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A descriptive study to assess the levels of stress among the staff nurses working in ICUs and General wards in selected Hospital, Guwahati, Assam

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Abstract
Stress is an emotional and physical strain caused by our response to pressure from the outside world. Stress can be caused by both good and bad experience [1].

Objectives of the study were to assess the level of stress among the nurses working in ICUs and general wards and to find out association between the levels of stress among the nurses working in ICUs and general wards with selected demographic variables.

A descriptive research design and Non probability convenient sampling technique was used. Study was undertaken on 100 staff nurses working in ICUs and general wards in selected hospitals of Guwahati, Assam. The nurses were selected based on their inclusive criteria. The Level of stress was checked using Perceived Stress Scale.

The study shows that among all the staff nurses, 7% nurses have low level of stress, 76% nurses have moderate level of stress and 19% nurses have high level of stress.

Keywords: Stress, perceived stress scale, staff nurses

Introduction
It's not the stress that kills us; it is our reaction to it."

-Hans Selye.

According to WHO (2023), stress can be defined as a state of worry or mental tension cause by a difficult situation. Stress is a natural human response that prompts us to address challenges and threats in our lives [1].

American Psychological Association (2021) stated that stress involves changes affecting nearly every system of the body, influencing how people feel and behave. By causing mind-body changes, stress contributes directly to psychological and physiological disorder, reducing quality of life [1].

Working in a nursing field requires dealing with very demanding situations. At the work place, they meet with pain, death, overload, handling critical patients, long shifts; lack of employees, pressure of responsibilities, all these aspects make the nursing profession one of the most stressful spheres. Further increase in stress and inability to cope with it leads to declining in job satisfaction, absenteeism, turnover intention, burnout and decrease in patient care outcome. Stress can among nurses can also leads to many physiological and psychological changes like depression, anxiety, fatigue, tension headache.

As per DASS (Depression Anxiety Stress Scale) 2023, the incidence of level of stress among ICU nurses was 68.29% and the overall stress level among staff nurses in 2022 was 42% of nurse's experienced severe stress; which was increased from 36.8% in 2018.

Materials and Methods
- **Research Approach:** The research approach selected for the present study was Quantitative approach.
- **Research Design:** Descriptive research design was used

Research Settings
Due to the feasibility of the study and availability of the sample, the study was conducted in selected hospitals of Guwahati, Assam. The study was conducted in NEMCARE Super Speciality Hospital, Sanjevani Hospital, North Guwahati Multi-Speciality Hospital and Tolaram Bafna Civil Hospital, Guwahati, Assam.

- **Population:** In this study, the population refers the staff nurses working in selected hospitals, Guwahati, Assam
- **Target Population:** In this study, the target population were the staff nurses working in ICUs and general wards.
- **Accessible Population:** In this study, the accessible population was the nurses working in MICU, SISU, CICU, Neuro-ICU and Male Medical, Male Surgical, Female Medical and Female Surgical wards, who were available at the time of data collection in selected hospitals, Guwahati, Assam.
- **Sample Size:** The sample size for the study was 100 samples consisting of 50 nurses working in ICUs and 50 nurses from general wards.
- **Sampling Technique:** Sampling technique for the

study was Non-probability: Convenience sampling technique.

Sampling criteria
Inclusive criteria
- Nurses working in NEMCARE Super Speciality Hospital, SanjevaniHospital, North Guwahati Multi-Speciality Hospital and Tolaram Bafna Civil Hospital, Guwahati.
- Nurses working in ICUs (MICU, SICU, CICU and Neuro-ICU) and General wards (Male medical, Male surgical, Female medical and Female Surgical wards).

Exclusive Criteria
- Nurses working in various hospitals outside Guwahati.
- Nurses who were not present during the time of data collection.

Hypotheses
- **H0:** there is no significant association between levels of stress and selected demographic variable.
- **H1:** there is significant association between levels of stress and selected demographic variable.

