

A Study to Assess the Perceived Stress and Quality of Life among the ICU Staff Nurse in Selected Hospitals in Bagalkote

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Abstract

Original Research Article

Background of the Study: The intensive care unit (ICU) is a very stress full place to work because of strained relationships, a high shift turnover dis-organised work space,a constant need for attention, and a high volume of emergencies. The ICU nurses is a stressed and concerned about the families' constant fears about their patients. the effects of being in a stress full setting. The high stress atmosphere in ICU has an a impact on their quality of life among nurses. Because care for severely ill patients involves both emotional and physical demands, these nurses frequently endure compassion fatigiae, burnout, and secondary traumatic stress

Objectives of the Study:

1. To assess the perceived stress among staff nurses working in ICU
2. To assess the quality of life among staff nurses working in ICU
3. To find out the co-relation between perceived stress and quality of life among the staff nurses working in ICU
4. To find out the association between level of stress and quality of life among staff nurses working in ICU with a selected socio demographic variable

Methodology: The research design selected for this study was non-experimental descriptive research design. the sample size comprises of 100 ICU staff nurse working in BVVS H S K Hospital Research center Bagalkote, Kuntoji Multi Speciality Hospital Navangar Bagalkote. The samplimg technique adopted for this study was purposive sampling technique. In the present study the data was collected by self-structured questionnaires for socio demopgraphic variables, perceived stress scale (PSS-14) and quality of life scale (QOL) was used to assess the perceived stress among ICU staff nurses. The data analysis done by using descriptive and inferential statistical in terms of mean, frequency, distribution, percentage and speramans correlation coefficient. **Conclusion:** According to this study, majority of nurses who work in ICUs, deal with moderate levels of stress, which has a negative effect on their quality of life. Hence, It's important concern to adopt different stress management strategies and programs to reduce stress and improve the quality of life among ICU staff nurses.

Keywords: Assess, quality of life, Perceived stress, Interventional package, ICU.

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INTRODUCTION

Intensive care nurses are routinely exposed to a multitude of stressors, particularly in the intensive care unit (ICU). Their role involves providing advanced care to critically ill patients while navigating various work-related challenges. The effective management of stress and the adoption of suitable coping strategies are crucial for improving both the well-being of nurses and the quality of patient care.

Stress: stress is state of worry or mental tension caused by a difficult situation. stress is natural human response that prompts us to address challenges and threats in our lives. everyone experiences stress to some degree.

The concept of quality of life is multidimensional encompassing, physical, psychological, social, and environmental domains.[1]

The nursing profession is believed to be one of the highly stressful occupations worldwide.¹ Nurses play a key role and encompass the largest workforce in any health care institution. Further, they act as direct caregivers who serve a hospital twenty-four hours a day, seven days a week, which gives nurses a unique perspective on both patient care and hospital operations.² Nurses work long hours in hospitals, and the job is physically challenging. In addition, nurses deal with human suffering daily, and need a high level of vigilance to assure patient safety in an environment that is complex. Several studies have shown that nurses often face multiple sources for increased work-related stress, including constant noise, interpersonal conflicts with other healthcare professionals, workload demands, role conflicts, dealing with death and dying, lack of resources, lack of support from co-workers and supervisors, patient aggressiveness or violence and increasing patient loads [2].

NEED FOR STUDY

stress and quality of ICU nurses Intensive care units (ICUs) are high-stress environments, particularly for nurses, who face numerous stressors that can negatively impact their well-being. This study aimed to examine stress levels and stressors among ICU nurses, investigate their stress coping strategies, and explore the primary stressors in this demanding work environment. [3] According to global statistical data Depending on the location, critical care nurses in Australia work approximately 31.7 hours a week. In South Australia critical care nurses are recorded to work approximately 28.2 hours a week. While in the Northern Territory critical care nurses have been documented to work 31.7 hours a week. [4]. According to the national statistical data Critical care nurses (CCN) experience a higher level of stress and burnout than nurses in other specialties. About 50% of CCNs are mildly stressed and almost 20% are moderately stressed. Prolonged periods of stress can lead to burnout, which has been shown to have deleterious effects on quality and patient safety. The purpose of this study is to determine the prevalence of burnout among a national sample of CCNs and the association with environmental factors. A national survey of critical care nurses working in the United States was implemented using an exploratory descriptive design. The anonymous survey was developed iteratively according to best practices of survey design. The survey included the Perceived Stress Scale (PSS) and the Copenhagen Burnout Inventory (CBI) Tool. Pre and pilot testing were conducted with critical care nurse specialists and the survey was revised based on their feedback. An anonymous link was distributed to respondents using convenience sampling through social media and further disseminated via snowball sampling. Two hundred and seventy nurses responded to the survey. The mean PSS score in the study population was 18.5 (SD = 6.4), indicating moderate stress. [5] According to locally statistical In the Intensive Care Unit (ICU), nurses often experience high levels of stress, which can negatively

