		Post Graduate	3	3.33
7	Type of employment	Temporary/ contract	51	56.67
		Permanent	39	43.33
8	Years of experience	6 months to 1 year	23	25.56
		1-5 years	29	32.22
		6-10 year	18	20.00
		Above 10 years	20	22.22
9	Area of working	SICU	15	16.67
		MICU	12	13.33
		RICU	20	22.22
		CCU	12	13.33
		CVTS	16	17.78
		NICU/ PICU	15	16.67

The above table 1 shows that majority of samples 35(38.89%) belong to the age group of 23-25, 21(23.33%) belong to 35 & above, 18(20%) belongs to 31-35 and 16(17.78%) belongs to 26-30 years. Regarding gender, 55 (61.11%) were female and 35 (38.89%) were males. 51(56.67%) were married, 39(43.33%) were unmarried. Majority 40(40.44%) sample did not have children, 26 (28.89%) had two children, 21 (23.33%) had one child and 3 (3.33%) had three and above number of children. Regarding family type, 49 (54.44%) living in nuclear family, 41 (45.56%) sample living with joint family and none of the sample had extended family type. Regarding professional qualification, half of the sample 45 (50%) qualified with general nursing midwifery, 34 (37.78%) were qualified with Basic B.Sc Nursing, 8(8.89%) sample qualified with Post Basic B.Sc Nursing, 3(3.33%) samples were Postgraduates.
With regards to type of employment, majority 51(56.67%) were temporary/ contract based employees and 39(43.33%) were permanent employees.
Regarding year of experience in critical care units, 29(32.22%) samples had 1-5 years of experience, 23(25.56%) 6 months to 1 year of experience, 20(22.22%) above ten year of experience, 18(20%) had experience of 6-10 years.
With regards to working area in critical care units, majority 20(22.22%) sample were working in RICU units, 16(17.78%) sample working in CVTS care units, 15(16.67%) each samples were working in SICU and NICU/PICU units.

Analysis of data related to assess the stress level and coping among critical care nurses

Table 2: Description of stress among critical care nurses

N=90

Sr. No	Score	Level	Frequency	Percentage	Mean	SD
1.	0-13	Low	0	0	28.18	1.74

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	14-26	Moderate	24	26.67		
	27-40	High	66	73.33		

Table no 2 shows that it high level of stress was prevalent among critical care nurses 66(73.33%), 24(26.67%) samples experienced moderate stress and none of the critical care nurses has low stress.

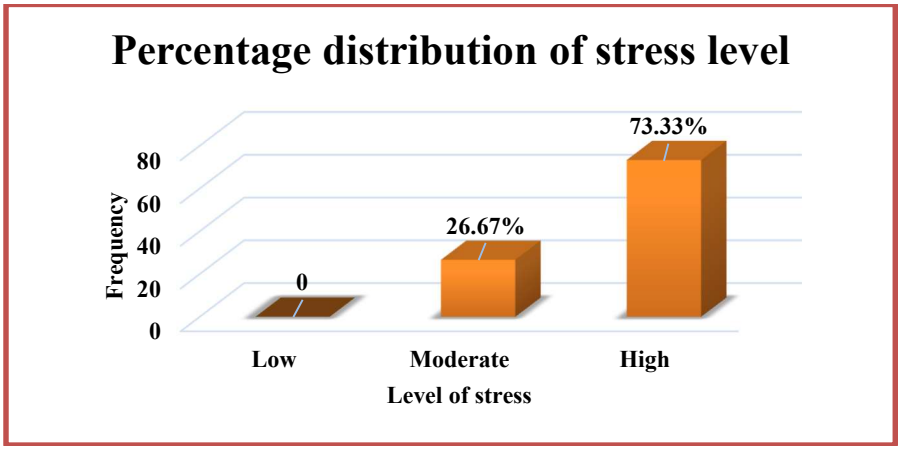

Figure No 1: Bar diagram showing percentage distribution of level of stress

Table 3: Description of level of coping among critical care nurses

N=90

Sr. No	Score	Level	Frequency	Percentage	Mean	SD
1.	4-13	Low	77	85.56	7.15	3.06
	14-16	Medium	13	14.44		
	17-20	High	0	0		

Table no 3 shows that majority 77(85.56%) nurses had low level of coping, 13(14.44%) sample had medium coping. There was none of the nurses had high coping level.

