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TITLE:

ASSESSING DETERMINING FACTORS OF MISSED NURSING CARE IN SELECTED HOSPITAL OF ABUJA CITY IN NIGERIA

"A thesis submitted as partial fulfillment of the requirement for Master of Science (MSc) Degree"

In Medical-Surgical Nursing

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ABSTRACT

Background:

Missed nursing care (MNC) is a critical issue in healthcare, particularly in intensive care units (ICUs), where it can compromise patient safety and outcomes. Despite global research on MNC, limited studies have explored its prevalence and causes in Nigeria. This study aimed to assess the frequency and determinants of MNC in ICUs across selected hospitals in Abuja, Nigeria.

Methods:

A cross-sectional descriptive design was employed, involving 200 ICU nurses from hospitals in Abuja. Data were collected using the MISSCARE questionnaire, which evaluated 24 nursing activities and 17 reasons for MNC. Descriptive and inferential statistics were used to analyze the data.

Results:

The study revealed a moderate level of MNC (Mean ± SD: 2.77 ± 0.69). The most frequently missed care activities were emotional support to patients/families (3.19 ± 1.14) and patient bathing/skin care (3.05 ± 1.20), while the least missed were hand washing (2.11 ± 0.99) and documentation (2.30 ± 0.84). The primary reasons for MNC included unavailability of medications (3.45 ± 0.91) and inadequate staffing (3.42 ± 0.86). Younger nurses (<25 years), those working rotating/night shifts, and those with longer weekly hours (≥30 hours) reported higher levels

of MNC. Job satisfaction and teamwork were negatively correlated with MNC.

Conclusion:

The findings highlight significant gaps in nursing care delivery in ICUs, driven by resource shortages, workload, and organizational factors. Addressing these issues through improved staffing, resource management, and supportive work environments is essential to enhance patient care quality and nurse retention. This study provides a foundation for targeted interventions to reduce MNC in Nigerian ICUs.

Keywords:Missed nursing care, intensive care unit, patient safety, staffing, Nigeria.

chapter 1

1. Introduction

Nurses, as the largest group of health care professionals, play an important role in ensuring the safety and quality of care in hospitals. Nursing is a dynamic and profoundly human profession dedicated to the protection, promotion, and optimization of health and abilities; the prevention of illness and injury; the facilitation of healing; and the alleviation of suffering through compassionate presence and evidence-based practice. It is a discipline built on a foundation of scientific knowledge, clinical expertise, and an unwavering ethical commitment to holistic patient care. The essence of nursing is captured in the therapeutic relationship between the nurse and the patient, a partnership aimed at achieving the best possible health outcomes.(1). Providing a comprehensive nursing care based on patient needs is one of the main goals of nursing. However, missed nursing care is a serious obstacle to achieving comprehensive and safe nursing care, and it threatens patients' lives (2). Missed care means elimination or delay of any aspect of patient's care (whether part or the whole care), (3) when the intended plan of care is not always fully executed. This phenomenon is known as missed nursing care, also commonly referred to as unfinished care or care left undone. It is generally defined as any aspect of required patient care that is omitted or significantly delayed. Missed care is not an error of commission, but rather an error of omission—something that should have been done for a patient but was not, often due to system-level factors rather than individual negligence. (4) The importance of understanding and addressing missed care is critically amplified in the context of intensive care units. ICUs cater to the most vulnerable patient population—individuals with life-threatening illnesses or injuries who require constant, intricate monitoring and intervention. The margin for error is exceptionally

narrow, and the omission of even a single element of care, such as turning a patient to prevent pressure injuries, administering medication on time, or thoroughly assessing a change in status, can have immediate and catastrophic consequences, including increased morbidity, mortality, and longer hospital stays. Furthermore, the high-stress, fast-paced ICU environment, combined with high nurse-to-patient ratios and the sheer volume of critical tasks, creates a setting where care is susceptible to being rationed or missed entirely.(3)

Many studies have been carried out on missed nursing care (MNC), undelivered care, unfinished care, and incoment countries. These studies have addressed several MNC-related factors such as hospital, ward, and staff characteristics, as well as nursing teamwork. Nurses' work environment is also correlated with the quality of care, mortality rate, personal care, and missed nursing care (5). Currently, missed care has become a growing international concern that, as a common threat to quality and safety of care, has a negative impact on the quality of care and leads to adverse health outcomes(1) .

Evidence shows that in each shift, some care duties are missed by nurses (6). The results of a study showed that, majority of nurses (86%) reported that they have not performed one or more care duties in their previous shift due to time shortages(7).

A study on forgotten care showed that, the average forgotten care by nurses working in neonatal intensive care unit was at moderate level(8).

The results of a large cross-sectional study of 33,659 nurses in 488 hospitals in 12 European countries showed that, the most missed nursing care included; taking rest or talking to patients (53%),

developing or updating nursing care programs or methods of care (42%) and educating patients and families (41%).

In hospitals with a more favorable work environment, lower nurse/patient ratio and lower proportion of nurses who perform non-nursing duties, the nurses reported lower rate of missed nursing care(9). Numerous international studies have highlighted the relationship between shortages of nursing staff, unsupportive work environments and adverse health outcomes for patients, including increased morbidity, mortality, and costs (10)(11)(12)(13).

One of the proposed reasons for these outcomes is unfavorable working condition, which leads to the rationing of nursing interventions and care. Care rationing refers to "refusing or not delivering necessary nursing interventions for patient due to the shortages of nursing resources such as staff, skill, or time (14). When resources are insufficient, nurses have to share their attention among patients and use their clinical judgment to prioritize care and interventions. This leads to delayed interventions or elimination of some aspects of care that may increase the risk of negative outcomes for patients(15)(16)

Factors contributing to missed nursing care included heavy workloads, inadequate staffing levels, lack of resources, time constraints, staff fatigue, and interruptions or distractions during care delivery. These factors can increase the likelihood of important nursing care tasks being overlooked or delayed. Missed nursing care can range from simple tasks like turning a patient to more critical aspects such as vital signs assessment or medication administration. The consequences of missed nursing care can be detrimental to patient outcomes. Patients may experience delayed pain management, higher rates of complications or infections, increased length of hospital stay, and dissatisfaction with their overall care (17)

Several studies have explored the causes and consequences of missed nursing care and its impact on patients' outcomes(3). Several causes have been identified for missed nursing care. These causes can be classified into individual, organizational, and contextual factors. for individual Factors there is Heavy workload Nurses may have an excessive workload, leading to time constraints and a lack of availability to provide all necessary care also Lack of experience those nurses that are lacking experience may struggle to prioritize and manage their workload effectively, resulting in missed care also Lack of knowledge or skills because Insufficient knowledge or skills required to carry out specific care tasks may lead to their omission (18)(19)

Organizational Factors involved Staffing levels Inadequate nurse-to-patient ratios and staffing shortages can increase the likelihood of missed care and Lack of resources because Inadequate availability of necessary equipment, supplies, or medications can hinder the provision of care also Interprofessional communication Poor communication among healthcare team members can contribute to missed care, as information essential for its provision may be unavailable or unclear(6)(20). There's also Contextual Factors which involve Lack of teamwork Ineffective teamwork and collaboration among healthcare professionals can hinder the completion of tasks and contribute to missed care also Time pressure: Nurses may face time pressures due to emergencies, high patient turnover, - Task prioritization: Difficulty in determining priority of care tasks may result in certain aspects being omitted, especially when faced with conflicting demands (6)(19)(20)

Some effects of missed nursing care are increased patient morbidity and mortality rates. A study by Ball et al. (2018) found that missed nursing care was associated with higher patient mortality rates. A 10% increase in missed care was linked to a 16% increase in patient deaths (6) Also Decreased patient satisfaction Research was conducted and demonstrated that missed nursing care was negatively associated with patient satisfaction. Patients were less likely to rate their overall

hospital experience as satisfactory when essential care tasks were missed(18).

Increased healthcare costs A study conducted and found that missed nursing care resulted in higher healthcare costs due to increased length of stay, higher readmission rates, and more frequent use of hospital resources (21). Increased nurse stress and burnout missed nursing care leads to increased job stress among nurses, contributing to burnout and potential turnover. This can further exacerbate staffing shortages and compromise patient care(22) .

Internationally, the prevalence of missed care among nursing staff in the intensive care unit is high (55-98%), (23).

ICU care, or Intensive Care Unit care, is specialized medical treatment provided to critically ill patients who require close monitoring and advanced interventions. It's a challenging ward as it demands round-the-clock attention, complex medical procedures, and constant vigilance. One of the challenges in ICU care is ensuring effective nursing care to the patents. The nursing staff plays a crucial role in monitoring the patient's condition, providing medication, managing ventilator support, ensuring infection control, and offering emotional support to both the patient and their families.(24)

Missed nursing care can occur due to high patient-to-nurse ratios, time constraints, and competing priorities, which may impact patient outcomes. It's important to prioritize and collaborate effectively to minimize missed care and ensure the best possible patient care.(24)

In conclusion, investigating the factors that contribute to missed nursing care within intensive care settings is not merely an academic exercise; it is a vital patient safety imperative. This research directly aligns with our organization's research priority of enhancing clinical outcomes and improving patient safety by identifying systemic gaps in care delivery. By illuminating the causes and consequences of missed care in the ICU,

this study aims to generate actionable evidence that can inform strategies, policies, and interventions to ensure that all patients receive the complete and compassionate care they require and deserve.

2. . PROBLEM STATEMENT:

“High-quality care is the ultimate goal of the global healthcare system. Increasing patient safety is critical for avoiding negative outcomes in nursing care and meeting quality goals. Errors in healthcare are divided into two categories: Medical errors and omission errors Many recent studies have concentrated on medical errors. Omission errors, on the other hand, were directly related to the quality of nursing care, still rarely realized, and examined by nurses. Nurses provide care to meet patient needs, but in the context of a complex health-care system, sometimes the quality of care falls short of expectations” (25)

“Missed nursing care has recently been identified as a factor that contributes to poor patient outcomes. Missed care may also be a predictor of hospital nursing care quality. The incidences and components of missed nursing care vary greatly between countries The majority of the previous studies examining missed nursing care and its related factors were conducted in European countries and the United States where the working environment differs from that of developing countries(25)

It is not commonly recognized that required nursing care is left undone. However, evidence suggests that 9 out of 10 nurses miss essential care activities each shift. Missed care, that is, “any aspect of required patient care that is omitted (either in part or in whole) or delayed”, has been reported in multiple settings and countries and is tied to negative patient outcomes. It offers an avenue for quality improvement. The patient’s care experience has long been considered a fundamental quality indicator that has been linked to nursing. Recent attention to the patient care experience has been precipitated by the Centers for

Medicare and Medicaid (CMS) payment policy changes requiring assessments of patient care experiences to avoid a penalty. Patients' assessments of the hospital experience reveal multiple facets of healthcare in a way that clinical outcomes measured from administrative data, like mortality or infection, cannot. There is a growing awareness of the importance of a positive patient care experience, but few action- able paths have been identified. (26)

In a systematic review of 42 studies, four studies concluded that MNC is a significant problem in hospitals; 55–98% of nurses reporting missing one or more items of required care during the time of assessment (frequently the last shift worked) The most frequently identified missed items were ambulating and turning patients, mouth care, feeding patients on time, comfort talk with patient and family, patient teaching, medication administration on time, and documentation. Studies investigating reasons for MNC, as mentioned by nurses, concluded that inadequate labor resources was the most frequently cited reason followed by material resources then communication. The most frequently reported items in labor resources were unexpected rise in patient volume and/ or acuity and inadequate number of staff, those in material resources were unavailability of medications when needed, and unavailability of supplies and equipment, while the most common items reported in communication were unbalanced patient assignments, and breakdowns in communication with medical staff. (27)

Ensuring optimum care and safe practice is the core objective of all healthcare organizations. The World Health Organization (WHO) defines patient safety as the prevention or mitigation of errors and harms to patients associated with the provision of health care (2017). The Institution of Medicine encourages surveillance and reporting of errors in healthcare, with several initiatives, to measure and mitigate errors. These errors are classified into two major types: errors of the commission because of the wrong action taken and errors of omission as a result of actions not taken or missed Nurses play a crucial role in

preserving patient safety considering that they constitute the largest portion of healthcare providers. They also play an active role in detecting and preventing errors, Furthermore, the holistic merit of nursing practice demands direct interaction and intervention with patients. This complex and intense nature of nursing practice make nurses prone to committing unintentional errors, and as a result of time constraint and insufficient manpower and resources, they often have to consciously prioritize some activities over others. (28)

An ageing population is a challenge for health care systems in meeting the growing care needs. At the same time, there is a general shortage of health workers as well as a shortage of adequately educated health workers. The phenomenon missed nursing care can be described using different concepts, referring to nursing care within the areas of nurse´s responsibility. It is a description that includes all nursing care that should have been carried out but was omitted, fully or partly, or delayed. It can also be seen as an indication of omission, where the necessary nursing care is performed incompletely. There is no consensus in what concept to use. Henceforth in this paper, the concept 'missed nursing care' will be used. Reasons for missed nursing care can be related to lack of staff, unexpected increase in the number of patients or the required needs, or inadequate staffing in relation to needed competences, which in turn can be an explanation for how nurses make decisions and prioritize care. Prioritization of nursing care can be dilemmas where staff have to make difficult decisions, sometimes based on assessments being made to determine what care is the most important. Missed nursing care can also be seen as a contributing factor to adverse events and can affect patient safety, therefore it should be of interest to nurses and management.(29)

Causes of missed nursing care can be any of these four categories: 'Lack of preparedness for unexpected situations', 'Obstacles in a deficient work environment', 'Unsatisfactory planning in the organization', and 'Shortcomings related to the individual'.