impact their quality of life and patient care. Studies have shown that a significant percentage of ICU nurses report moderate to high levels of stress, with some experiencing symptoms of burnout. This stress is often linked to factors like heavy workload, limited resources, and the emotional toll of caring for critically ill patients. Şanlıtürk, in 2021, found that 20% of ICU nurses experienced high levels of stress, while 63% reported moderate stress levels. [6] The primary causes were heavy workload and limited resources, which are consistent with this study's findings [6] The overall prevalence of stress among ICU staff (doctors and nurses) was 52.43%. Prevalence of stress among ICU doctors was 36.58% and nurses was 68.29.[7] The incident rate of various issues among ICU nurses includes high levels of burnout (around 44%), PTSD symptoms (around 22%), and a significant prevalence of pain (72.2%). Additionally, critical incidents, such as medication errors and resource management issues, occur at a rate of 1.7 per 100 patient admissions. [8]

REVIEW OF LITREATURE

A descriptive co-relational study design was conducted on Perceived stress levels and professional quality of life aspects among nurses during COVID-19 pandemic in Saudi Arabia the study used a convenience sampling technique with a sample of 212 participants. Data was collected by Participants' socio-demographic data included age, gender, marital status, education level, years of experience, and the participant's area of work. Study result shows that 212 completed questionnaires were received. As can be seen from, approximately 41 % of the study sample who responded to the survey were males (41 % [n = 87]), while 59 % of them were females. In addition, half of the study participants (50 % [n = 106]) were aged 31 years or older, compared to 50.0 % who were aged below 30 years. It is evident from this table that 50 % of the study participants were single, 33.0 % of them were married, and 13.7 % were either divorced or widowed. Furthermore, 75.0 % of the study participants had attained a university degree, 9.0 % had obtained a diploma level of education, and 16 % had a master's degree. Study concluded that the study concludes that nurses experienced a high level of stress and poor quality of life during the COVID-19 pandemic. Therefore, it is necessary to emphasize the importance of paying attention to the mental health of health professionals, especially during this time. Urgent and appropriate support is needed for all health workers worldwide who are working hard to control the outbreak of COVID-19, as well as to establish early strategies aimed at preventing and treating indirect trauma. This preventive approach is particularly important in order to avoid an increase in mental health problems among professionals at all levels. In addition, programs for stress reduction, emotional regulation, and cultivation of compassion based on full attention need to be established for professionals affected by this compassion fatigue syndrome.[9]

METHODOLOGY

Research Approach: A Quantitative research design

Research Design: Descriptive research study

Research Variable:

the study variables for the present study are assessment of ICU staff nurses regarding perceived stress and quality of life among ICU staff nurses

Socio-demographic Variables:

in this study demographic variables refers to Age, Gender, Education, Marital status, Residence, Number of childrens, Working experience in ICU, Number of night shift in a month, Family monthly income.

Sample:

sample consist subjects of units that comprises the ICU staff nurse who are working in the BVVS H S K Hospital and Research Center navanagar, bagalkote, Kuntoji Multi Speciality Hospital Navangar Bagalkote

Sample size:

Total sample size for the present study was 100 ICU staff nurse who are working in BVVS H S K Hospital and Research Center Navanagar bagalkote, Kuntoji Multi Speciality Hospital Navangar Bagalkote

Sampling technique:

A purposive sampling technique was adopted to select the sample for the present study.

