EFFECT OF CONTINUOUS MEDICAL EDUCATION ON NURSES' KNOWLEDGE AND PRACTICES OF DOCUMENTING CARE IN MEDICAL-SURGICAL WARD IN A DISTRICT HOSPITAL IN MIDWESTERN UGANDA

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Declaration

This is to declare that this study on the effect of continuous medical education on nurses' knowledge and practices of documenting care in medical-surgical ward in a district hospital in Midwestern Uganda is my personal work. It has never been submitted before to any institution for any form of academic award. All the work from previous scholars has been cited accordingly to acknowledge their contributions.

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Date: 27/03/2025

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"*I can do all things through Christ who strengthens me. Philippians 4:13 (NKJV)"*

Dedication

I dedicate this piece of work to the nursing staff of Kawolo General Hospital and the entire fraternity of nurses in Uganda. I want to affirm to you that our power is in documenting every piece of work we do. Chosen to love and serve.

"*Accurate and thorough documentation is essential in nursing; it reflects the quality of care given and serves as a foundation for improving patient outcomes."*

Inspired by Virginia Henderson- Nurse theorist

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Acronyms and Abbreviations

BNS – Bachelor of Nursing Science

CME- Continuous Medical Education

MS- Medical Superintendent

OPD-Out Patient Department

PNO- Principal Nursing Officer

REC- Research and Ethics Committee

UCU-Uganda Christian University

VIPS- Wellness Integrity Prevention Safety

Abstract

Background/Purpose: Nursing documentation is an obligation of all nurses who provide care. Globally literature has shown that proper documentation of nursing care improves communication among the health team and reduces nursing and medical errors. Nursing process is the internationally recognized framework for nurses to document care. The study examined the effects of a nursing process-based documentation checklist on the knowledge of nurses and their documentation practices in Uganda.

Theoretical/Conceptual Framework: VIPS Model of Nursing Documentation guided the creations of a documentation checklist and the study questionnaire. The five steps of documenting described in the VIPS model served as the basis for the preparation of the continuing medical education on nurses' documentation utilizing the nursing process.

Methodology: The study used a quasi-experimental pretest-posttest study design. Before intervention, the participants filled self-administered questionnaires. An educational intervention was introduced starting with the CME on documenting care using the nursing process and later introduced a nursing process-based documentation checklist. After the intervention, data was again collected using the same questionnaire used at pre- intervention.

Results: The study discovered that the introduction of a nursing process-based checklist and an educational intervention had a significant effect on nurses' knowledge of documentation using the nursing process. The findings also demonstrated an improvement of documentation of nursing care.

Conclusion: Nurses can improve both their knowledge and practice of documentation if they have checklist based on nursing process as their guide.

Recommendation: Nurse leaders/administrators should advocate for a summarized format of documenting nursing care countrywide based on nursing process. There should be a plan for regular training of nurses of documentation and lastly nurse supervisors should always make spot checks to see the documentation is done.

Nurses at all levels should be reminded that documenting care is their obligation. They should take documentation as part of their daily routines as they provide care for patients and communities. Nurses should also be encouraged to embrace the use of a nursing process-based checklist to guide their daily documentation.

Key Terms: Nursing process, documentation checklist, nurses' knowledge and practice of documentation.

Chapter One: Introduction

The foundation of effective clinical communication is nursing documentation. An accurate patient chart provides a chronological account of the patient's care and well-being. Keeping track of care, the team members are informed of patient's wellbeing and response towards care (Mathioudakis et al. 2016). Ida Jean Orlando's nursing process approach, which she formulated in 1958, serves as the basis for nursing care plan (Toney-Butler & Thayer, 2023). Documentation guidelines are derived from the nursing process. The care provided to patients becomes invisible when nurses neglect their fundamental duty of documenting, and there is no independent nursing data.

In their investigation of the relationship between adverse events in primary care and documentation, Anderson et al. (2018) found a connection between patient safety and efficient documentation. Simplified formats of documentation, such as checklists, improved team communication and patient care while assisting in the implementation of difficult activities and lowering omissions and variations in practice (Kirthi, at, el 2012).

