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University of Health Sciences

Northern State — Nursing Program — Batch 2

RESEARCH PROPOSAL

Assessment of Occupational Stress, Shift Work and Their Effects on Nursing Performance Among Nurses at Dongola Specialized Hospital

Study period: August to December 2026

Prepared by

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Extracted and organized from the submitted graduation research PDF.

1. Introduction

Nursing is an essential part of healthcare services. Nurses have an important role in providing continuous, safe, and effective care to patients. The quality of nursing care depends not only on nurses' knowledge and skills, but also on the conditions in which they work. Nurses work in different clinical environments and are often required to manage several responsibilities at the same time. These working conditions may increase their workload and affect their physical and psychological well-being.

1.1 Background

Nursing is a demanding profession that requires continuous physical and psychological effort. Nurses are responsible for providing direct patient care, monitoring patients, administering medications, communicating with patients and healthcare teams, and performing many other nursing duties. These responsibilities require concentration, attention, and the ability to work effectively under different clinical conditions.

Occupational stress is an important issue among nurses. Heavy workloads, staff shortages, work pressure, multiple responsibilities, and continuous exposure to different clinical situations may increase occupational stress and affect nurses' well-being. High levels of work-related stress may contribute to fatigue, emotional exhaustion, reduced job satisfaction, and difficulties in maintaining effective work performance.

Shift work is another important factor that may affect nurses' health and well-being. Nurses may work during the day, evening, or night, and some may have irregular working schedules. Night shifts and irregular working hours can affect normal sleep and rest patterns and may contribute to fatigue, sleep disturbances, reduced energy, and decreased concentration.

Roman et al. (2023) reported that shift work can affect the health and well-being of nursing professionals, while Baek et al. (2022) examined the relationship between occupational stress, sleep disturbance, and presenteeism among shiftwork nurses. Pourteimour et al. (2021) examined the relationship between mental workload and job performance among nurses, highlighting the importance of workload in nursing practice.

Therefore, occupational stress, workload, and shift work are important factors that may affect nurses' physical and psychological well-being as well as their professional performance. Understanding these factors is important for supporting nurses and improving their working conditions.

2. Problem Statement

Nursing is a demanding profession that requires significant physical and psychological effort. Nurses often work long hours and perform multiple responsibilities that require continuous concentration and attention. They may experience occupational stress due to heavy workloads, staff shortages, work pressure, multiple responsibilities, and continuous exposure to different clinical situations. These factors may negatively affect nurses' physical and psychological well-being.

Shift work, particularly night shifts and irregular working schedules, may also affect nurses' sleep and rest patterns. This can lead to fatigue, exhaustion, sleep disturbances, reduced energy, and decreased concentration and alertness. Continuous exposure to these working conditions may make it difficult for nurses to maintain a consistent level of efficiency while performing their daily duties.

3. Justification / Significance of the Study

Nurses are directly involved in providing continuous care to patients, so their ability to perform their duties effectively is important for maintaining safe and high-quality nursing care. However, occupational stress, heavy workload, staff shortages, and shift work may negatively affect nurses' physical and psychological well-being and their ability to perform their responsibilities effectively.

Studying these factors can help identify the main challenges experienced by nurses in their working environment. The findings may help nursing administrators and hospital management understand the factors affecting nurses' well-being and performance and may provide useful information for improving working conditions, organizing duties, and supporting nurses.

Understanding occupational stress and shift work among nurses may also help in identifying appropriate coping strategies and areas that require improvement. Therefore, this study is important for understanding the factors that may affect nurses' well-being and nursing performance and for supporting better working conditions and professional efficiency.

4. Objectives of the Study

4.1 General Objective

To evaluate the effect of occupational stress and the shift work system on the quality and efficiency of nursing performance, and to identify coping strategies used by nurses to deal with occupational stress.

4.2 Specific Objectives

1. To determine the level of occupational stress among nurses.
2. To assess the effect of the shift work system on nursing performance.
3. To evaluate the quality and efficiency of nursing performance among nurses.
4. To determine the relationship between occupational stress and nursing performance.
5. To identify coping strategies used by nurses to deal with occupational stress and shift work.
6. To identify factors associated with increased occupational stress among nurses.

5. Brief Literature Review

5.1 Occupational Stress Among Nurses Working in Intensive Care Units in Public Hospitals of Khartoum State, Sudan (2016)

A cross-sectional study was conducted among 139 nurses in 14 public hospitals in Khartoum State, Sudan. The findings showed that workload was one of the major sources of occupational stress among nurses, following situations involving death and dying. The study highlighted the importance of workload management in reducing occupational stress among nurses.

5.2 The Relationship Between Occupational Stressors and Performance Among Nurses Working in Pediatric and Intensive Care Units (2016)

This study included 200 nurses working in pediatric and intensive care units in Khartoum. The findings showed that nurses experienced above-average occupational stress, particularly due to inadequate resources and limited support from supervisors. The study also identified a negative relationship between lack of supervisory support and nursing performance.

5.3 Occupational Stress Among Nurses Working in the Neonatal Intensive Care Unit at Omdurman Maternity Hospital, Sudan (2018)

A descriptive cross-sectional study was conducted among 60 nurses working in the neonatal intensive care unit at Omdurman Maternity Hospital. The findings revealed that workload was the most common source of occupational stress, reported by 76.7% of nurses, followed by death and dying situations (73.3%). The study recommended reducing work overload and improving support for nurses.

5.4 Assessment of Night-Shift Effects on Nurses' Health and Work Performance at South Gondar Zone Public Hospitals (2023)

This cross-sectional study assessed the effects of night shifts on nurses' health and work performance. The findings indicated that night-shift work was associated with sleep loss, persistent tiredness, and reduced concentration. The study emphasized the importance of considering the effects of shift schedules on nurses' health and professional performance.

Literature Review Summary

The reviewed studies indicate that workload, occupational stress, night shifts, fatigue, and limited workplace support are important challenges affecting nurses. These factors may influence nurses' physical and psychological well-being and their ability to perform their professional responsibilities effectively. The present study focuses on occupational challenges associated with nursing shifts and how these challenges may affect nurses' well-being and work performance.

6. Methodology

6.1 Study Design

A descriptive cross-sectional study design will be used to assess occupational stress, shift work, and their effects on nursing performance among nurses working at Dongola Specialized Hospital. The cross-sectional design will allow the researcher to collect data from study participants at a specific period of time and assess the relationship between occupational stress, shift work, and nursing performance.

6.2 Study Area

The study will be conducted at Dongola Specialized Hospital, located in Dongola, the capital city of the Northern State, Sudan. The hospital is one of the important healthcare facilities serving the population of Dongola and the surrounding areas. It provides various healthcare services to patients and includes different departments and nursing units where nurses work under different conditions and shift patterns. Therefore, the hospital is considered an appropriate setting for assessing occupational stress, shift work, and their effects on nursing performance among nurses.

6.3 Study Population

The study population will consist of all registered nurses working at Dongola Specialized Hospital during the period of the study. The participants will include nurses working in different departments and nursing units of the hospital and who are involved in direct patient care. The study population will be selected according to the inclusion and exclusion criteria established by the researcher. The study will focus on nurses because their working conditions, including occupational stress and shift work, may influence their ability to provide effective and safe nursing care.