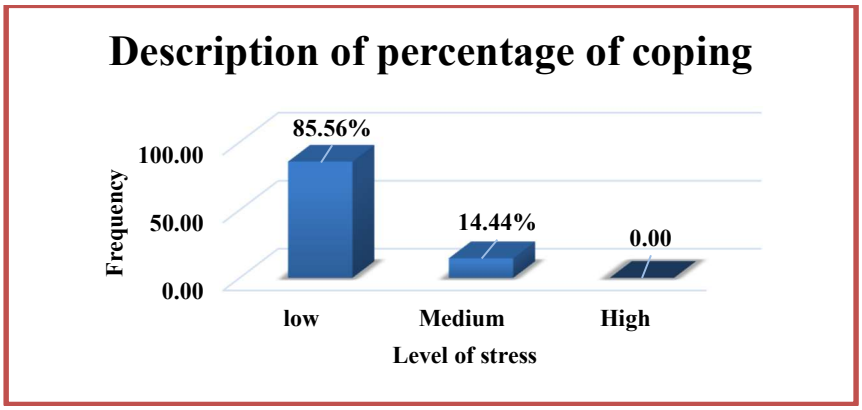

Figure No 2: Bar diagram showing frequency distribution of level of coping

Table no 4: Association between perceived stress level with demographic variables

N=90

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Sr. No	Demographic Variable	Level of Perceived stress			df	Chi square Value	p Value	Significance
		Low	Moderate	High				
1	**Age In Years**							
	23-25 years	0	9	26	3	1.246	0.742	Not Significant
	26-30 years	0	6	10				
	31-35 years	0	4	14				
	35 And Above years	0	5	16				
2	**Gender**							
	Male	0	6	29	1	2.656	0.103	Not Significant
	Female	0	18	37				
	Other	0	0	0				
3	**Marital Status**							
	Married	0	15	36	1	0.454	0.501	Not Significant
	Unmarried	0	9	30				
	Divorced	0	0	0				
	Widow/ Widower	0	0	0				
4	**Number of Children**							
	None	0	9	31	3	0.901	0.825	Not Significant
	1	0	7	14				
	2	0	7	19				
	3 & Above	0	1	2				
5	**Type of Family**							
	Joint Family	0	14	27	1	2.154	0.142	Not Significant
	Nuclear Family	0	10	39				
	Extended Family	0	0	0				
6	**Professional Qualification**							
	GNM	0	11	34	3	3.520	0.318	No Significant
	Basic B. Sc Nursing	0	10	24				
	P.B. B.Sc Nursing	0	1	7				
	Post Graduate	0	2	1				
	Ph.D. Nursing	0	0	0				

Sr. No	Demographic Variable	Level of Perceived stress			df	Chi square Value	p Value	Significance
		Low	Moderate	High				
7	**Type of Employment**							
	Temporary	0	16	35	1	1.330	0.248	Not Significant
	Permanent	0	8	31				

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8	**Year of Experience**							
	6 months to 1 Year	0	4	19	3	3.928	0.269	Not Significant
	1-5 Years	0	11	18				
	6-10 Year	0	3	15				
	Above 10 Years	0	6	14				
9	**Area of Working**							
	SICU	0	4	11	5	4.751	0.447	Not Significant
	MICU	0	3	9				
	RICU	0	7	13				
	CCU	0	4	8				
	CVTS	0	1	15				
	NICU/ PICU	0	5	10				
10	**Do you practice Yoga/meditation**							
	Yes	0	4	30	1	6.205	0.01	Significance
	No	0	20	36				

The table 4 describes that, association between level of perceived stress among critical care nurses with selected demographic variables. Chi square test was applied to calculate the association between the level of perceived stress and demographic variables and the value were observed with 5% level of significance.