While there is currently no literature to reveal the current state of nurses' knowledge and practice of documenting care, this research project will examine the effects of a nursing process-based checklist on nurses' knowledge and practice of documenting care provided in medical-surgical wards. In Uganda, nursing documentation remains a challenge, as reported by Nakate et al. (2015), who found that 43.2% of nurses lacked adequate knowledge about nursing documentation, and Namayanja (2016), found that 68% of nurses did not document patient information.

Background of the Study

The 1930s saw the introduction of the concept of using nursing care plans to explain nursing care by nurse theorist Virginia Henderson, who advocated for the use of the nursing care plan to guide documentation (Chelagat et al., 2013). According to Ayele et al. (2020) and Tasew et al. (2019), nursing documentation is a record of the planned actions that nurses provide to a specific patient either on their own or under the supervision of qualified nurses. Whether done manually or electronically, it is an essential aspect of safe, moral, and efficient nursing practice. According to Mathioudakis et al. (2016), it enables all team members to stay informed and engaged regarding patient care and how patients respond to the care provided.

The nursing process framework was created to direct the practice of nursing as it progressed to become a profession. In order to diagnose and treat current or possible health problems and to promote wellness. Nursing process is a systematic approach used to plan patients' care and delivery using critical thinking skills (Toney-Butler, & Thayer, 2023). Through the components of assessment, nursing diagnosis, intervention, implementation, and evaluation, the nursing process logically directs the documentation of care.

The goal of collaboration and communication in healthcare is undermined by unclear, imprecise, and incomplete clinical notes which expose colleagues to risk and liability (Limandri, 2021). According to research conducted in Iraq by Hajjul et al. (2018), 28.57% of nurses knew the objective of documentation and 53.97% of nurses knew the principles of documentation.

According to Chelegat et al. (2013), nursing professionals in underdeveloped countries have not been particularly diligent about documenting care. According to Nakate et al. (2015), study conducted in Uganda only 43.2% of nurses had sufficient understanding on nursing documentation. On the other hand, the study included no literature about nursing documentation practices.

Krishnamohan et al. (2019) formulated a checklist that simplified the complex ward round procedure, providing a systematic framework outlining essential care components. The results disclosed that ward round checklist enhanced patient outcomes, documentation and communication while also promoting patient safety (Krishnamohan et al).

At Cure Children's Hospital-Uganda (CCHU) in eastern Uganda, action research by Okaisu et al. (2014) conducted many rounds of planning, intervention, reflection, and modification to identify best practice approaches that would aid improvement on nurses' performance in documenting patient care. They observed a need to redesign the documentation form Okaisu et al. in order to bring about a change in the documentation practices of nurses after auditing patient charts and finding inadequate documentation by the nurses. Although mentoring and training were used in this Ugandan study to enhance nurses' documentation, the outcomes did not appear to be encouraging.

According to Okaisu et al.'s study, nurses' documentation practices improved after they created a template. They concluded that, in accordance with chart audits conducted after intervention, a more simplified documentation format complemented the nursing documentation. They also mentioned how having clear criteria made documentation simpler for nurses. District hospitals in Uganda now lack a structure or set of guidelines

for recording nursing care. This research intends to study the effect of a nursing process-based checklist used as a guideline to document nursing care.

Problem Statement

Despite the critical role of nursing documentation in ensuring patient care and safety, global studies consistently report that documentation practices among nurses remain inconsistent and often inadequate (Hassan et al., 2018; Tasew et al., 2019). In Saudi Arabia, 47.8% of nurses were found to have inadequate knowledge of documentation (Barathi et al., 2020), while in Pakistan, 40% of nurses demonstrated poor documentation practices (Hussain et al., 2024). In Ethiopia, only 37.4% of nurses exhibited good knowledge, and 42% demonstrated good documentation practices (Tasew et al., 2019; Bolado et al., 2023). Similarly, in Uganda, just 43.2% of nurses possessed sufficient knowledge of nursing documentation (Nakate et al., 2022), and 68% reportedly do not document the care they provide (Namayanja, 2016).