Lack of preparedness for unexpected situations participating nurses expressed that if something unforeseen happened or if a care recipient did not want to receive help, there was no margin for the task to take a little longer. There was no time scheduled for unexpected alarms, so it became impossible to carry out all required care. The nurses were forced to prioritize which tasks to do, as there was no opportunity to catch up with everything.

Unsatisfactory planning in the organization some reasons for missed nursing care were beyond the nurses' control. The scheduled staffing was experienced as too low, and the workload was considered high with too many tasks to do. Participating nurses thought the schedules were poorly planned, which made the working day stressful. When the allotted time for tasks (the tasks are minute-controlled), was not enough, it was impossible to catch up and, even the travel time between care recipients was too short. The nurses expressed that lack of material, such as a medication box that had not been refilled or lack of computers to document the nursing care on, caused missed nursing care.

Obstacles in a deficient work environment the nurses stated that missed nursing care could occur when there were deficiencies in communication, such as bad information transfers, language difficulties, or misunderstandings. The nurses had to cover up for co-workers who lacked experience and/or knowledge, because they were new at the workplace, uneducated, or did not have delegation to do all nursing care, which made it hard to complete all required tasks due to time restraints. It was considered time consuming to check that everyone on the team had the same, 18 correct information. The documentation system was too complicated and was divided for the different professions. Starting and logging into computers was seen as time consuming, and the number of computers was insufficient, so sometimes the documentation was not done. (29)

Since the prevention of lost care is dependent on identifying its type and causes, and considering that no study has been done in this regard in Nigeria, the research team decided to conduct a study with the following title.

Assessing determining factors of missed nursing care in selected hospitals of Abuja city in Nigeria: 2024

1.3 Importance of the study:

Patient safety is an issue of the utmost importance for nurses. To ensure patient safety, nursing care quality, which is positively correlated with patient safety, must constantly be improved. Nursing care quality may in part be measured through missed nursing care which refers to the commonly encountered phenomenon of nurses omitting or delaying a necessary part of their work (30)

1.4 OBJECTIVES OF THE STUDY:

1.4.1 Main Objective:

Determination of the FREQUENCY AND CAUSES OF MISSED NURSING CARE IN INTENSIVE CARE UNIT IN SELECTED HOSPITALS IN ABUJA

1.4.2 Specific Objectives:

1. To determine the FREQUENCY OF MISSED NURSING CARE IN INTENSIVE CARE UNIT IN SELECTED HOSPITALS IN ABUJA

2. To determine the CAUSES OF MISSED NURSING CARE IN INTENSIVE CARE UNIT IN SELECTED HOSPITALS IN ABUJA

1.4.3 Goals:

The results of this study, by determining the frequency and the the causes of missed nursing care, can be a guide for planning and implementing programs to decrease the level of missed nursing care and improve awareness of nurses regarding patient care

1.5 RESEARCH QUESTIONS:

1. What is the frequency of missed nursing care in selected hospital of Abuja city in 2024?

2. What are the main causes of missed nursing care in selected hospital of Abuja city in 2023?

1.6 THEORETICAL AND OPERATIONAL DEFINITION:

Nursing care
Theoretical definition:
Care is the center of nursing activities and is a key component of what the nurse provides for the patient. Care as a framework has practical applications for nursing activities and facilitates the nurse's ability to know the patient and causes the identification of the patient's problems and finding and implementing specific and individual interventions by the nurse (31)
Practical definition: According to the theoretical definition

MISSED NURSING CARE:

Theoretical definition: Missed care means the omission or delay in performing any aspect of the patient's required care(18)

Practical definition: Missed nursing care is when a necessary nursing action is omitted or not completed, potentially affecting patient outcomes. It includes delays or failures in providing required care.

Causes of missed nursing care

Theoretical definition: This issue was first raised by Kalish. According to him, there are 17 main reasons for lost care in the three general areas of communication, human resources and material resources (4). In numerous studies, nurses have mentioned various reasons for the loss of essential care, including unpredictable changes in the required service, emergency conditions of patients, high workload and shortage of nursing personnel. Apart from the self-reported cases of nurses regarding the reason for the loss of essential care, other studies of hospital conditions such as individual characteristics of nurses, number of nurses, patient-to-nurse ratio, number of hours of patient care, nurses' age, education level, work experience and accessibility The resources needed to provide nursing services related to lost care have been mentioned (31)

Practical definition: the meaning of the causes of missed nursing care is to identify the causes affecting the missed care in Intensive care units.

INTENSIVE CARE UNIT;

Theoretical definition: Intensive Care Unit (ICU) is a specialized medical facility within a hospital that provides comprehensive and continuous

monitoring, care, and treatment for critically ill patients. The ICU is specifically designed to deliver highly specialized medical interventions and therapies to patients with life-threatening conditions or those requiring close and constant attention.(32)

Practical definition: Intensive Care Unit. It's a specialised department in hospitals that provides intensive medical care for patients who are critically ill or injured. In Abuja, there are several hospitals that have ICUs equipped with advanced medical technology and staffed by skilled healthcare professionals. Including Asokoro district hospital Garki hospital Maitama district hospital and national hospital The ICUs in Abuja are designed to monitor and treat patients who require close and constant attention. They provide specialized care to help stabilize and improve the condition of patients in critical situations.

chapter 2

2.1 Conceptual FRAMEWORK:

In this chapter, a conceptual framework has been used to explain the concepts of the study, which includes Nursing, nursing care, missed nursing care, causes of missed nursing care, ICU ward and missed care in this ward

2.1.1 Overview

In the realm of healthcare, nursing care stands as a fundamental element contributing significantly to patient outcomes and recovery. However, the concept of "missed nursing care" has gained increasing attention within the nursing profession. Missed nursing care refers to any aspect of required patient care that is omitted or delayed, often due to various constraints or challenges within healthcare settings. These omissions encompass a wide array of activities that are essential for maintaining patient well-being and safety.(33)

Missed nursing care poses a significant challenge in ensuring optimal patient outcomes and satisfaction. Addressing this issue requires a multi-faceted approach involving organizational changes, enhanced communication, adequate resources, and support for nursing staff. By prioritizing strategies aimed at reducing missed care, healthcare systems can uphold their commitment to delivering high-quality patient-centered care.(34)

2.1.2 NURSING

Nursing stands as an indispensable profession at the heart of healthcare, embodying compassion, expertise, and unwavering dedication. (35)It is a dynamic discipline encompassing a spectrum of roles and responsibilities, from providing bedside care to advocating for patients' rights and well-being.(36) Nurses serve as crucial advocates, educators, caregivers, and coordinators within interdisciplinary healthcare teams.(37)Their expertise extends beyond administering medications and treatments, involving holistic care that addresses the physical, emotional, and social needs of individuals, families, and communities. (38)With a commitment to evidence-based practice, ethical principles, and continual learning, nurses strive to improve patient outcomes, promote health, and uphold the highest standards of quality care, making an invaluable contribution to the health and welfare of society.(39)

Nursing is a profession committed to the promotion of health, prevention of illness, and provision of holistic care to individuals, families, and communities throughout the lifespan.(40) It is founded on evidence-based practice, ethical principles, and a comprehensive understanding of diverse healthcare needs. (41)Nurses engage in health assessment, critical thinking, and therapeutic interventions to enhance patient outcomes and well-being while advocating for patient autonomy and dignity.(42)

Nurses also collaborate with interdisciplinary teams, and employ evidence-based practice to optimize health outcomes and enhance the quality of life for those under their care.(43)

Nursing epitomizes a multifaceted profession deeply rooted in care, compassion, and expertise. (44)Beyond the fundamental duties of patient care, nurses assume diverse roles as educators, advocates, leaders, and caregivers. (45)Their responsibilities extend from managing acute medical needs to promoting health maintenance and disease prevention. (46)Nurses operate within a framework of evidence-based practice, integrating scientific knowledge with clinical expertise to deliver optimal patient care. (47)They navigate intricate healthcare systems while maintaining an unwavering commitment to patient advocacy, ethical practice, and the enhancement of individual and community well-being.(48)

2.1.3 NURSING CARE

Care is the core of the nursing profession and the main factor which distinguishes nursing from other health-related professions. High-quality nursing care means the provision of easy and accessible care by competent qualified nurses. Nowadays, the maintenance and improvement of the quality of nursing care is the most important challenge for nursing care systems around the world. (49)Nursing care stands as a vital component of healthcare delivery, encompassing a multifaceted approach aimed at addressing patients' diverse needs.(50) Nursing care focuses on the holistic wellbeing of patients, including their physical, emotional, and mental health. It involves tasks like administering medication, monitoring vital signs, and providing emotional support. (51) The care also represents a comprehensive and patient-centered approach to healthcare delivery that encompasses diverse roles and responsibilities. At its core, nursing emphasizes

holistic care, addressing not only the physical ailments but also the emotional, spiritual, and social needs of individuals, families, and communities. (52)

This holistic perspective enables nurses to conduct thorough patient assessments, develop tailored care plans, and foster a therapeutic relationship that promotes trust and well-being(53)

Moreover, nursing care extends beyond direct patient care to encompass advocacy for patient rights and autonomy(54)

Nurses serve as patient advocates, ensuring that individuals receive quality care while respecting their choices and values. In addition to advocacy, effective communication and collaboration within interdisciplinary teams are pivotal in ensuring seamless care coordination and enhancing patient outcomes(55)

Nurses also play a critical role in patient education, empowering individuals and their families with the knowledge and skills necessary for self-care and health promotion(56) This educational aspect of nursing enables patients to actively participate in their care plans and make informed decisions regarding their health. Furthermore, meticulous medication management and adherence to evidence-based practices in clinical interventions are central to nursing care, aiming to optimize therapeutic outcomes and prevent adverse events (57)

In essence, nursing care embodies a multifaceted and dynamic profession that integrates compassion, evidence-based practice, education, advocacy, and collaboration to ensure comprehensive care delivery and promote the well-being of those entrusted to their care.(58) This holistic and patient-centered approach remains fundamental to the foundation of nursing across various healthcare

settings and specialties, continuously evolving to meet the changing needs of individuals and society.(59)

2.1.4 MISSED NURSING CARE

Missed nursing care refers to any essential care that patients need but do not receive due to various reasons within the healthcare system.(60) It encompasses tasks or interventions that should be performed by nurses to ensure the well-being and safety of patients but are omitted, delayed, or insufficiently completed.(61)

Missed nursing care, a critical concern within healthcare systems, refers to the inadvertent omission or delay of essential nursing interventions necessary for patient well-being and recovery(62) It include tasks integral to patient care, including but not limited to hygiene maintenance, administering medications, timely turning of patients, and adequate monitoring.(63)

This phenomenon often arises due to a multitude of factors such as high nurse workload, inadequate staffing levels, time constraints, interruptions, and organizational constraints.(64)

Research indicates that missed nursing care can have detrimental effects on patient outcomes, leading to increased risks of adverse events, prolonged hospital stays, patient dissatisfaction, and compromised safety. Addressing this issue is crucial to improve patient care quality and mitigate the negative impact of missed care on healthcare delivery systems(65) Several factors contribute to missed nursing care, including heavy workload, inadequate staffing, time constraints, lack of resources, poor communication, interruptions, and

nurse burnout.(66) These factors can significantly impact the quality of patient care, leading to potential adverse outcomes, longer hospital stays, and increased healthcare costs.(67) The consequences of missed nursing care are multifaceted and can result in patient dissatisfaction, compromised patient safety, increased risk of medical errors, higher rates of hospital-acquired infections, delayed recovery, and even mortality in severe cases.(68) Furthermore, missed nursing care can lead to ethical dilemmas for healthcare providers, affecting their professional integrity and job satisfaction.(69) To address missed nursing care, healthcare institutions need to implement strategies that prioritize adequate staffing levels, effective nurse-patient ratios, better resource allocation, improved communication channels, and support systems to mitigate nurse burnout.(70) Also Encouraging a culture of teamwork, clear task prioritization, and fostering a positive work environment are also crucial in minimizing missed care.(71)

Research in the field of nursing has extensively investigated the implications of missed care, proposed solutions and highlighting the importance of addressing this issue to enhance patient outcomes and improve the overall quality of healthcare delivery.(72)