Inclusive criteria: The study will include

- Registered staff nurses who are working in ICU
- Staff nurses who are interested to participate in research study
- Both male and female nurses are working in ICU

Table-01: Frequency and percentage distribution score among ICU staff nurses

Perceived Stress Score			
Descriptions	scores	frequency	percentile
Low	0-18	0	0%
Moderate	19-37	25	25%
High	38-56	75	75%

In this present study shows that majority 75 (75%) of staff nurses were having high level of perceived stress, followed by 0 (0%) of staff nurses were having

Exclusive Criteria:

The study will exclude

- Nurses who are having physical or psychological problems
- ICU staff nurse unavailable during data collection

ETHICAL CONSIDERATION

- Permission was taken from the principal of shri BVVS Sharadamba institute of nursing sciences vidyagiri bagalkote,
- Permission was obtained from medical superintendent BVVS H S K hospital and research center bagalkote, Kuntoji Multi Speciality Hospital Navangar Bagalkot
- inform consent was taken from the subjects

Data collection method:

The data was collected by using self-report method. Data collection instruments were administered to the study the participants and asked to give responses to items.

RESULTS

PART-I: SOCIO-DEMOGRAPHIC VARIABLES

The first part of the tool consists of 09 items for obtaining information about the selected background factors such as Age, Gender, Education, Marital status, Number of childrens, working experience in ICU, Number of night shift in a month, Family monthly income.

PART-II: PERCEIVED STRESS SCALE (PSS-14)

Perceived stress scale (PSS-14) was designed to assess the perceived stress. It asks about feelings and thoughts during a last month. Which was comprehensively scored as a level of perceived stress. items 4,5,6,7,9,10, and 13. are scored in the reverse direction total scores range from 1 to 56

low level of perceived stress, 25 (25%) of staff nurses having moderate level of perceived stress

Table-02 Assessment of mean, standard deviation, median and range

Observation	mean	sd	median	range
PSS-14	40.47	4.977	41	30-50

Table-02:

Depicts that mean and SD score perceived stress among ICU staff nurses mean was 40.47 with SD 4.97636858 Median was 41 and Range was about 30-50

PART- III: QUALITY OF LIFE

Quality of life (QOL-5) scale was designed to assess the quality of life. It asks about your experiences as a nurse and a nursing work during a last month which

was comprehensively scored as a level of compassion satisfaction, burnout and secondary traumatic stress.

Score range from 10-50 are presented in each above component.

Table-03 Frequency and percentage distribution Domains of professional quality of life among ICU staff nurse

Domain	Compassion satisfaction		burnout		STS	
Description	frequency	percentage	frequency	percentage	frequency	percentage
low	30	30%	1	1%	20	20%
moderate	70	70%	99	99%	80	80%
high	0	0%	0	0%	0	0%

Table-04: Assessment of Mean, Standard deviation, Range of professional quality of life

Professional quality of life (ProQOL)			
	mean	SD	Range
CS	24.27	3.11	18-27
BO	26.09	1.70	17-29
STS	24.66	2.00	19-27

CS: Compassion Satisfaction, BO: Burnout, STS: secondary traumatic stress, SD: Standard deviation

Table-04:

Describe those domains of professional quality of life results shown that the mean and SD and range of compassion satisfaction was 24.27 and 3.11 and 18-27

respectively. followed by burnout result was 26.09 and 1.70 and 17-29 respectively, secondary traumatic stress result was 24.66 and 2.00 and 19-27

Table-05: Association between Perceived Stress Scale-14 and social demographic variable

Sl. No	sociodemographic variables	Df	χ^2 value	p value	interpretation
1	Age	3	1.27	0.735	NS
	21-30				
	31-40				
2	Gender	1	0.33	0.563	NS
	Male				
	Female				
3	Education	3	1.41	0.703	NS
	GNM				
	UG/others				
4	marital status	1	0.14	0.708	NS
	married				
	Unmarried				
5	residence	2	0.73	0.694	NS
	rural				
	urban/semi urban				
6	No. of children	3	1.58	0.663	NS
	none				
	1-2				
	>2				
7	work experience in NICU	2	1.779	0.408	NS
	0-5 years				
	>5 years				
8	No. of night shifts in month	2	0.84	0.887	NS
	≤ 10				
	>10				
9	family monthly income	2	1.354	0.509	NS
	≤ 20,000/-				
	> 20,000/-				

Df: Degree of freedom * Significant at P<0.05, NS: Not significant

In the present study shown that the socio demographic variables like number of night shifts in

month ($\chi^2 = 0.84$) and family monthly income ($\chi^2 = 1.354$) had shown Non-significant association with

perceived stress (PSS-14) among ICU staff nurses. The other socio demographic variables such as age($\chi^2=1.27$), gender($\chi^2=0.33$), education($\chi^2=1.41$), marital status($\chi^2=0.14$), residence($\chi^2=0.73$), number of children($\chi^2=1.58$) and work experience in

ICU($\chi^2=1.779$) did not show statistically significant association with perceived stress (PSS-14).