Several factors contribute to the poor documentation practices observed among nurses. These include high patient-to-nurse ratios, excessive workloads, and lack of time, insufficient training, absence of documentation tools or guidelines, and limited supervision. In some cases, nurses may not fully understand the legal or professional implications of incomplete or missing documentation. Additionally documentation is sometimes perceived as an administrative task rather than a clinical responsibility, which may result in lower prioritization.

In Uganda, nurses lack a systematic approach to documenting care, making their contributions less visible within the healthcare system (Nakate et al., 2022). Nakate and

colleagues found that patient records often fail to reflect the structured nursing process, undermining continuity of care and the professional identity of nurses.

Despite these challenges, literature shows that Continuous Medical Education (CME) is effective in improving nurses' knowledge and documentation practices (Yousef et al., 2025). CME serves as a vital strategy to address knowledge gaps and promote adherence to standards of care documentation. This study aimed to assess the effects of CME on nurses' knowledge and practice of documenting nursing care in medical-surgical wards at a district hospital in Midwestern Uganda. By identifying specific areas of weakness and evaluating the impact of targeted education, the study seeks to inform strategies for improving nursing documentation practices and, ultimately, patient care outcomes.

Purpose of the study

The purpose of the study was to determine the effect of continuous medical education on nurses' knowledge and practices of documenting care in medical-surgical wards in a district hospital in Midwestern Uganda.

Research Question

What effect does continuous medical education have on nurses' knowledge and practice of documenting care in medical-surgical wards in a district hospital in Midwestern Uganda?

Specific Objectives

1. To identify the effects of a nursing process-based documentation checklist on nurses' knowledge of documenting care in a medical-surgical wards in a district hospital in Midwestern Uganda.

2. To describe the effect of a nursing process-based documentation checklist on nurses' practices of documenting care in a medical-surgical wards in a district hospital in Midwestern Uganda.
3. To identify factors that affect nurses' practices of documenting nursing care