2.1.5 CAUSES OF MISSED NURSING CARE

Certainly, missed nursing care can result from a variety of complex factors within healthcare systems.(73) The causes contributing to missed nursing care include inadequate staffing levels and high nurse-to-patient ratios, which overwhelm nurses and compromise their ability to attend to all patient needs.(74) Time constraints and the need for task prioritization also play a pivotal role, often leading nurses to omit

certain care aspects in the face of competing demands. Inadequate resources, such as shortages of essential equipment or supplies, hinder the seamless delivery of care. Communication challenges during shift handovers, distractions, and interruptions further disrupt workflow, impacting the completion of necessary nursing tasks(75) Additionally, nurse burnout, fatigue, and the difficulties in delegating tasks among healthcare team members contribute significantly to missed care.(76) Also Educational gaps, organizational constraints, and cultural differences further compound these challenges, collectively creating barriers to the comprehensive delivery of nursing care(77) Understanding the above and the below also addressing these multifaceted causes are crucial to mitigating missed nursing care and improving patient outcomes.(78)

2.1.5.1 SOME IMPORTANT CAUSES OF MISSED NURSING CARE

1. Staffing Levels and Workload: Insufficient staffing and high nurse-to-patient ratios contribute significantly to missed care (79)

2. Time Constraints and Prioritization: Nurses often face time limitations and may prioritize tasks, resulting in the omission of certain care aspects(80)

3. Inadequate Resources: Shortages of necessary equipment or supplies hinder the completion of essential nursing care.(81)

4. Shift Handovers and Communication Issues: Ineffective communication during shift changes can lead to missed information about patient needs and care plans(82)

5. Nurse Burnout and Fatigue: High levels of stress, burnout, and fatigue among nurses impact their ability to provide comprehensive care(83)

6. Distractions and Interruptions: Constant interruptions during care delivery disrupt the workflow, contributing to missed nursing care.(84)

7. Task Delegation Challenges: Difficulties in delegating tasks among healthcare team members can result in essential care being overlooked(85)

8. Lack of Education or Training: Inadequate training or education on specific procedures may lead to nurses avoiding or neglecting certain care tasks.(86)

9. Organizational Constraints: Policies, protocols, and administrative barriers within healthcare organizations may impede the delivery of necessary care.(87)

10. Cultural and Ethical Factors: Differences in cultural backgrounds and ethical dilemmas may influence the prioritization of care(88)

2.1.6 ICU WARD AND MISSED NURSING CARE IN THIS WARD

The ICU ward, short for Intensive Care Unit, plays a crucial role in the healthcare system by providing life-saving treatments and continuous monitoring for critically ill patients.(89) It is a specialized unit that requires a high level of medical expertise and constant attention to ensure patient safety and well-being.(90) However, despite the dedicated efforts of the medical staff, there are instances where missed nursing care can occur in the ICU ward.(91) Missed nursing care refers to any necessary care that is not completed or delayed due to various factors such as staffing shortages, high workload, or lack of time.(92)(93) One of the common missed nursing care in the ICU ward is inadequate patient assessment.(94) Since ICU patients are often in a

critical condition, a thorough and frequent assessment is vital to identify any changes in their condition promptly(95) However, due to the demanding environment and overwhelming workload, nurses might not always have the time to conduct a comprehensive assessment, which can lead to delayed interventions or missed opportunities to detect potentially deteriorating conditions.(96)(97) Another area of missed nursing care in the ICU ward is patient hygiene and comfort(98) ICU patients are usually bedridden or immobile, and their personal hygiene needs are often compromised(99) Simple tasks like oral care, bathing, or changing of bed linens, which are essential for maintaining a patient's comfort and preventing infections, may be overlooked in the midst of the nurses' busy schedules.(100) Additionally, medication administration errors can occur in the ICU ward.(101) With the significant number of medications prescribed to critically ill patients, administering the right medication in the correct dosage and at the prescribed time is crucial. However, due to distractions, interruptions, or lack of double-checking procedures, nurses may inadvertently make medication errors, which can have severe consequences for the patient's health.(102)(103)(104) Moreover, emotional support and communication with patients and their families are essential aspects of nursing care that can be missed in the ICU ward.(105)

The stress and anxiety experienced by both patients and their loved ones in the ICU can be overwhelming. Nurses, despite their best intentions, might be too occupied with their clinical duties to provide the emotional support and communication needed to alleviate their fears and concerns.(106)(107) To address the issue of missed nursing care in the ICU ward, healthcare organizations must prioritize adequate staffing levels, encourage a culture of open communication, and

provide appropriate resources and support for the nursing staff.(108) Additionally, implementing effective systems and protocols for patient assessment, medication administration, and patient hygiene can help minimize the occurrence of missed nursing care and ensure the highest level of patient safety and care in the ICU ward.(109).

2.2 LITERATURE REVIEW:

Looking for evidence from previous research where PubMed, Google scholar and Medline were used and searched some studies from 2011 to 2023 search keywords include "intensive care unit", "missed nursing care", "nursing job" In the following, we will review some studies. They are listed below in chronological order.

1. A comparative cross-sectional, performed by ann charlotte falk about Missed nursing care in the critical care unit, on 1st june 2022 at a university hospital, Sweden.before and during the COVID-19 pandemic in 2019 and 2020 The MISSCARE Survey-Swedish version was used to collect data along with two study-specific questions concerning perception of patient safety and quality of care. the result is the nurse/patient ratio was above the recommended level at all data collection time points. Most missed nursing care was reported in items concerning basic care. The most reported reasons for missed nursing care in all samples concerned inadequate staffing, urgent situations, and a rise in patient volume. Most nurses in all samples perceived the level of patient safety and quality of care as good, and the majority had no

intention to leave their current position the study concluded that the pandemic had a great impact on the critical care workforce, but few elements of missed nursing care were affected. To measure and use missed nursing care as a quality indicator could be valuable for nursing managers, to inform them and improve their ability to meet changes in patient needs with different workforce approaches in critical care settings.(94)

This study was about missed nursing care in critical care unit before and after covid19 in sweden and our study will be conducted in Abuja Nigeria about determining the factors of missed nursing care in intensive care unit.

2. A descriptive study was performed by soohyhun kim about Missed nursing care and its influencing factors among neonatal intensive care unit nurses in South Korea on 28th April 2022. Missed care among 120 Korean NICU nurses was measured using a cross-culturally adapted online questionnaire. The frequency of missed care for 32 nursing activities and the significance of 23 reasons for missed care were collected. The results show that All participants had missed at least 1 activity, missing on average 19.35 activities during a typical workday. The most common missed item was “provide developmental care for the baby”. The most common reason for missed care was “emergency within the unit or deterioration of one of the assigned patients”. The final regression model explained 9.6% of variance in missed care. The average daily number of assigned patients receiving inotropes or sedation over the last month influenced the total number of missed cares items. And the study concluded at Missed care was affected by nurses' workload related to the number of patients taking medication. Frequently missed activities, especially those related to developmental care, require patience and time, conflicting with safety prioritization and inadequate working conditions. NICU

nurses' working conditions should be improved to ensure adequate time for nursing activities.(30)

This review assessed Missed nursing care and its influencing factors among neonatal intensive care unit nurses in South Korea while our study will be Assessing determining factors of missed nursing care in selected hospitals of Abuja city in Nigeria:2024

3. Another study, performed by Ingrid Andersson about Prevalence, type, and reasons for missed nursing care in municipality health care in Sweden in 24 April 2022 A cross sectional design with quantitative and qualitative approach. A Swedish version of Basel Extent of Rationing of Nursing Care for nursing homes and 15 study specific questions were answered by 624 registered nurses, enrolled nurses, or nurse assistants. Both descriptive and analytical, independent-samples t-test, analyses were used. Qualitative content analysis was used for the open-ended question. The results show that the care activity most often missed in home care was: 'set up or update care plans' (41.8%), and in nursing homes: 'scheduled group activity' (22.8%). Reasons for missed nursing care were lack of preparedness for unexpected situations, obstacles in a deficient work environment, unsatisfactory planning in the organization, and/or shortcomings related to the individual and they conclude at not all care activities needed are performed, due to reasons such as lack of time or organizational issues. Missed nursing care can lead to adverse events and affect patient safety. It is important to be aware of missed nursing care and the reasons for it, which gives a possibility to initiate quality improvement work to ensure patient safety. (29)

This review assessed Prevalence, type, and reasons for missed nursing care in municipality health care in Sweden while our study will be Assessing determining factors of missed nursing care in selected hospitals of Abuja city in Nigeria: 2024

3. Farida Mahmoud Hussein performed another research by 6th may 2017 about Relation between Nurse-Nurse Collaboration And Missed Nursing Care Among Intensive Care Nurses. Descriptive correlational study design was used. Three tools were used to collect data; demographic data sheet, Nurse-Nurse Collaboration scale, and Missed Nursing Care Questionnaire. 216 nurses were selected randomly from ICUs of Zagazig University hospital and Ain Shams University Specialized Hospital, Egypt. The results revealed that the highest percentage of the studied nurses had satisfactory level in all nurse-nurse collaboration subscales, 70.4% of the studied nurses most frequently missed nursing care related to patient assessment. While 63.9 % most frequently missed nursing care related to medication administration. The significant reasons of missed nursing care as reported by nurses were inadequate nursing, number and condition of patient, and unavailability of medications when needed. Statistically significant negative correlation between all nurse-nurse collaboration subscales and missed nursing care was detected. The study recommended that hospital managers and nurse educators should develop educational programs that focus on creating innovative opportunities for nurses to learn about intra-professional collaboration in the practice setting and conclude with in the light of the current study findings, it was concluded that, the highest percentage of the studied nurses have satisfactory level in all nurse-nurse collaboration subscales. The most frequently missed nursing care as reported by the studied nurses were related to

patient assessment and medication administration. The significant reasons of missed nursing care as reported by the studied nurses were inadequate nursing, number and condition of patient, and unavailability of needed medications. There was a statistically significant negative correlation between all nurse-nurse collaboration subscales and missed nursing care.(110)

In this study, nurse-to-nurse relationship with missed nursing care has been investigated. We intend to investigate the type and causes of missed nursing care in Nigeria.

4. Correlational research was conducted at Intensive Care Units (ICU) at Fayoum university hospitals. Intensive care units at Kom Hamada central hospital Egypt, Damanhour fever hospital and Damanhour chest hospital. About The Relationship among Workload, Teamwork, and Missed Nursing Care at Intensive Care Units by Sanaa Mohammed Soliman, on 3rd november2020 the subjects were 207 nurses. A self-administered questionnaire containing four parts; the present study showed that less than half of studied nurses had moderate missed care and moderate team work. According to workload perception, about half of studied nurses had moderate workload There was highly significant positive correlation between workload and missed care at p value <0.01. While, there was highly significant negative correlation between teamwork with workload and missed care at p value <0.01. The study recommends that: Nurse managers must monitor missed care and workload daily to ensure proper sizing of staff and safety of care, Educational workshop for nurses about teamwork skills and coping mechanism related workload, Further researches about predictive factors affecting nursing missed care the study concluded

that There was highly significant positive correlation between workload and missed care at p value <0.01. While there was highly significant Negative correlation between teamwork with workload and missed care at p value <0.01. The study recommends that: Nurse Managers must monitor missed care and workload daily to ensure proper.

Sizing of staff and safety of care, educational workshop for nurses about teamwork skills and coping mechanism related workload, further research about predictive factors affecting nursing missed care.(111)

In this study, The Relationship among Workload, Teamwork, and Missed Nursing Care at Intensive Care has been investigated. While we intend to investigate about Assessing determining factors of missed nursing care in selected hospitals of Abuja city in Nigeria: 2024

5.Fatemeh amrollahi mishavan aconducted a study by 9th September 2022 about Factors affecting missed nursing care in Iranian hospitals This review aimed to explain the factors affecting MNCs Screening on the studies was done in four stages and the final studies were selected based on the inclusion and exclusion criteria. Editorial, letter, and commentary studies were not considered. Finally, 34 studies were reviewed, and eight main themes were obtained, including personal and job characteristics of nurses, nurses' workload, job satisfaction, available resources, professional communication and teamwork, work environment, management performance, and technology in caregiving. A wide range of organizational and individual factors contribute to MNC formation. The information obtained from this study can be beneficial for nurse managers to control the level of MNC and its consequences. The Results show the level of MNC is lower in a professional work environment. The professional work environment helps nurses to be at

the highest level of the nursing activity, to have effective team performance, and to call resources quickly Besides, managers can reduce MNC by appropriate allocation of resources, improving nurses' work environment, and reducing the non-nursing duties of nurses and the conclusion is MNC is a pervasive problem in health care systems around the world and a wide range of organizational and individual factors contribute to it. This review provides information on the association between MNCs and related factors. The information obtained from this study can be helpful for nurses and nurse managers to control the level of MNC, as the reduction of MNC directly leads to a reduction in patient-related accidents as well as an increase in patient satisfaction as the main goal of the health system.(112)

6. Another study was conducted on 14th March 2023 about Missed nursing care in acute care hospital settings in low-income and middle-income countries by Abdulazeez Imam We conducted a systematic review searching Medline, Embase, Global Health, WHO Global index medicus and CINAHL from their inception up until August 2021. Publications were included if they were conducted in an LMIC and reported on any combination of categories, reasons and factors associated with missed nursing care within in-patient settings. We assessed the quality of studies using the Newcastle Ottawa Scale. The result is Thirty-one studies met our inclusion criteria. These studies were mainly cross-sectional, from upper middle-income settings and mostly relied on nurses' self-report of missed nursing care. The measurement tools used, and their reporting were inconsistent across the literature. Nursing care most frequently missed were non-clinical nursing activities including those of comfort and communication.

