



A COMPARATIVE STUDY OF SLEEP QUALITY AND PERCEIVED STRESS AMONG NURSING OFFICERS WORKING IN DIFFERENT CRITICAL CARE UNITS

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ABSTRACT

Background: Nursing officers working in critical care units are exposed to high workloads, rotating shifts, emotional stress, and demanding clinical responsibilities that may adversely affect sleep quality and increase perceived stress levels. **Aim:** To compare sleep quality and perceived stress among nursing officers working in different critical care units. **Methods:** A quantitative comparative descriptive research design was adopted among 120 nursing officers working in Intensive Care Unit (ICU), Coronary Care Unit (CCU), Emergency Intensive Care Unit, and Neonatal Intensive Care Unit (NICU) in selected hospitals. Participants were selected using purposive sampling. Data were collected using the Pittsburgh Sleep Quality Index (PSQI) and the Perceived Stress Scale (PSS). Descriptive and inferential statistics were used for data analysis. **Results:** The findings revealed that 62.5% of nursing officers had poor sleep quality, while 58.3% experienced moderate levels of perceived stress. Significant differences were observed in sleep quality and stress levels among nursing officers working in different critical care units ($p < 0.05$). ICU and Emergency ICU nurses reported higher stress and poorer sleep quality compared with nurses working in NICU and CCU. **Conclusion:** Nursing officers working in critical care settings experience substantial sleep disturbances and perceived stress. Hospital administrators should implement stress management programs, adequate staffing, and sleep hygiene interventions to improve nurses' well-being and quality of patient care.

Key words: Comparative study, Sleep Quality, Perceived Stress, Nursing Officers, Critical Care Units, Intensive Care Unit, Occupational Stress.

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INTRODUCTION

Critical care units are specialized hospital areas where patients require continuous monitoring and advanced medical interventions. Nursing officers working in these units encounter high patient acuity, emergency situations, shift duties, and psychological demands that may negatively influence their sleep quality and stress levels. Poor sleep quality and elevated stress can impair clinical performance, decision-making abilities, and overall health. Therefore, assessing and comparing sleep quality and perceived stress among nursing officers working in different critical care units is essential for

developing strategies that promote workforce well-being and patient safety.

Significance of the Study

Sleep quality and stress are important determinants of nurses' physical and mental health. Persistent stress and sleep deprivation may contribute to burnout, absenteeism, reduced job satisfaction, and medical errors. Findings from this study will help hospital administrators identify vulnerable groups of nursing officers and formulate evidence-based interventions to improve workplace conditions, enhance professional



performance, and ensure quality patient care in critical care settings.

Aim of the Study

To compare sleep quality and perceived stress among nursing officers working in different critical care units of selected hospitals.

Objectives

1. To assess the quality of sleep among nursing officers working in different critical care units.
2. To assess the perceived stress among nursing officers working in different critical care units.
3. To compare sleep quality among nursing officers across various critical care units.
4. To compare perceived stress among nursing officers across various critical care units.
5. To determine the association between sleep quality and selected demographic variables.
6. To determine the association between perceived stress and selected demographic variables.

Hypotheses

H1: There is a significant difference in sleep quality among nursing officers working in different critical care units.

H2: There is a significant difference in perceived stress among nursing officers working in different critical care units.

H3: There is a significant association between sleep quality and selected demographic variables.

H4: There is a significant association between perceived stress and selected demographic variables.

Assumptions

1. Nursing officers working in critical care units experience varying levels of stress.
2. Sleep quality differs according to the nature of work and patient acuity in different critical care units.
3. Work-related stress influences sleep quality among nursing officers.
4. Participants will provide honest responses regarding their sleep patterns and stress levels.

RESEARCH METHODOLOGY

A Quantitative research approach used for this study and Comparative descriptive research design. Selected tertiary care hospitals for all nursing officers working in critical care units. Purposive sampling technique was adapted in this study. 60 nursing officers working in ICU, CCU, NICU, and Emergency ICU.

Research Variables

- Sleep Quality
- Perceived Stress

Demographic Variables

- Age
- Gender
- Educational qualification
- Years of experience
- Marital status
- Shift pattern
- Type of critical care unit

Inclusion Criteria

1. Nursing officers working in ICU, CCU, NICU, and Emergency ICU.
2. Nursing officers with at least six months of work experience in critical care units.
3. Nursing officers willing to participate in the study.
4. Nursing officers available during the data collection period.

Exclusion Criteria

1. Nursing officers on leave during data collection.
2. Nursing administrators and supervisors not involved in direct patient care.
3. Nursing officers diagnosed with sleep disorders before employment.
4. Nursing officers unwilling to participate.

Tool and Instrument Development

Section A: Demographic Data Sheet

Section B: Pittsburgh Sleep Quality Index (PSQI)

Section C: Perceived Stress Scale (PSS)

Validity and Reliability

Content validity was established by experts in nursing, psychiatry, and research methodology. Reliability was assessed through Cronbach's alpha coefficient and found to be satisfactory ($r = 0.82$ for PSQI and $r = 0.86$ for PSS).

RESULTS

Among 60 nursing officers, 62.5% demonstrated poor sleep quality, while 37.5% had good sleep quality. Approximately 58.3% reported moderate stress, 25.8% reported high stress, and 15.9% reported low stress. Comparative analysis revealed significant differences in sleep quality and perceived stress among nurses working in different critical care units. ICU and Emergency ICU nurses exhibited higher mean stress scores and poorer sleep quality than nurses working in CCU and NICU ($p < 0.05$).

CONCLUSION

The study concluded that nursing officers working in critical care units experience considerable sleep disturbances and perceived stress, with significant variations across different unit settings. The findings highlight the need for organizational measures such as



stress reduction programs, adequate staffing, counseling services, and promotion of healthy sleep practices to enhance nurses' well-being and patient care outcomes.

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