Results and discussion

Table 1: Frequency and percentage distribution of the staff nurses according to the level of stress.

Sl. No.	Level of stress	Frequency (f)	Percentage (%)
1.	Low level	7	7%
2.	Moderate level	76	76%
3.	High level	19	19%
	Total	100	100%

The table 1 depicts that among all the staff nurses 7(7%) nurses have low level of stress, 76(76%) nurses have moderate level of stress and 19(19%) nurses have high level of stress.

The level of stress among the staff nurses with the selected demographic variables had shown statistically significant association with age ($X2 = 14.23133$, d.f = 6, P value= 0.027156), qualification ($X2 = 20.9052$, d.f = 6, P value= 0.001908), and years of experience ($X2 = 20.42792$, d.f = 6, P value = 0.002323).

While the level of stress among the staff nurses with the selected demographic variables had shown statistically non-significant association with gender ($X2= 1.509404$, d.f = 2, P value= 0.824974), area of posting ($X2= 13.50486$, d.f = 14, P value= 0.487212), Income per month ($X2= 37.76234116$, d.f = 6, P value= 1.250), marital status ($X2 = 10.969499$, d.f = 6, P value= 0.20343375), any training obtained on stress management program ($X2= 1.463964$, d.f = 2, P value= 0.480955).

Since, there is association with the level of stress among the staff nurses with the selected demographic (age, qualification and years of experience). So, H1 is accepted

The study shows that among all the staff nurses 7(7%) nurses have low level of stress, 76(76%) nurses have moderate level of stress and 19(19%) nurses have high level of stress.

This study was supported by the Sandhu Manreet and Sarla Singh Gurmeet (2022) [2]: A descriptive study was conducted to assess the level of stress among nurses working in selected hospitals of Ferozepur, district Punjab. A total number of 100 nurses were taken as a sample of study and convenient sampling technique was adopted to collect the data. A Perceived Stress Scale was used for data collection. The result depicted that 22% of the working nurses have the no stress, 24% of them have mild level of stress, 12% suffer from moderate levels of stress and 42% nurses have severe stress. Among them 30% of the nurses were in the age group of 20-30 years, 50% of the age group between 30-40 years and 20% were above 40 years of age. 40% of nurses were GNM qualified and 60% of them possessed a degree of BSc. Nursing. 38% of the nurses considered in the study were married and 62% of them were unmarried. 48% nurses had a work experienced between 10-20 years and 52% had an experience between 20-40 years.2

The level of association was found statistically significant at the level of significance 0.05 between the level of stress among the staff nurses working in ICUs and General wards with demographic variables, i.e, age, qualification and years of experience. The research hypothesis was accepted and null hypothesis was been rejected.

This study was supported by Jaywant Manda, Tukaram Zagade, Patil Supriya *et al*. (2022) [3]: A comparative study was conducted to assess the level of stress among the nurses working in different working area of Krishna Hospital and Medical Research Centre, Karad. A total number of 300 registered nurses was taken. Anon-probability convenience sampling technique was adopted and Modified expanded nursing stress scale (MENSS) was used to collect the data. The results showed that *P*<0.05 current working area and years of experience are statistically significant.3

Conclusion
Stress is a natural response to internal or external stressors that can affect people's behavior and feelings. This study highlights significant stress levels among nurses working in ICUs and general wards, emphasizing the need for hospital administrations to address workplace stressors. Identifying stress patterns and their associations with demographic factors can lead to better policies, improved nurse well-being, and ultimately, better patient care. The study shows that among all the staff nurses 7% nurses have low level of stress, 76% nurses have moderate level of stress and 19% nurses have high level of stress. This study indicates the Mean score 21.83 and SD 4.80752. The level of association of stress level among the staff nurses working in ICUs and general wards with demographic variables was found statistically significant & the research hypothesis was accepted and the null hypothesis was been rejected.

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