> Inadequate personnel numbers were the most important reasons given for missed care and the study concluded that Missed nursing care is reported for all key nursing task areas threatening care quality and safety. Data suggest nurses' priorities technical activities with more non-clinical activities missed, this undermines holistic nursing care. Improving staffing levels seems a key intervention potentially including sharing of less skilled activities. More research on missed nursing care and interventions to tackle it to improve quality and safety is needed in LMIC. (113)

In this study, missed nursing care in acute care hospital settings in low-income and middle-income countries was investigated While we intend to investigate about Assessing determining factors of missed nursing care in selected hospitals of Abuja city in Nigeria: 2024

7. A cross-sectional study was done about Missed nursing care, non-nursing tasks, staffing adequacy, and job satisfaction among nurses in a teaching hospital in Egypt by Marwa Hammad1, on 20thJuly 2021 The study was conducted among 50 units at 1762-beds teaching Hospital in Alexandria that employs 1211 nurses in inpatient areas. A sample of 553 nurses were interviewed using the MISSCARE and the N4CAST survey. The MISSCARE survey measured the amount of missed nursing care (MNC) that was experienced on the last worked shift by each nurse. The N4CAST survey was used to collect data about level of non-nursing work carried out by nurses and the nurses' job satisfaction. The result shows that the overall mean score for the missed nursing care was 2.26 ± 0.96 out of 5, with highest mean score attributed to "Planning" and lowest mean score attributed to "Assessment and Vital

Signs" (2.64 and 1.96, respectively). Missed nursing care was significantly associated with number of patients admitted and cared for in the last shift and perceived staffing adequacy. Almost all non-nursing care tasks and most of satisfaction elements showed negative weak correlation with overall missed nursing care. And finally, the study concluded that Missed Nursing Care is common in study hospital which may endanger patient safety. MNC Missed Nursing Care is positively associated with nursing adequacy. There is no association between MNC and neither nurses' job satisfaction nor non-nursing tasks. Nursing leaders should monitor missed nursing care and the environmental and staffing conditions associated with it to design strategies to reduce such phenomena. (27)

In this study, missed nursing care, non-nursing tasks, staffing adequacy, and job satisfaction among nurses in a teaching hospital in Egypt was investigated While we intend to investigate about Assessing determining factors of missed nursing care in selected hospitals of Abuja city in Nigeria: 2024

8. Another descriptive study was done by Faustinnteziman on 21st April 2022 about Determinants of Missed Nursing Care by Nurses at University Teaching and Referral Hospital (Chuk) of Kigali in Rwanda The aim of this study was to determine the levels, types and the factors that influence Missed Nursing Care activities by nurses at the University Teaching and Referral Hospital of Kigali in Rwanda This study was cross-sectional descriptive correlation design. The researchers used complete coverage method of sampling technique to obtain participants. The researchers used MISSCARE survey questionnaires for data collection with. The data was analyzed using SPSS version 26.0. Frequencies, crosstabulation, chi-square and

multinomial logistic regression were computed to find the percentage, associations and effects between independent and dependent variables at 95% confidence interval and significance level of 5% Results Two hundred and one (201) nurses took part in the study, 56.7% were female and 46.3% were male. The majority were aged 31–40 years, 54.2% had Diploma, 42.3% had bachelor while 3.5% had master's degree, and 75.6% were married. The mean experience in nursing and in current unit were 13years and 7years respectively. Missed nursing care was regarded as moderate as perceived by 46.73% of respondents. The study showed that replying to call alarms within 5 minutes, joining interdisplinary whenever held, documentation of necessary information, monitoring intake and output, and patient health education were always being missed by nurses. Institutional unit type (χ^2 (6, N = 201) = 63.31, p = 0.001), gender (χ^2 (2, N = 201) = 10.35, p = 0.006), orientation (χ^2 (2, N = 201) = 9.51, p = 0.009), satisfaction with salary (χ^2 (2, N = 201) = 8.25, p = 0.016), level of education (χ^2 (2, N = 201) = 10.34, p = 0.006), and ward size were the most statistically significant factors associated with level of missed nursing care activities. Discussion Majority, 46.73% of nurses viewed the level of missed nursing care at the hospital as moderate. The top five nursing activities that have always been missed were replying to call alarms within 5 minutes, joining interdisplinary whenever held, documentation of necessary information, monitoring intake and output, and patient health education. The study findings revealed that gender, level of education, and the department in which the nurses work were the most statistically significant factors contributing to missed nursing care at the hospital. The conclusion is the study findings showed that level of missed nursing care was moderate, and it was different across the hospital. The findings also showed that there was top five missing nursing care that are aways missing affected by various factors.(114)

In this study, Determinants of Missed Nursing Care by Nurses at University Teaching and Referral Hospital (Chuk) of Kigali in Rwanda was investigated while we intend to investigate about Assessing determining factors of missed nursing care in selected hospitals of Abuja city in Nigeria: 2024

9. Monir Nobahar conducted another study about the relationship between teamwork, moral sensitivity, and missed nursing care in intensive care unit nurses on 26th july 2023 in iran it is a descriptive cross-sectional study that was conducted on a total of 200 ICU nurses working at teaching hospitals affiliated to Semnan and Shahroud Universities of Medical Sciences, Semnan, Iran in 2022. Sampling was conducted using the census method. Data collection was conducted using a demographic checklist, the TeamSTEPPS Team Perception Questionnaire (T-TPQ), Lützén Moral Sensitivity Questionnaire (L-MSQ), and Kalisch and Williams Missed Nursing Care (MISSCARE) Survey. The examination of the relationship between the three variables was conducted using Pearson's correlation coefficient and multiple regression analysis. The results shows that the mean and standard deviation of teamwork, moral sensitivity, and missed nursing care was 3.47 ± 0.69, 64.19 ± 13.43, and 55.04 ± 34.10, respectively. The variable of teamwork had a significant positive relationship with moral sensitivity ($p < .001$) and a significant negative relationship with missed nursing care ($p < .001$). Teamwork was also a positive predictor of moral sensitivity ($p < .001$) and a negative predictor of missed nursing care ($p < .001$). The clinical experience of ICU nurses was a positive predictor of teamwork ($p = .01$) and a negative predictor of missed nursing care ($p = .001$). The age of ICU nurses was a positive predictor

of moral sensitivity (p = .001) and a negative predictor of missed nursing care (p = .008).and it conclusion says that the findings showed that a higher level of teamwork was associated with increased moral sensitivity and reduced missed nursing care among ICU nurses. Therefore, focusing on planning interventions on teamwork improvement can lead ICU nurses to improve moral sensitivity, lower missed nursing care, and promote the quality of patient care.(115)

In this study, the relationship between teamwork, moral sensitivity, and missed nursing care in intensive care unit nurses was investigated while we intend to investigate about Assessing determining factors of missed nursing care in selected hospitals of Abuja city in Nigeria: 2024

Summary of Review of the Literature:

A review of the literature reveals that only a limited number of studies have examined the factors contributing to missed nursing care in Intensive Care Units globally. Unfortunately, this phenomenon has received little attention in Nigeria. To date, no research has specifically investigated missed nursing care within Nigerian ICUs, resulting in a lack of understanding regarding the scope of the issue and its potential consequences.

chapter 3

RESEARCH DESIGN AND METHOD.

3.1 Study Design:

A **cross-sectional descriptive design** was employed in this study. The target population consisted of all ICU nurses working in 2 selected hospitals in Abuja, the capital city of Nigeria. Eligible participants were those who held a bachelor's degree in nursing and had at least one year of experience in the Intensive Care Unit. A **quantitative approach** was adopted, as it allowed the researcher to collect numerical data, perform statistical analyses, and identify patterns and trends related to missed nursing care among ICU nurses in Abuja.

3.2 Study Setting:

The research environment is selected hospitals of Abuja city. Abuja is the capital city of Nigeria and it is home to several prominent hospitals that provide quality healthcare services to its residents. Some of the well-known hospitals in Abuja include:

1. Garki Hospital Abuja: Situated in the Garki area of the city, this hospital is renowned for its state-of-the-art facilities and skilled medical professionals. It has a well-equipped ICU to handle emergency cases.
2. Wuse Hospital: Located in the Wuse district, this hospital offers a range of medical services and has an ICU equipped with essential life-saving equipment.

Some of The above hospitals have 2 icu ward general icu and trauma icu while others get one general icu

3.3 Study Population:

The study population consisted of all the nurses working in ICU of garki hospital, Wuse hospital.

3.4 Study samples: The study sample were all nurses working in ICU department of garki hospital, Wuse hospital, The total number of samples from all the hospitals are 200 nurses that have at least a year of experience of working in the ICU ward and have a bachelor degree

3.5 INCLUSION / EXCLUSION CRITERIA:

Inclusion:

1. Having a bachelor's degree of nursing
2. Having at least one year of experience in intensive care unit
3. Consent to participate in the study

Exclusion

1. Having a completed questionnaire
2. 10% of the questionnaires not completed

3.6 Sampling method

The investigation relied on a census sampling method. The project was done to ensure that intensive care unit nurses from the above mentioned hospitals in Abuja city of Nigeria were chosen for this study. Nurses who worked in intensive care unit were interviewed, the purpose of this study was clarified to them in greater detail, and they were asked to participate.

3.7 Sample

All nurses working in the ICU departments of the mentioned 2 hospitals who meet the entry criteria have been included in the study through census.

3.8 Data collection process:

After obtaining the necessary permits from the university and selected hospitals, the researchers went to the hospital for sampling. The participants were included in the study after obtaining informed consent and determining their eligibility according to the inclusion criteria. Data collection was done between December 2023 and May 2024 sample used.

3.9 Instruments:

In this research, 3 self-report questionnaires including demographic characteristics and MISSCARE questionnaire which consists of two part A and B.

The questionnaire is a standardized tool designed by Kalish in 2006.

Missed Nursing Care Questionnaire: Designed by Kalisch in 2006 to determine the causes of missed nursing care and psychometrically validated by the same researcher in 2009 (67). The MISSCARE questionnaire has two parts, Parts A and B. Part A, which was used in this study, addresses factors related to missed nursing care, which includes 24 nursing activities such as patient movement, turning, assessment, education, discharge planning, and medication administration, which are usually performed in the acute care setting. The response to each item of this questionnaire is in the form of a 5-point Likert scale including: I never forget (score 1), I rarely forget (score 2), I often forget (score 3), I frequently forget (score 4), and I always forget (score 5). The range of scores for this questionnaire is between 24 and 120, with a higher score indicating a higher possibility of forgetting care (40). The validity of this tool in Iran was evaluated by Khajoui et al. and its reliability was calculated as 0.91. The evaluation and reliability of this questionnaire in the study of Javad Ebadi et al. was calculated as 0.88 using Cronbach's alpha .

This questionnaire also has four subscales, which include assessment, interventions and personal care, interventions and primary care, and planning (68). The assessment subscale includes care: assessment of vital signs as ordered, monitoring absorption and excretion, monitoring glucose as ordered, assessing the patient in each shift, re-assessment according to the patient's condition, care of the central venous site

according to the hospital's policy, hand washing for nurses, and recording all necessary data. The Interventions and Personal Care subscale includes questions on: administering medications within 30 minutes of the scheduled time, fulfilling PRN medication requests within 15 minutes of the request, checking medication effectiveness, educating the patient's family about health, assisting with patient needs within 5 minutes of the nurse call, and responding to patient toileting needs within 5 minutes of the request. The Interventions and Primary Care subscale includes questions on: setting a meal plan for patients who are fed orally, caring for the patient's wound, feeding the patient while the food is still warm, bathing the patient/skin/wound care, caring for the patient's mouth, walking 3 times a day or as directed, and changing the patient's position every 2 hours (rotating). The Planning subscale includes: educating the patient about the discharge, educating the patient about the disease, diagnostic tests and studies, and attending interdisciplinary conferences at any time

The demographic questionnaire is designed to gather information about the participant’s background characteristics, such as age, gender, education level, marital status, and income, etc. This questionnaire helps to establish a profile of the participants and provides important contextual information for the study. The MISSCARE questionnaire is based on the Health Belief Model, which is a widely used to assesses participants' attitudes, beliefs, and perceptions related MNC.

By utilizing these two questionnaires, the study collects comprehensive data on the participants' demographic characteristics and their attitudes and beliefs regarding MNC. This combination of instruments allows for a thorough exploration of the factors that influencing in missed nursing care.

THE TOOL WAS A THREE-PART QUESTIONNAIRE:

3.9.1 Part 1: Socio-demographic form

Socio-demographic form was used to collect specific data from ICU nurses (personal information). The Information such as age, gender, job position, marital status, employment status, shift type, work experience and work history in the emergency department were collected by the demographic information form.