The χ value of yoga/ meditation practice χ=6.20, 1 degree of freedom found association at $p<0.05$ level and there were no demographic variables found association with level of perceived stress.

Table no 5: Association between pretest coping level with demographic variables N=90

Sr. No	Demographic Variable	Level of coping			df	Chi square Value	p Value	Significance
		Low	Medium	High				
1	**Age In Years**							
	23-25 years	28	7	0	3	1.906	0.592	Not Significant
	26-30 years	15	1	0				
	31-35 years	16	2	0				
	35 And Above years	18	3	0				
2	**Gender**							
	Male	30	5	0	1	0.001	0.973	Not Significant
	Female	47	8	0				
	Other	0	0	0				
3	**Marital Status**							
	Married	44	7	0	1	0.049	0.824	Not Significant
	Unmarried	33	6	0				
	Divorced	0	0	0				

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	Widow/ Widower	0	0	0				
4	**Number of Children**							
	None	34	6	0	3	2.195	0.533	Not Significant
	1	17	4	0				
	2	24	2	0				
	3 & above	2	1	0				
5	**Type of Family**							
	Joint Family	34	7	0	1	0.421	0.516	Not Significant
	Nuclear Family	43	6	0				
	Extended Family	0	0	0				
6	**Professional qualification**							
	GNM	40	5	0	3	1.974	0.578	Not Significant
	Basic B. Sc Nursing	7	7	0				
	P.B. B.Sc Nursing	1	1	0				
	Post Graduate	0	0	0				
	Ph.D. Nursing	0	0	0				
7	**Type of employment**							
	Temporary	40	11	0	1	4.834	0.02	Significance
	Permanent	37	2	0				

Sr. No	**Demographic Variable**	**Level of coping**			**df**	**Chi square Value**	**p Value**	**Significance**
		Low	**Medium**	**High**				
8	**Year of experience**							
	6 months to 1 year	21	2	0	3	1.697	0.638	Not Significant
	1-5 year	23	6	0				
	6-10 year	16	2	0				
	Above 10 years year	17	3	0				
9	**Area of working**							
	SICU	13	2	0	5	8.407	0.135	Not Significant
	MICU	10	2	0				
	RICU	15	5	0				
	CCU	12	0	0				
	CVTS	16	0	0				
	NICU/ PICU	11	4					
10	**Do you practice Yoga/meditation**							
	Yes	32	2	0	1	3.124	0.07	Not

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	No	45	11	0				Significant

The table 5 describes that, association between coping level among critical care nurses with selected demographic variables. Chi square test was applied to compute the association between the level of coping and demographic variables and the value was observed with 5% significance level.
The chi value of type of employment χ=4.834 with 1 degree of freedom found association($p<0.05$) and there were no demographic variables found association with level of coping with selected demographic variables.