Association between Professional Quality Of Life-5

Sl. No	Sociodemographic variables	Compassion Satisfaction			Burnout			Secondary traumatic stress			Interpretation		
		Df	χ^2 value	p value	interpretation	Df	χ^2 value	p value	interpretation	Df	χ^2 value	p value	
1	age	3	3.2	0.362	NS	3	1.37	0.635	NS	3	0.45	0.929	NS
	21-30												
	31-40												
2	Gender	1	2.91	0.088	NS	1	0.13	0.56	NS	1	0.02	0.879	NS
	Male												
	Female												
3	Education	3	5.65	0.13	NS	3	1.71	0.703	NS	3	1.04	0.792	NS
	GNM												
	UG/others												
4	marital status	1	0.64	0.422	NS	1	0.18	0.708	NS	1	0.61	0.434	NS
	married												
	Unmarried												
5	residence	2	0.24	0.888	NS	2	0.63	0.594	NS	2	0.65	0.708	NS
	rural												
	urban/semi urban												
6	No. of children	3	4.81	0.186	NS	3	1.88	0.663	NS	3	14.34	0.002*	S
	none												
	1-2												
7	work experience in ICU	2	8.73	0.013*	S	2	1.879	0.608	NS	2	2.43	0.29	NS
	0-5 years												
	>5 years												
8	No. of night shifts in month	2	2.24	0.326	NS	2	0.89	0.987	NS	2	2.03	0.363	NS
	≤ 10												
	>10												
9	family monthly income	2	3	0.223	NS	2	1.354	0.509	NS	2	9.71	0.008*	S

In the current study shown that the socio demographic variable work experience in ICU ($\chi^2 = 8.73$) had shown significant association with compassion satisfaction among ICU staff nurses.

The other socio demographic variables such as age, gender, education, marital status residence, number of children($\chi^2=14.34$) show statistically significant with secondary traumatic stress, number of night shifts in month and family monthly income ($\chi^2=9.71$) had shown statistically significant association with secondary traumatic stress. Followed by none of sociodemographic variables had shown the statistically significant association with compassion satisfaction and secondary traumatic stress.

DISCUSSION

The findings of the present study discussed in light of previous scientific studies in this chapter and discussion regarding findings of the presented in

accordance with the objectives of the study and hypothesis. The current study aims at evaluating the evaluate the perceived stress and quality of life among ICU staff Nurse at selected Hospitals of Bagalkote.

Findings of the present study shows that level of perceived stress score reveals that out of 100 ICU staff nurse moderate percentage (25%) and high (75%) and 0% are low perceived stress. Respectively the quality-of-life score reveals that out of 100 ICU staff nurse.

Similar study was conducted by Sujatha R. Kannappan (2021), to assess the perceived stress among nurses. It was reported that 22 (33.8%) nurses experienced a low level of stress, 40 (61.5%) had moderate stress, and 3 (4.6%) had high stress, mean \pm SD of perceived stress among staff nurses was 15.89 ± 7.065 .

The study results were found similar with study conducted by Astri Eka Wulandar (2018), to assess the

professional quality of life among nurses. It was reported that in ICU

The study results were supported with study, conducted by Jacintha Veigas, (2021), to assess the association between perceived stress and selected sociodemographic variable, which had shown there was significant association found between the frequency of night duty $\chi^2 = 8.531$ and perceived stress.

LIMITATIONS

The study limited to sample of 100 ICU staff nurse were working in hospitals of Bagalkote district were assess the perceived stress and quality of life among the ICU staff nurse BVVS, H S K Hospital and Research Center Navanagar, Bagalkote

CONCLUSION

The main focus of this study was to assess the perceived stress and quality of life among the ICU staff nurse in BVVS, H S K Hospital and Research Center Navanagar, Bagalkote.

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