3.9.2. Part II: MISSCARE questionnaire

The MISSCARE questionnaire had 2 parts (parts A and B). Part A was related to 24 nursing activities that are usually performed in an acute care setting

3.9.3 Part III: PART TWO OF MISSCARE questionnaire

Part B was related to 17 potential reasons for missed care in three areas of human resources, communication, and material resources. Scoring system was based on 4-point Likert's scale ranging from main causes (score=4), moderate causes (score=3), mild causes (score=2) and causes of missed care (score=1). A higher score indicated the greater importance of that item in the missed care.

3.10 Validity and reliability

The validity of MISSCARE questionnaire was determined through content validity and the opinionsof 10 faculty members of School of Nursing and Midwifery, Tehran University of Medical Sciences. The reliability of MISSCARE questionnaire was assessed by Cronbach's alpha method (to examine the internal correlation of the questions) and test re-test (to assess the reproducibility). Cronbach's alpha coefficient was 0.737 for communication, 0.771 for human resources, and 0.734 for material resources.

It was also 0.743 for the whole questionnaire. The correlation coefficient for communication, human resources and material resources was 0.951, 0.902, and 0.947, respectively. It was also 0.968 for the whole questionnaire

The reliability of the study instrument was assessed in 20 nurses who were not included in the final analysis.

3.11 Statistical data analysis:

Data analysis was carried out by SPSS software version 16. Frequency distribution tables were used for the qualitative variables, and numerical indices of minimum and maximum, as well as mean and standard deviation were used for the quantitative variables

3.12 Ethical consideration:

Ethical approval was obtained from the Institutional Research Ethics Committee of the Faculty of Nursing, Midwifery, and Rehabilitation, Tehran University of Medical Sciences International Campus on 1402/11/10. Participants were assured that their participation was entirely voluntary and that they would not be penalized for opting out. Additionally, they were assured that all information obtained would be treated with the utmost confidentiality. The results of the research will also be provided to all hospitals in Abuja.

3.13 STRENGTHS AND LIMITATIONS OF THE STUDY:

This research investigates about FACTORS OF MISSED NURSING CARE in intensive care unit of Abuja hospitals and has no limitations so far. because data collection is based on self-report, some missed care may not be reported by nurses

Limitations: The cross-sectional design limits causal inferences, and self-reporting may introduce bias. Future research should include observational methods for validation.

chapter 4

Table 1. Demographic characteristics of the nurses participating in the study (n=200)

Variables		**Number (%)**
Age	<25	47 (23.5%)
	25-34	91 (45.5%)
	35-44	62 (31.0%)
Gender	female	147 (73.5%)
	Male	53 (26.5%)
Nursing Degree	BSN	190 (95.0%)
	MSN or higher	10 (5.0%)
Type of shift	Variable	94 (47.2%)
	Day	48 (24.1%)
	Evening	40 (20.1%)
	Night	17 (8.5%)
Working hours per week	<30	65 (32.5%)
	≥30	135 (67.5%)
Overall work experience	≤6 month	22 (11.0%)
	6 month-2 yrs	70 (35.0%)
	2-5 yrs	74 (37.0%)
	5-10 yrs	27 (13.5%)
	≥10	7 (3.5%)

Working experience in current role	≤6 month	63 (31.5%)
	6 month-2 yrs	92 (46.0%)
	2-5 yrs	33 (16.5%)
	5-10 yrs	7 (3.5%)
	≥10	5 (2.5%)
Job title	Staff Nurse (RN)	194 (97.0%)
	Nurse Manager, Assistant Manager	6 (3.0%)
Missed shifts/days in past 3 months	None	61 (30.5%)
	1	59 (29.5%)
	2-3	70 (35.0%)
	4-6	10 (5.0%)
Overtime hours per week	0	53 (26.5%)
	1-12	89 (44.5%)
	>12	58 (29.0%)
Plan on leaving current position	No intention	185 (92.5%)
	In next year	15 (7.5%)
Current position satisfaction	Satisfied	97 (48.5%)
	Neutral	85 (42.5%)
	Dissatisfied	18 (9.0%)
Satisfaction of teamwork	Satisfied	72 (36.0%)

	Neutral	109 (54.5%)
	Dissatisfied	19 (9.5%)
Satisfaction of being a nurse	Satisfied	74 (31.0%)
	Neutral	109 (54.5%)
	Dissatisfied	17 (8.5%)

Based on the results reported in Table 1, the largest age group of nurses falls within the 25 to 34-year range (45.5%), while 23.5% are under 25, and 31% are between 35 and 44 years old. The majority of nurses were female (73.5%), and 95% of the nurses hold a bachelor's degree, and 5% have a postgraduate degree. In the area of job roles, an overwhelming majority of nurses (97%) work as Staff Nurses (RNs), with only 3% holding managerial or assistant nursing positions. Concerning weekly work hours, 67.5% of nurses work more than 30 hours per week, while 32.5% work fewer than 30 hours. Regarding shift types, 47.2% work variable shifts, 24.1% work day shifts, 20.1% work evening shifts, and only 8.5% work night shifts. In terms of work experience, most nurses have between 2 to 5 years (37%) and 6 months to 2 years (35%) of experience, while only 3.5% have more than 10 years of experience. Regarding experience in their current position, 46% have been in their current role for 6 months to 2 years, and 31.5% for less than 6 months. These results indicate that most nurses are relatively young, with moderate work experience, and the majority work variable shifts with long hours.

Table 2. Descriptive frequency of questions related to missed nursing care among nurses (n=199).

Missed Nursing Care		Never	Rarely	Occasionally	Frequently	Always	Mean ± SD
		Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	
1	Full documentation of all necessary data	35 (17.6)	81 (40.7)	73 (36.7)	8 (4.0)	2 (1.0)	2.30 ± 0.84
2	IV site care and assessment according to hospital policy	16 (8.0)	66 (33.2)	96 (48.2)	21 (10.6)	0 (0.0)	2.61 ± 0.78
3	Monitoring intake/output	19 (9.5)	69 (34.7)	78 (39.2)	28 (14.1)	5 (2.5)	2.65 ± 0.92
4	Vital signs assessed as ordered	40 (20.1)	59 (29.6)	64 (32.2)	32 (16.1)	4 (2.0)	2.50 ± 1.04
5	Focused reassessment according to patient	11 (5.5)	60 (30.2)	110 (55.3)	18 (9.0)	0 (0.0)	2.68 ± 0.71
6	Hand washing	62 (31.2)	72 (36.2)	54 (27.1)	3 (1.5)	8 (4.0)	2.11 ± 099
7	Bedside glucose monitoring as ordered	16 (8.0)	52 (26.1)	106 (53.3)	24 (12.1)	1 (0.5)	2.71 ± 0.80
8	Patient assessments performed each shift	38 (19.1)	26 (13.1)	109 (54.8)	24 (12.1)	2 (1.0)	2.63 ± 0.96
9	Assess effectiveness of medications	33 (16.6)	46 (23.1)	87 (43.7)	32 (16.1)	1 (0.5)	2.61 ± 0.96
10	PRN medication requests acted on within 5 minutes	19 (9.5)	58 (29.1)	104 (52.3)	18 (9.0)	18 (8.0)	2.61 ± 0.78
11	Medications administered within 30 minutes before or after scheduled time	27 (13.6)	83 (41.7)	65 (32.7)	24 (12.1)	0 (0.0)	2.43 ± 0.87
12	Assist with toileting needs within five minutes of request	24 (12.1)	43 (21.6)	79 (39.7)	39 (19.6)	14 (7.0)	2.88 ± 1.08
13	Response to call light is provided within five minutes	22 (11.1)	62 (31.2)	100 (50.3)	14 (7.0)	1 (0.5)	2.55 ± 0.80

14	Emotional Support to patient and/or family	24 (12.1)	17 (8.5)	81 (40.7)	51 (25.6)	26 (13.1)	3.19 ± 1.14
15	Ambulation three times per day or as ordered	17 (8.5)	51 (25.6)	94 (47.2)	37 (18.6)	0 (0.0)	2.76 ± 0.85
16	Turning patient every two hours	18 (8.0)	54 (27.1)	94 (47.2)	32 (16.1)	1 (0.5)	2.72 ± 0.85
17	Mouth Care	26 (13.1)	27 (16.6)	85 (42.7)	36 (18.1)	25 (12.6)	3.04 ± 1.16
18	Feeding patient when the food is still warm	27 (13.6)	32 (16.1)	89 (44.7)	44 (22.1)	7 (3.5)	2.86 ± 1.02
19	Patient bathing/skin care	29 (14.6)	26 (13.1)	75 (37.7)	44 (22.1)	25 (12.6)	3.05 ± 1.20
20	Skin/wound care	38 (19.1)	62 (31.2)	80 (40.2)	18 (9.0)	1 (0.5)	2.41 ± 0.91
21	Setting up meals for patients who feed themselves	25 (12.6)	46 (23.1)	79 (39.7)	42 (21.1)	7 (3.5)	2.80 ± 1.02
22	Patient education	22 (11.1)	75 (37.7)	78 (39.2)	22 (11.1)	2 (1.0)	2.53 ± 0.86
23	Attend interdisciplinary care conferences whenever held	26 (13.1)	49 (24.6)	98 (49.2)	25 (12.6)	1 (0.5)	2.63 ± 0.88
24	Ensuring discharge planning	25 (12.6)	33 (16.6)	106 (53.3)	26 (13.1)	9 (4.5)	2.80 ± 0.97

According to Table 2, the most missed nursing care among nurses was related to "Emotional Support to patient and/or family " and " Patient bathing/skin care " respectively.

Also, the least missed nursing care was related to “hand washing” and “Full documentation of all necessary data”, respectively.

Table 3. Descriptive frequency of subscales related to missed nursing care among nurses

Missed Nursing Care And Its Subscales	min	max	Mean ± SD	On 1-5 basis score		
				min	max	Mean ± SD
Patient Assessment (8-40)	11	35	23.39 ± 5.94	1	4	2.92 ± 0.74
Intervention Individual Needs (6-30)	6	22	15.61 ± 3.94	1	4	2.60 ± 0.65
Intervention Basic Care (7-35)	7	29	19.63 ± 5.93	1	4	2.8 ± 0.84
Planning (3-15)	3	12	7.96 ± 2.09	1	4	2.65 ± 0.7
Total Missed Nursing Care (24-120)	27	94	66.59 ± 16.75	1	4	2.77 ± 0.69

According to the findings in Table 3, the mean scores of missed nursing care was at a moderate level with a Mean ± SD 2.77 ± 0.69.

Also, among the subscales of missed nursing care, “Intervention Individual Needs” had the lowest rate of missed care with a Mean ± SD of 2.60 ± 0.65, and “Patient Assessment” had the highest rate of missed care with a Mean ± SD of 2.92 ± 0.74.

Table 4. Descriptive frequency of questions related to reasons for missed nursing care among nurses (n=199).

Reasons For Missed Nursing Care		Not a reason	Minor	Moderate	Significant	Mean ± SD
		Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	
1	Unbalanced patient assignments	24 (12.1)	58 (29.1)	93 (46.7)	24 (12.1)	2.59 ± 0.85
2	Inadequate hand-off from previous shift	13 (6.5)	55 (27.6)	104 (52.3)	27 (13.6)	2.73 ± 0.77
3	Other departments did not provide the care needed	14 (7.0)	67 (33.7)	97 (48.7)	21 (10.6)	2.63 ± 0.76
4	Lack of back up support from team members	22 (11.1)	45 (22.6)	95 (47.7)	37 (18.6)	2.74 ± 0.88
5	Tension or communication breakdowns with other ancillary/support departments	36 (18.1)	54 (27.1)	76 (38.2)	33 (16.6)	2.53 ± 0.97
6	Tension or communication breakdowns within the nursing team	20 (10.1)	46 (23.1)	105 (52.8)	27 (13.6)	2.70 ± 0.82
7	Tension or communication breakdowns with the medical staff	24 (12.1)	54 (27.1)	93 (46.7)	28 (14.1)	2.63 ± 0.87
8	Nursing assistant did not communicate that care was not provided	48 (24.1)	58 (29.1)	65 (32.7)	28 (14.1)	2.37 ± 1.00
9	Caregiver off unit or unavailable	18 (9.0)	40 (20.1)	41 (20.6)	100 (50.3)	3.12 ± 1.02
10	Medications were not available when needed	16 (8.0)	11 (5.5)	39 (19.6)	133 (66.8)	3.45 ± 0.91
11	Supplies/ equipment not available when needed	20 (10.1)	22 (11.1)	58 (29.1)	99 (49.7)	3.19 ± 0.99
12	Supplies/ equipment not functioning properly	14 (7.0)	17 (8.5)	57 (28.6)	111 (55.8)	3.33 ± 0.90
13	Inadequate number of staff	14 (7.0)	8 (4.0)	58 (29.1)	119 (59.8)	3.42 ± 0.86
14	Urgent patient situations	11 (5.5)	50 (25.1)	63 (31.7)	75 (37.7)	3.02 ± 0.92

15	Unexpected rise in patient volume and/or acuity on the unit	24 (12.1)	35 (17.6)	61 (30.7)	79 (39.7)	2.98 ± 1.03
16	Inadequate number of assistive and/or clerical personnel	9 (4.5)	47 (23.6)	95 (47.7)	48 (24.1)	2.91 ± 0.80
17	Heavy admission and discharge activity	10 (5.0)	28 (14.1)	31 (15.6)	130 (65.3)	3.41 ± 0.91

According to Table 4, the most reasons for missed nursing care according to nurses perspective was related to “Medications were not available when needed” and " Inadequate number of staff " with a Mean ± SD of 3.45 ± 0.91 and 3.42 ± 0.86, respectively.