DISCUSSION

In present study results shows majority 66(73.33%) had high level of stress, 24(24.67%) sample moderate stress and none of the sample experienced low stress. Similarly, a systematic review was analyzed by Khatatbeh H et al (2022) and quotes the relationship between quality of life and burnout. Investigator recommended applied activities to minimize the burnout and improve critical care nurses' quality of life. The CINAHL, Medline, PubMed, Psychology and Behavioral Sciences Collection and Google Scholar were included to find the articles, it searched 21 studies from 2009-2021. The results obtained by these selected studies found that there is a significant relationship between burnout dimension and quality of life dimension among the nurses.[23]
There are few studies shows similar findings conducted by Alharbi H, Alshehry A (2019) and Adriano Friganoviü et al (2019) to highlight the stress and coping mechanism assumed by nurses working in critical care settings.
Cross sectional study conducted by Alharbi H and Alshehry A (2019) in government hospitals at Saudi Arabia among 154 Intensive Care Unit (ICU) nurses aimed to explore the perceived stress and coping behaviors and effect of coping mechanisms on stress. 87% ICU nurses reported moderate level of stress. It was found that cardiac ICU nurses were more stressed than surgical ICU nurses. (mean and SD 18.18±3.88 vs 6.17 ± 3.21, P=.025). The most common coping strategies among ICU nurses was religion and the using substances was the least common (mean scores 6.70±1.72 vs 2.22± 0.81).[19]
A literature review was done by Adriano Friganoviü et al, (2018) to discuss the stress in intensive care nurses and to find out the incidence of burnout syndrome. The review determines the associations between coping mechanisms and job satisfaction and burnout. 15 year published articles at scopus and pubmed. Out of 786 studies about Twenty-nine original research papers were discovered review process. Research articles indicated that it is important to have preventive activities in work place to reduce stress and burnout from happening.[24]
In concern to coping strategies, majority 77(85.56%) of experienced low level of coping, 13(14.44%) sample had medium coping. None of the sample had high coping level. Type of employment variable found significant association with coping among critical care nurses.
In similar study conducted by Sondhi S. (2019) nurses employed in critical care units at New Delhi. The study was to identify the coping strategies and factors associated with stress. The study result depicted that least used coping strategies among Intensive Care Unit(ICU) was escape-avoidance (35.70%) while, the most common positive reappraisal (51.57%). The working area of the nurses found significant association with coping strategies($p=0.001$).[14]
Marwa A, A. et al (2019) conducted cross sectional study among 228 critical care nurses from four Jordanian hospitals. The study results were similar to this study and highlight the stress and coping mechanisms. The result shows that critical care nurses had low to moderate compassion satisfaction with burnout and secondary stress syndrome.[26]

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Conclusion

The aim of the study to assess the stress and coping of critical care nurses using Sheldon Cohen Perceived Stress Scale and Brief Resilience Coping Scale. Finding of the study suggest that nurses have high to moderate level of stress and low level of coping. Yoga practice was found significant association with perceived stress level. Type of employment variable found significant association with level of coping among critical care nurses. Assessing stress among nurses is crucial for maintaining their well-being and ensuring high-quality patient care. Nurses face significant physical, emotional, and psychological demands in their roles, often leading to stress and burnout if not managed effectively. Regular assessment allows healthcare organizations to identify stressors, implement supportive interventions, and promote a healthy work environment. By addressing stress actively, nurses can experience improved job satisfaction, reduced turnover rates, and enhanced patient outcomes.

Implication of the study

Nursing Practice: -

Working in critical care unit is stressful conditions and affect the nursing care. It is imperative to create and focus more closely to the nurses' stress coping strategies adopted by them. The training can also help them to reducing stress and improving their ability to cope, it can help critical care nurses handle stress and deal with stressful situation better, ultimately leading to a less stressful daily life.

Nursing Education: -

India has seen a rise in nursing education institutions due to the growing demand for nurses both within the country and globally. To ensure that nurses are well-equipped for their roles, it is important that the nursing curriculum includes stress management Training Program. This program focuses on developing nurses' psychological aptitudes and personal skills.

Nursing Administration: -

The study facilitates the nursing administrative authorities to launch and carry out Stress management training program periodically in various public, private and corporate hospitals to develop coping among critical care unit nurses for the benefit. The study finding also suggest to organize counseling programs for nurses who moderate to high stress.

Nursing Research: -

The finding from the current study contribute valuable information to the nursing field. However, it is important to conduct more research on assessment of stress and coping strategies adopted by nurses This will strengthen the nursing profession as a whole.

Limitation.

The limitation of the study was;

1. Study is limited to only critical care nurses.
2. Limited to only selected city hospitals.

Recommendations.

The following recommendation is listed for further studies,

- The study can be done to assess the stress and coping among general nursing staffs.
- Research could be deemed in other settings of the hospital.

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