Also, the least reasons for missed nursing care according to nurses perspective was related to was related to “Nursing assistant did not communicate that care was not provided” and “Tension or communication breakdowns with other ancillary/support departments ” with a Mean ± SD of 2.37 ± 1.00 and 2.53 ± 0.97, respectively.

Table 5. Descriptive frequency of subscales related to reasons for missed nursing care among nurses.

Reasons Missed Nursing Care And Its Subscales	min	max	Mean ± SD	On 1-5 basis score		
				min	Max	Mean ± SD
Communication (9-36)	11	36	24.05 ± 5.61	1.22	4	2.67 ± 0.62
Material Resources (3-12)	3	12	9.97 ± 2.45	1	4	3.32 ± 0.81
Labor resources (5-20)	7	20	15.74 ± 3.33	1.40	4	3.14 ± 0.66
Total Reasons For Missed Nursing Care (17-68)	23	68	49.77 ± 10.26	1.35	4	2.92 ± 0.60

According to the findings in Table 5, scores of reasons for missed nursing care according to nurses perspective was at a moderate level with a Mean ± SD 2.92 ± 0.60.

Also, among the subscales of reasons for missed nursing care, “Communication” had the lowest rate causing missed care with a Mean ± SD of 2.67 ± 0.62, and “Material Resources” had the highest rate causing missed care with a Mean ± SD of 3.32 ± 0.81 according to nurses perspective.

Table 6. The relationship between participant's age with Missed Nursing Care (n=199).

		Missed Nursing Care				
Demographic Characteristics		Patient Assessment (8-40)	Intervention Individual Needs (6-30)	Intervention Basic Care (7-35)	Planning (3-15)	Overall Missed Nursing Care (24-120)
		Mean ± SD	**Mean ± SD**	**Mean ± SD**	**Mean ± SD**	**Mean ± SD**
Age	<25	25.60 ± 3.56	17.57 ± 2.74	21.04 ± 4.10	8.91 ± 7.51	73.13 ± 9.73
	25-34	22.17 ± 6.22	15.14 ± 3.94	18.91 ± 5.99	7.51 ± 2.13	63.73 ± 65.77
	35-44	23.48 ± 6.54	14.79 ± 4.25	19.60 ± 6.84	7.90 ± 2.24	65.77 ± 18.90
	Test result	**F=5.37** p=0.005	**F=8.37** p<0.001	F=2.01 p=0.136	**F=7.38** p<0.001	**F=5.16** p=0.007

Note: acceptable p value is p<0.05.

According to the findings in Table 6, it was determined that nurses with an average age of less than 25 years missed more nursing care than other nursing groups.

It was found that nurses under 25 years old had more missed nursing care in the areas of patient assessment, Intervention Individual Needs and planning than other nurses.

It was also determined that there was no statistically significant difference in the scores of missed nursing care between other age groups.

Table 7. The relationship between participant's Gender with Missed Nursing Care (n=199).

		Missed Nursing Care				
Demographic Characteristics		Patient Assessment (8-40)	Intervention Individual Needs (6-30)	Intervention Basic Care (7-35)	Planning (3-15)	Overall Missed Nursing Care (24-120)
		Mean ± SD	**Mean ± SD**	**Mean ± SD**	**Mean ± SD**	**Mean ± SD**
Gender	Male	22.17 ± 5.87	15.10 ± 3.57	18.69 ± 5.38	7.44 ± 1.99	63.40 ± 15.93
	Female	23.82 ± 5.93	15.79 ± 4.06	19.96 ± 6.10	8.15 ± 2.11	67.71 ± 16.94
	Test result	t=1.72 df=197 p=0.087	t=1.09 df=197 p=0.277	t=1.32 df=197 p=0.187	**t=2.10** df=197 p=0.036	t=1.72 df=197 p=0.111

Note: acceptable p value is $p<0.05$.

According to the findings of table 7, no statistically significant difference was found between gender and missed nursing care.

It was also found that female nurses had more missed nursing care on planning subscale than male nurses.

Table 8. The relationship between participant's Educational Level with Missed Nursing Care (n=199).

		Missed Nursing Care				
Demographic Characteristics		Patient Assessment (8-40)	Intervention Individual Needs (6-30)	Intervention Basic Care (7-35)	Planning (3-15)	Overall Missed Nursing Care (24-120)
		Mean ± SD	**Mean ± SD**	**Mean ± SD**	**Mean ± SD**	**Mean ± SD**
Educational Level	BSN	23.54 ± 5.81	15.74 ± 3.87	19.76 ± 5.75	8.02 ± 2.11	67.06 ± 16.35
	MSN or higher	21.00 ± 7.62	13.58 ± 4.62	17.58 ± 8.37	7.08 ± 1.62	59.25 ± 21.63
	Test result	t=1.43 df=197 p=0.152	t=1.84 df=197 p=0.066	t=0.88 df=197 p=0.393	t=1.50 df=197 p=0.134	t=1.57 df=197 p=0.118

Note: acceptable p value is p<0.05.

According to the findings of table 8, It was found that no statistically significant differences were observed between missed nursing care and its' subscales with educational level.

Table 9. The relationship between participant's Overall work experience with Missed Nursing Care (n=199).

Demographic Characteristics		Missed Nursing Care				
		Patient Assessment (8-40)	Intervention Individual Needs (6-30)	Intervention Basic Care (7-35)	Planning (3-15)	Overall Missed Nursing Care (24-120)
		Mean ± SD	**Mean ± SD**	**Mean ± SD**	**Mean ± SD**	**Mean ± SD**
Overall work experience	≤6 month	23.68 ± 4.45	16.32 ± 2.91	18.27 ± 5.29	8.14 ± 2.29	66.41 ± 13.35
	6 month-2 yrs	22.09 ± 4.14	15.60 ± 4.02	18.44 ± 5.86	7.44 ± 2.27	62.57 ± 17.38
	2-5 yrs	23.89 ± 6.21	16.42 ± 4.17	20.58 ± 6.28	8.22 ± 1.90	69.21 ± 17.34
	5-10 yrs	24.78 ± 5.61	15.81 ± 3.47	21.00 ± 4.54	8.00 ± 2.30	69.81 ± 14.49
	≥10	24.86 ± 5.49	14.14 ± 3.28	20.57 ± 7.87	7.96 ± 2.09	67.57 ± 18.10
	Test result	F=1.47 p=0.212	**F=2.43** p=0.049	F=1.88 p=0.114	F=1.75 p=0.140	F=1.73 p=0.144

Note: acceptable p value is p<0.05.

According to the findings of table 9, It was found that no statistically significant differences were observed between missed nursing care with overall work experience.

It was also found that nurses who had more than 10 years of overall experience had more missed nursing care on Intervention Individual Needs subscale than other their Colleagues.

Table 10. The relationship between participant's Type of shift with Missed Nursing Care (n=199).

Demographic Characteristics		Missed Nursing Care				
		Patient Assessment (8-40)	Intervention Individual Needs (6-30)	Intervention Basic Care (7-35)	Planning (3-15)	Overall Missed Nursing Care (24-120)
		Mean ± SD	**Mean ± SD**	**Mean ± SD**	**Mean ± SD**	**Mean ± SD**
Type of shift	Rotational	24.74 ± 3.78	16.61 ± 3.18	21.22 ± 3.94	8.61 ± 1.44	71.18 ± 10.58
	Day	23.46 ± 7.63	15.06 ± 3.99	18.96 ± 7.24	7.63 ± 2.54	65.10 ± 20.55
	Evening	19.68 ± 6.87	13.05 ± 4.80	15.93 ± 7.04	6.50 ± 2.30	55.15 ± 20.06
	Night	24.12 ± 4.52	17.47 ± 1.87	21.18 ± 4.01	8.76 ± 1.30	71.53 ± 10.39
	Test result	**F=7.58** p<0.001	**F=10.50** p<0.001	**F=8.97** p<0.001	**F=12.51** p<0.001	**F=10.48** p<0.001

Note: acceptable p value is p<0.05.

According to the findings of table 10, it was found that nurses with rotating shifts and night shift nurses had more missed care compared to nurses with fixed morning or evening shifts.

They also missed more nursing care in terms of Planning, Intervention Individual Needs, and Intervention Basic Care.

nurses with fix evening shifts experienced less missed care compared to other nurses

Table 11. The relationship between participant's Working hours per week with Missed Nursing Care (n=199).

Demographic Characteristics		Missed Nursing Care				
		Patient Assessment (8-40)	Intervention Individual Needs (6-30)	Intervention Basic Care (7-35)	Planning (3-15)	Overall Missed Nursing Care (24-120)
		Mean ± SD	**Mean ± SD**	**Mean ± SD**	**Mean ± SD**	**Mean ± SD**
Working hours per week	<30	20.88 ± 6.31	14.08 ± 405	16.72 ± 5.97	6.98 ± 2.18	58.66 ± 17.49
	≥30	24.60 ± 5.37	16.35 ± 3.67	21.04 ± 5.40	8.44 ± 1.89	70.43 ± 15.00
	Test result	**t=-4.09** df=197 p<0.001	**t=-3.95** df=197 p<0.001	**t=-4.92** df=197 p<0.001	**t=-4.60** df=197 p<0.001	**t=-4.65** df=197 p<0.001

Note: acceptable p value is p<0.05.

According to the findings of table 11, Nurses working more than 30 hours per week missed more nursing care on all subscales.

Table 12. The relationship between participant's Missed shifts/days in past 3 months with Missed Nursing Care (n=199).

Demographic Characteristics		Missed Nursing Care				
		Patient Assessment (8-40)	Intervention Individual Needs (6-30)	Intervention Basic Care (7-35)	Planning (3-15)	Overall Missed Nursing Care (24-120)
		Mean ± SD	**Mean ± SD**	**Mean ± SD**	**Mean ± SD**	**Mean ± SD**
Missed shifts/days in past 3 months	None	24.18 ± 3.72	16.03 ± 3.21	20.50 ± 3.94	8.20 ± 1.54	68.92 ± 10.82
	1	23.15 ± 6.59	15.64 ± 4.96	19.44 ± 7.42	8.02 ± 2.28	66.25 ± 20.29
	2-3	22.26 ± 6.63	14.94 ± 3.51	18.64 ± 5.92	7.51 ± 2.29	63.36 ± 17.28
	4-6	27.90 ± 5.68	17.50 ± 3.50	22.40 ± 5.25	9.40 ± 1.71	77.20 ± 14.98
	Test result	**F=3.25** p=0.023	F=1.68 p=0.172	F=1.84 p=0.140	**F=2.98** p=0.033	**F=2.66** p=0.049

Note: acceptable p value is $p<0.05$.

According to the findings of table 12, Nurses who missed more than 4-6 shifts/days in past 3 months, received the lowest scores compared to their other colleagues in terms of Planning, Patient Assessment and Overall Missed Nursing Care.

		Missed Nursing Care				
Demographic Characteristics		Patient Assessment (8-40)	Intervention Individual Needs (6-30)	Intervention Basic Care (7-35)	Planning (3-15)	Overall Missed Nursing Care (24-120)
		Mean ± SD	**Mean ± SD**	**Mean ± SD**	**Mean ± SD**	**Mean ± SD**
Job title	Staff Nurse (RN)	23.27 ± 5.94	15.60 ± 3.97	19.50 ± 5.91	7.93 ± 2.10	69.30 ± 16.76
	Nurse Manager, Assistant Manager	27.17 ± 5.23	16.00 ± 3.16	23.67 ± 5.75	9.00 ± 1.67	75.83 ± 14.83
	Test result	t=-1.58 df=197 p=0.114	t=-0.24 df=197 p=0.805	t=-1.70 df=197 p=0.091	t=-1.22 df=197 p=0.221	t=-1.37 df=197 p=0.171

Table 13. The relationship between participant's Job title with Missed Nursing Care (n=199).

Note: acceptable p value is p<0.05.

According to the findings of table 13, there was no statistically differences between missed nursing care and Job title.

Table 14. The relationship between participant's Plan on leaving current position with Missed Nursing Care (n=199).

Demographic Characteristics		Missed Nursing Care				
		Patient Assessment (8-40)	Intervention Individual Needs (6-30)	Intervention Basic Care (7-35)	Planning (3-15)	Overall Missed Nursing Care (24-120)
		Mean ± SD	**Mean ± SD**	**Mean ± SD**	**Mean ± SD**	**Mean ± SD**
Plan on leaving current position	No intention	23.36 ± 5.51	15.88 ± 3.51	20..04 ± 5.46	8.04 ± 1.97	67.59 ± 15.19
	In next year	20.40 ± 9.64	12.33 ± 6.80	14.53 ± 8.79	7.00 ± 3.22	54.27 ± 27.90
	Test result	**t=2.03** df=197 p=0.043	**t=3.43** df=197 p<0.001	**t=3.55** df=197 p<0.001	t=1.86 df=197 p=0.064	**t=3.02** df=197 p=0.003

Note: acceptable p value is p<0.05.

According to the findings of table 14, nurses who were reluctant to leave their current job position provided higher levels of missed care rather than nurses who were willing to leave their current position.

Table 15. The relationship between participant's Current position satisfaction with Missed Nursing Care (n=199).

Demographic Characteristics		Missed Nursing Care				
		Patient Assessment (8-40)	Intervention Individual Needs (6-30)	Intervention Basic Care (7-35)	Planning (3-15)	Overall Missed Nursing Care (24-120)
		Mean ± SD	**Mean ± SD**	**Mean ± SD**	**Mean ± SD**	**Mean ± SD**
Current position satisfaction	Satisfied	21.38 ± 6.95	14.62 ± 4.73	17.77 ± 7.06	7.37 ± 2.53	61.14 ± 20.23
	Neutral	25.17 ± 4.20	16.40 ± 2.75	21.06 ± 4.09	8.54 ± 1.47	71.17 ± 10.85
	Dissatisfied	25.89 ± 2.78	17.22 ± 2.46	22.94 ± 2.28	8.50 ± 0.61	74.56 ± 6.64
	Test result	**F=12.08** p<0.001	**F=6.63** p=0.002	**F=11.00** p<0.001	**F=8.11** p<0.001	**F=11.36** p<0.001

Note: acceptable p value is p<0.05.

According to the findings of table 15, The mean scores of missed nursing care and all its subscales showed that nurses who were satisfied with their current job position had less missed care than other nurses.

No statistical difference was observed in the mean scores of missed care between neutral and dissatisfied nurses.

Table 16. The relationship between participant's Satisfaction of teamwork with Missed Nursing Care (n=199).

		Missed Nursing Care				
Demographic Characteristics		Patient Assessment (8-40)	Intervention Individual Needs (6-30)	Intervention Basic Care (7-35)	Planning (3-15)	Overall Missed Nursing Care (24-120)
		Mean ± SD	**Mean ± SD**	**Mean ± SD**	**Mean ± SD**	**Mean ± SD**
Satisfaction of teamwork	Satisfied	20.10 ± 6.64	13.44 ± 4.13	15.90 ± 6.62	6.76 ± 2.35	56.21 ± 18.69
	Neutral	25.46 ± 4.79	16.88 ± 3.45	21.74 ± 4.52	8.65 ± 1.68	72.73 ± 12.99
	Dissatisfied	24.05 ± 2.97	16.58 ± 1.77	21.74 ± 2.40	8.63 ± 0.83	71.00 ± 5.43
	Test result	**F=21.34** p<0.001	**F=20.35** p<0.001	**F=28.36** p<0.001	**F=22.45** p<0.001	**F=27.55** p<0.001

Note: acceptable p value is p<0.05.

According to the findings of table 16, The mean scores of missed nursing care and all its subscales showed that nurses who were satisfied with teamwork had less missed care than other nurses.

No statistical difference was observed in the mean scores of missed care between neutral and dissatisfied nurses.

Table 17. The relationship between participant's Satisfaction of being a nurse with Missed Nursing Care (n=199).

		Missed Nursing Care				
Demographic Characteristics		Patient Assessment (8-40)	Intervention Individual Needs (6-30)	Intervention Basic Care (7-35)	Planning (3-15)	Overall Missed Nursing Care (24-120)
		Mean ± SD	**Mean ± SD**	**Mean ± SD**	**Mean ± SD**	**Mean ± SD**
Satisfaction of being a nurse	Satisfied	22.37 ± 7.68	14.21 ± 4.71	17.86 ± 7.31	7.51 ± 2.58	61.95 ± 21.37
	Neutral	23.97 ± 4.60	16.36 ± 3.08	20.60 ± 4.75	8.17 ± 1.69	69.10 ± 12.69
	Dissatisfied	24.00 ±4.63	16.82 ± 3.72	21.00 ± 4.43	8.59 ± 1.80	70.41 ± 13.21
	Test result	F=1.69 p=0.186	**F=7.91** p<0.001	**F=5.35** p=0.005	**F=3.09** p=0.048	**F=4.63** p=0.011

Note: acceptable p value is p<0.05.

According to the findings of table 17, The mean scores of missed nursing care showed that nurses who were satisfied with being a nurse had less missed care than other nurses. They also had lower missed care in terms of Intervention Individual Needs, Intervention Basic Care and Planning.

No statistical difference was observed in the mean scores of missed care between neutral and dissatisfied nurses.

chapter 5

5.1 Discussion of Findings

This chapter synthesizes the findings of the study, compares them with existing literature, and discusses their implications for research, education, clinical practice, and management. The study aimed to assess the frequency and causes of missed nursing care (MNC) in intensive care units (ICUs) in selected hospitals in Abuja, Nigeria. The results highlight critical factors contributing to MNC and provide actionable insights for improving patient care quality.The study examined the prevalence, reasons, and demographic factors associated with missed nursing care among 200 nurses. Most nurses were female (73.5%), aged 25–34 (45.5%), and held a BSN (95%). - 67.5% worked ≥30 hours/week, and 47.2% worked variable shifts.

5.1.1 Objective 1: To explore the relationship between demographic/work-related factors and missed nursing care

Key Findings:

- Age: Nurses under 25 missed more care (73.13 ± 9.73) than older groups, particularly in patient assessment and planning ($p < 0.05$).
- Shift Type: Rotating/night shift nurses had higher missed care (71.18 ± 10.58) than fixed-shift nurses ($p < 0.001$).
- Work Hours: Nurses working ≥30 hours/week missed more care (70.43 ± 15.00 vs. 58.66 ± 17.49; $p < 0.001$).
- Job Satisfaction: Satisfied nurses reported less missed care (61.14 ± 20.23) than neutral/dissatisfied peers ($p < 0.001$).

Dall'Ora et al. (2020) linked younger age and inexperience to higher missed care, supporting the current results. Similarly, Stimpfel et al. (2016) associated long shifts and rotating schedules with increased care omissions. However, some studies (e.g., Lake et al., 2020) found no age-related differences, possibly due to uniform training across age groups in those settings.

The age disparity here may reflect the study's focus on early-career nurses, who might lack confidence or time-management skills. The strong correlation between job satisfaction and missed care aligns with Maslow's hierarchy, where dissatisfaction demotivates proactive care delivery.

5.1.2 Objective 2: To examine the extent of missed nursing care among nurses.

The study found that MNC was moderate overall (Mean ± SD: 2.77 ± 0.69). The most frequently missed care activities were emotional support to patients/families (3.19 ± 1.14) and patient bathing/skin care (3.05 ± 1.20), while the least missed were hand washing (2.11 ± 0.99) and full documentation (2.30 ± 0.84).

Similar studies in ICU settings have reported comparable findings. For instance, Falk (2022) found that basic care activities, such as emotional support and hygiene, were frequently missed due to high workload and staffing issues. Another study by Kim and Chae (2022) in neonatal ICUs highlighted that developmental care and patient education were often omitted, emphasizing the impact of time constraints and prioritization. Other findings were reported by Ball et al. (2018), where emotional support and hygiene-related tasks were frequently missed due to time constraints and prioritization of clinical tasks.

- A study by Lake et al. (2016) in U.S. hospitals also identified documentation and hygiene as commonly missed, aligning with our results.

Another similar study by Vranas et al. (2023) was conducted specifically in the ICU setting, finding that the omission of oral care and ambulation were among the most frequently missed tasks. While this study identified emotional support as one of the most missed care, some studies (e.g., Hassona) reported medication administration and patient assessments as the primary omissions. The difference may stem from variations in ICU settings, patient acuity, and cultural factors influencing care priorities in Nigeria compared to other regions

Lucchini et al. (2024) also explored the psychological consequences for nurses. Their longitudinal study demonstrated that frequent episodes of missed care were a primary predictor of increased levels of moral distress, burnout, and intent to leave the profession among critical care nurses. This highlights missed care not only as a patient safety issue but also as a major occupational health and workforce retention problem.

Ball et al. (2023) published a large multi-hospital study across several countries, reinforcing that the primary reasons for missed care remain rooted in system-level resources, specifically inadequate staffing levels and poor team communication. Their findings suggest that interventions targeting individual nurses are less effective than those addressing these macro-level organizational factors.

The discrepancy in documentation rates may stem from variations in electronic health record (EHR) systems or organizational cultures. Hospitals with robust EHR systems might facilitate better documentation, whereas those with manual systems could see higher missed rates. Additionally, the emphasis on infection control in the study setting may explain the lower missed rates for hand hygiene.
The primary reasons for missed care were "Medications were not available when needed" (3.45 $\pm$ 0.91) and "Inadequate number of staff" (3.42 $\pm$ 0.86). The least significant reasons were "Nursing assistant did not communicate care gaps" (2.37 $\pm$ 1.00) and "Tension with ancillary departments" (2.53 $\pm$ 0.97). Among subscales, "Material Resources" (3.32 $\pm$ 0.81) was the leading cause, while "Communication" (2.67 $\pm$ 0.62) had the least impact.

Consistent with this study, Aiken et al. (2014) highlighted staffing shortages and resource unavailability as major contributors to missed care. Similarly, Griffiths et al. (2018) found that communication issues were less impactful compared to systemic resource deficits. However, some studies (e.g., Tubbs-Cooley et al., 2019) reported higher communication-related missed care, possibly due to interdisciplinary conflicts in their settings.

The prominence of material resource issues in this study may reflect systemic challenges in Nigerian hospitals, such as supply chain inefficiencies or budget constraints, which are less pronounced in high-income countries. Additionally, the high workload reported here aligns with global trends but may be exacerbated by local staffing ratios.

The lower impact of communication in this study may reflect effective teamwork protocols or training programs in the sampled hospitals. Conversely, resource shortages are a universal challenge, exacerbated by high patient acuity or budgetary constraints, explaining the alignment with global findings.

5.2 Implications

5.2.1 Research

- Future studies should explore interventions to reduce missed care,

To advance nursing management practices, we propose six research-based initiatives: First, assess mentorship programs' effectiveness in reducing missed care among novice nurses through controlled studies. Second, pilot digital solutions like EHR alerts and smart inventory systems to tackle resource-related care gaps. Third, conduct cross-cultural comparisons to identify systemic factors influencing missed care patterns globally. Fourth, implement longitudinal tracking to measure how policy changes affect care quality over time. Fifth, analyze how specific omissions impact patient recovery and satisfaction metrics care. Sixth, investigate the physiological effects of shift work on clinical performance through sleep studies and cognitive assessments. These evidence-based approaches will help develop targeted, data-driven management strategies while accounting for technological, cultural, and human factors in care delivery. Regular outcome measurements will ensure continuous improvement.

5.2.2 Education

- Nursing curriculum should emphasize time management and emotional support training.

- Simulation-based learning could address skill gaps in patient assessment for novice nurses.

To strengthen nursing care quality, we propose three key interventions based on research findings. First, implement structured mentorship and simulation training for nurses under 25 to enhance their clinical judgment and reduce care omissions in assessment and planning. Second, address the prevalent issue of missed emotional support (Mean ± SD: 3.19 ± 1.14 in Table2) through regular communication skills workshops focusing on empathy and patient interaction techniques. Third, maintain high compliance with critical but often overlooked tasks like documentation and hand hygiene through quarterly refresher training sessions. These targeted educational initiatives should complement existing staffing and resource optimization efforts to create a comprehensive approach to improving care delivery. The programs should be regularly evaluated for

effectiveness and adjusted based on staff feedback and patient outcome measures.

This work significantly benefits nursing education by identifying key factors contributing to missed nursing care, such as inadequate staffing, poor resource management, and low job satisfaction, which can inform targeted training programs for nurses. By understanding these root causes, nursing educators can develop evidence-based workshops and curricula that emphasize effective time management, teamwork strategies, and stress resilience to minimize care omissions. Additionally, the findings highlight the importance of supportive leadership and career development, which can be integrated into leadership training modules for nurse managers. The research also underscores the need for regular audits of medical supplies and equipment, reinforcing the value of resource management in nursing education. By incorporating these insights into both pre-licensure and continuing education programs, nursing schools and professional development initiatives can better prepare nurses to deliver high-quality, uninterrupted care, ultimately improving patient outcomes and healthcare system efficiency.

5.2.3 Clinical Practice

- Hospitals should prioritize staffing adequacy and resource availability to mitigate care omissions.
- Shift stability policies (e.g., limiting rotations) may improve care consistency.

To effectively minimize missed nursing care and enhance patient outcomes, we propose implementing targeted interventions based on research findings. The primary focus should be on optimizing staffing levels, as inadequate nurse-to-patient ratios (Mean ± SD: 3.42 ± 0.86) represent the most significant contributor to missed care. This requires establishing evidence-based staffing standards and deploying supplemental nursing staff during periods of high patient acuity or increased admissions. Concurrently, we must address material resource shortages (Mean ± SD: 3.32 ± 0.81) through systematic improvements to supply chain management, including regular audits of critical supplies and implementation of digital tracking systems for medications and equipment to ensure real-time visibility and timely replenishment. Shift scheduling practices need comprehensive reform, particularly for rotating and night shifts, where care omissions are more prevalent. Recommended measures include limiting the number of consecutive shifts worked and implementing evidence-based fatigue management programs

to maintain nurse alertness and performance. These interventions should be implemented as part of a comprehensive strategy that also incorporates previously identified solutions such as enhanced supervision, teamwork strengthening, and work-life balance initiatives. By systematically addressing these three key areas - staffing adequacy, resource availability, and shift scheduling - healthcare organizations can create an environment that supports consistent, high-quality nursing care delivery while improving both patient outcomes and nurse job satisfaction. Regular monitoring and evaluation of these measures will be essential to assess their impact and guide ongoing quality improvement efforts.

5.2.4 Management

- Leaders should foster job satisfaction through supportive supervision and career development opportunities.
- Regular audits of material resources (e.g., medications, equipment) are critical to prevent care delays.

To improve nursing care quality and reduce instances of missed care, we propose implementing evidence-based management strategies focused on staff satisfaction, resource management, and workload optimization. (table12) Nursing leaders should prioritize supportive supervision and create clear career development pathways to enhance job satisfaction, as research shows satisfied nurses deliver more complete care. Retention strategies such as employee recognition programs and professional growth opportunities should be introduced to maintain an engaged workforce. Regular audits of critical resources including medications and medical equipment must be institutionalized to prevent care delays caused by material shortages. Interdisciplinary collaboration should be strengthened through standardized handoff protocols and regular team-building exercises, given the demonstrated relationship between teamwork satisfaction and reduced missed care. Work schedules require careful monitoring, with weekly hours capped to avoid exceeding 30 hours, which studies associate with increased care omissions. Complementary work-life balance initiatives, such as flexible scheduling and wellness programs, should be implemented to support nurses managing demanding workloads. These combined approaches address the organizational, interpersonal, and systemic factors that contribute to missed care while fostering a more sustainable and effective nursing practice environment.

5.3 Conclusion

This study highlights moderate levels of missed nursing care, driven by resource shortages, workload, and demographic factors. The findings align with global trends but underscore the need for localized solutions, particularly for younger nurses and those in rotating shifts. Addressing these issues through targeted interventions can enhance care quality and nurse retention.

Final Note: By integrating these insights into policy and practice, healthcare systems can move closer to achieving zero missed care and optimal patient outcomes.

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Attachment

1.consent form

Assessing determining factors of missed nursing care in selected hospitals of Abuja city in Nigeria:2024

You are hereby invited in the above research. Information about this research is provided in this service sheet and you are free to participate in this research or not. You do not have to make an immediate decision and to decide on this you can ask your questions from the research team and or with any person.

If you wish to consult. Before signing this consent form, make sure that you understand all the information in this form and all your questions

Answered.

1. I know that the objectives of this research are:

To determine the frequency of missed nursing care in intensive care unit in selected hospitals of Abuja city in 2024

To determine the causes of missed nursing care in intensive care unit in selected hospitals of Abuja city in 2024

2. I know that my participation in this research is completely voluntary and I do not have to participate in this research.

3. I know that even after agreeing to participate in the research, I can at any time, after informing the moderator, get out of the research.

4. The way I collaborate in this research is as follows: If I want to participate in the study, I will first fill in the ethical consent form, then the information questionnaire.

And will complete demographics and information about missed nursing care in ICU wards

5. The potential benefits of my participation in this study are as follows:

Determining the type and causes of missed nursing care can help us manage these cases in providing care to patients and lead to providing better care.

6. Injuries and possible complications of participating in this study are as follows: Participating in this study will not have any complications for me.

7. I know that those involved in this research keep all information about me confidential and only allow the general and group results of this research to be published without mentioning my name and details.

8. I know that the Research Ethics Committee can access my information with The purpose of monitoring my rights.

9. I know that I will not incur any costs of conducting this research interventions.

10. Ms. Fatima Mohammad Badamsi was introduced to me to answer questions and I was told that whenever there is a problem or question in relation to participation it the research, to ask them for consult.

I was provided with his address and landline and mobile phone numbers as follows:

Address: Tohid Square, School of Nursing and Midwifery, Tehran University of Medical Sciences

Landline: 66927171 ext. 545

Mobile: 02349062318172

11. I know that if during and after the research, there was any problems or complications for me, both physical and mental, due to participation in this the cost of treatment and its related compensation will be the responsibility of the facilitator.

12. I know if I have any problems or objections to those involved or the research process, I can contact the Ethics Committee of Tehran University of Medical Sciences.

Research department of Tehran University of Medical Sciences address: Tehran, the intersection of Keshavarz Boulevard and Ghods Street, Central Headquarters Building of Tehran University of Medical Sciences, sixth floor ,Management of Research and Technology, Secretariat of the University Ethics Committee .

Call 81633626 and 81633613 and raise your problem orally or in writing.

13.. I have read and understood the above and based on that I have given my informed consent to participate in this research .

Participant's signature

I …… consider myself obliged to fulfill the obligations

Related to the executor in the above provisions and I commit myself to try to and ensure the rights and safety of the participants in this research.

2.instrument

MISSED NURSING CARE (*The MISSCARE Survey*)
Beatrice J. Kalisch

1. **Name of the unit** you work on: _____

2. I spend **the majority of my working time** on this unit**:** _____ yes _____ no

3. **Highest education level:**

    1) _____ Grade school
    2) _____ High School Graduate (or GED)
    3) _____ Associate degree graduate
    4) _____ Bachelor's degree graduate
    5) _____ Graduate degree

4. **If you are a nurse, what is the highest degree:**

    1) _____ LPN Diploma
    2) _____ RN Diploma
    3) _____ Associate's degree in nursing (ADN)
    4) _____ Bachelor's degree in nursing (BSN)
    5) _____ Bachelor's degree **outside** of nursing
    6) _____ Master's degree (MSN) or higher in nursing
    7) _____ Master's degree or higher **outside** of nursing

5. **Gender:** _____ Female _____ Male

6. **Age:**

1) _____ Under 25 years old (<25)
2) _____ 25 to 34 years old (25-34)
3) _____ 35 to 44 years old (35-44)
4) _____ 45 to 54 years old (45-54)
5) _____ 55 to 64 years old (55-64)
6) _____ Over 65 years old (65+)

7. **Job Title/Role:**

1) _____ Staff Nurse (RN)
2) _____ Staff Nurse (LPN)
3) _____ Nursing Assistant (e.g., nurse aides/tech)
4) _____ Nurse manager, assistant manager (e.g. administrators on the unit)
5) _____ Other [Please specify: _____]

Please turn over to page 2

8. Number of **hours usually worked per week** (check only one)
1) _____ less than 30 hours per week
2) _____ 30 hours or more per week

9. **Work hours** (check the one that is most descriptive of the hours you work)

1) _____ Days (8 or 12 hour shift)
2) _____ Evenings (8 or12 hour shift)
3) _____ Nights (8 or 12 hour shift)
4) _____ Rotates between days, nights or evenings

10. **Experience in your role:**

1) _____ Up to 6 months
2) _____ Greater than 6 months to 2 years
3) _____ Greater than 2 years to 5 years
4) _____ Greater than 5 year to 10 years

5) _____ Greater than 10 years

11. **Experience** on your **current patient care unit:**

1) _____ Up to 6 months
2) _____ Greater than 6 months to 2 years
3) _____ Greater than 2 years to 5 years
4) _____ Greater than 5 year to 10 years
5) _____ Greater than 10 years

12. Which **shift** do you most often work?

1) _____ 8 hour shift
2) _____ 10 hour shift
3) _____ 12 hour shift
4) _____ 8 hour and 12 hour rotating shift
5) _____ Other [Please specify: _____]

13. In the past 3 month, how many hours of **overtime** did you work?

1) _____ None
2) _____ 1-12 hours
3) _____ More than 12 hours

14. In the past 3 months, how many days or shifts did you **miss work** due to illness, injury, extra rest etc. (exclusive of approved days off)?

1) _____ None
2) _____ 1 day or shift
3) _____ 2-3 days or shifts
4) _____ 4-6 days or shifts
5) _____ over 6 days or shifts

Please turn over to page 3

15. Do you plan to **leave your current position?**

1) _____ in the next 6 months
2) _____ in the next year
3) _____ no plans to leave

16. How often do you feel **the unit staffing is adequate?**

1) _____ 100% of the time
2) _____ 75% of the time
3) _____ 50% of the time
4) _____ 25% of the time
5) _____ 0% of the time

17. **On the current or last shift** you worked, how many **patients** did you care for?

_____

17-a. how many **patient-admissions** did you have (i.e. includes transfers into the unit)? _____

17-b. how many **patient-discharges** did you have (i.e. includes transfers out of the unit)? _____

Please check one **response for each question.**

	Very satisfied	**Satisfied**	**Neutral**	**Dissatisfied**	**Very dissatisfied**
18. **How satisfied** are you in your **current position**?					

19. Independent of your current job, **how satisfied** are you with **being a nurse or a nurse assistant?**					
20. **How satisfied** are you with **the level of teamwork on this unit?**					

Please turn over to page 4

Section A — Missed Nursing Care

Nurses frequently encounter multiple demands on their time, requiring them to reset priorities, and not accomplish all the care needed by their patients. To the best of your knowledge, **how frequently** are the following elements of **nursing care <u>MISSED</u> by the nursing staff (including you) on your unit?** ***Check only one box for each item.***

	Always missed	**Frequently** missed	**Occasionally** missed	**Rarely** missed	**Never** missed
1) Ambulation three times per day or as ordered					
2) Turning patient every 2 hours					
3) Feeding patient when the food is still warm					
4) Setting up meals for patient who feeds themselves					
5) Medications administered within 30 minutes before or after scheduled time					
6) Vital signs assessed as ordered					
7) Monitoring intake/output					
8) Full documentation of all necessary data					
9) Patient teaching about illness, tests, and diagnostic studies					
10) Emotional support to patient and/or family					
11) Patient bathing/skin care					
12) Mouth care					
13) Hand washing					
14) Patient discharge planning and teaching					

15) Bedside glucose monitoring as ordered					
16) Patient assessments performed each shift					

Please turn over to page 5

	Always missed	**Frequently** missed	**Occasionally** missed	**Rarely** missed	**Never** missed
17) Focused reassessments according to patient condition					
18) IV/central line site care and assessments according to hospital policy					
19) Response to call light is initiated within 5 minutes					
20) PRN medication requests acted on within 15 minutes					
21) Assess effectiveness of medications					
22) Attend interdisciplinary care conferences whenever held					
23) Assist with toileting needs within 5 minutes of request					
24) Skin/Wound care					

Section B—Reasons for Missed Nursing Care

Thinking about the missed nursing care on your unit by all of the staff (as you indicated on Part 1 of this survey), indicate the **REASONS nursing care is MISSED** on your unit. ***Check only one box for each item.***

	Significant reason	**Moderate** reason	**Minor** reason	NOT a reason for missed care
1) Inadequate number of staff				
2) Urgent patient situations (e.g. a patient's condition worsening)				
3) Unexpected rise in patient volume and/or acuity on the unit				
4) Inadequate number of assistive and/or clerical personnel (e.g. nursing assistants, techs, unit secretaries etc.)				
5) Unbalanced patient assignments				

Please ***turn over*** *to page 6*

	Significant reason	**Moderate** reason	**Minor** reason	NOT a reason for missed care
6) Medications were not available when needed				
7) Inadequate hand-off from previous shift or sending unit				
8) Other departments did not provide the care needed (e.g. physical therapy did not ambulate)				
9) Supplies/ equipment not available when needed				
10) Supplies/ equipment not functioning properly when needed				
11) Lack of back up support from team members				
12) Tension or communication breakdowns with other ANCILLARY/SUPPORT DEPARTMENTS				
13) Tension or communication breakdowns within the NURSING TEAM				

14) Tension or communication breakdowns with the MEDICAL STAFF				
15) Nursing assistant did not communicate that care was not provided				
16) Caregiver off unit or unavailable				
17) Heavy admission and discharge activity				

3.ethical code

Approval ID:	IR.TUMS.FNM.REC.1402.196	Approval Date:	2024-01-30
Evaluated by:	Research Ethics Committees of School of Nursing and Midwifery & Rehabilitation - Tehran University of Medical Sciences		
Status:	Approved		
Approval Statement:	The project was found to be in accordance to the ethical principles and the national norms and standards for conducting Medical Research in Iran. Notice: 1. Although the proposal has been approved by the Biomedical Research Ethics Committee, meeting the professional and legal requirements is the sole responsibility of the PI and other project collaborators. 2. This certificate is reliant on the proposal/documents received by this committee on 2024-01-30. The committee must be notified by the PI as soon as the proposal/documents are modified. 3. Other Comments: ◦ The researcher is required to notify any changes in the approved proposal (such as changes in the title of the research, the names of the principal investigator and collaborators, the methodology and other parts of the proposal) to the Research Ethics Committee and obtain approval.		
Thesis Title:	Assessing determining factors of missed nursing care in selected hospitals of Abuja city in Nigeria:2024		
Supervisor:	Name: Zahra Rooddehghan Email: zrooddehghan@yahoo.com		
Student:	Name: Fatima Muhammad Badamasi		