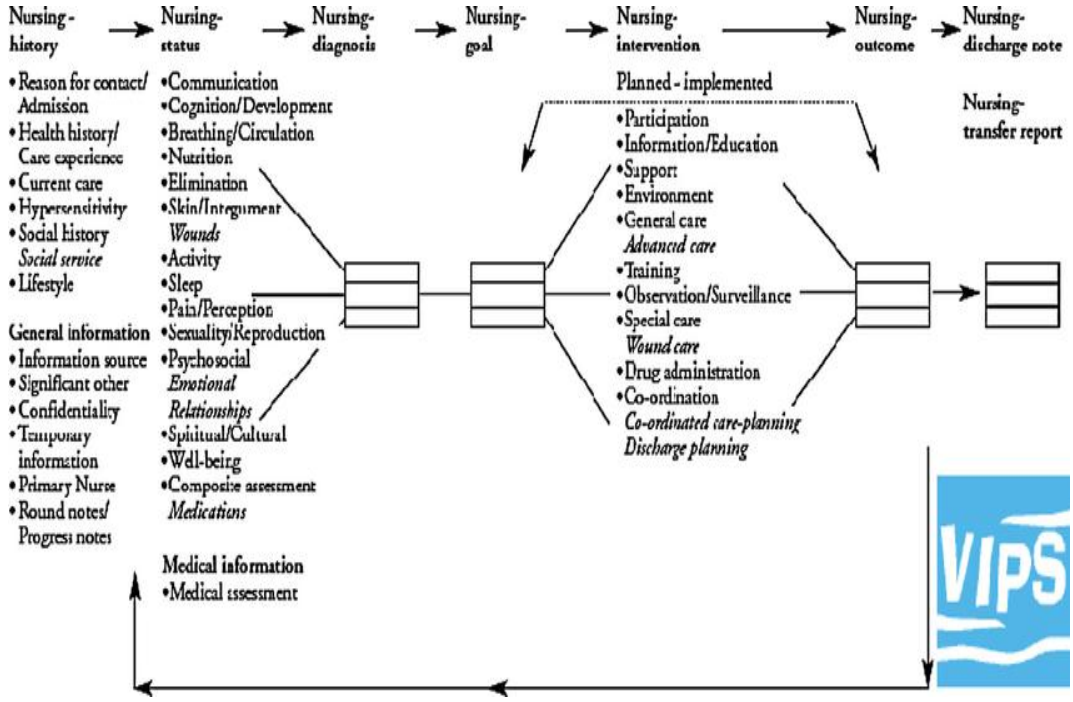
Significance of the Study

Nurses in clinical practice may improve on their knowledge and practice of documenting care, which may improve patient outcome. Nurses may be able to know the gaps in their documentation and understand the gaps in their documentation process. Nurse supervisors may use the data collected and possibly adapt the documentation checklist as a tool to guide documentation of nurses. Finally, if nursing care is well documented because of continuous medical education patients may benefit from this study.

Theoretical Framework: VIPS Model of Nursing Documentation

In Sweden, in 1991, the VIPS model of nursing documentation (Figure 1) was developed and released. The model's objectives were to assist nurses in providing personalized treatment and aid in their systematic documentation (Ehrenberg et al., 1996). The term VIPS, spelled in Swedish, stands for "well-being, integrity, prevention, and safety," which form the foundation of the documentation paradigm (Ehrenberg et al., 1997). The four VIPS principles are the overarching objectives of nursing care for each nursing action utilizing the nursing process, as outlined below, even though they are not physically visible in Figure 1.

Figure 1: VIPS Model of Nursing Documentation



Note: (Enhfors, Thorell-Esktrand & Ehrenberg, 1997).

Nursing History. Nursing history is a critical segment of patient care. A nurse should know and document using the second key level words that represent essentials of nursing actions for nursing history, which are reason for patient's admission, health history, any hypersensitivities, care experiences, current care, social history, life style (Ehrenberg et al., 1996). The nurse also documents general information concerning the patient; source of information, any significant others, confidentiality, ward round notes, temporary information, primary nurse and progress notes (Ehrenberg et al., 1996). During nursing practice, all aspects of patient history need to be documented as the nurse's professional responsibility in the patient record (Ehrenberg et al., 1996).

Nursing Status. Nursing status is the next segment that describes the patient's overall state that may include cognitive or developmental aspects (Ehrenberg et al., 1996). Key terms related to the patient's health status should be documented in the patients' records,

such as respiration and circulation, nutrition, elimination, skin/integumentary (wounds), activity, sleep, pain/perception, sexuality /reproductive health, psychosocial (emotional relationships), spiritual/cultural, well-being and medication (Ehrenberg et al., 1996).

Nursing Diagnosis. Nursing diagnosis is the third segment. This is a clinical judgement that the nurse makes after obtaining the patient's nursing history and status. A nursing diagnosis may be actual, potential or a wellness diagnosis, based on the issues that have been detected (Ehrenberg et al., 1996).

Goals. Goals are intentions a nurse aims to attain when providing care and represents the fourth segment. The goals may be short term or long term and must be specific, measurable, achievable realistic and time bound (SMART). The goals of care and expected outcomes of nursing interventions are documented in the patient's chart as a guide to patient care (Ehrenberg et al., 1996).

Nursing Intervention. Nursing intervention, the fifth segment, refers to the actual working phase on the patients' problem. The nurse carries on activities by directly participating in the care. Various nursing actions represent the key words of the second level for this segment (Ehrenberg et al., 1996). The nurse provides information/education to the patient and family about the health condition and possible outcome of the disease (Ehrenberg et al., 1996). A nurse provides the patient and family support for activities that improve the patient's wellbeing. For example, a nurse can support a patient to ambulate or bathe in bed. The support can be emotional through counseling the patient and family members. The nurse also ensures that patient's environment is clean and enabling for a patient to rest. (Ehrenberg et al., 1996).

Nursing Outcome. Nursing outcomes are results of a nurses' intervention experienced by the patient. A patient may come with a high fever and the nurse does an intervention of exposing the patient, which is removing patient's clothes to allow temperature to reduce naturally, or tepid sponging which is placing a cloth immersed in lukewarm water on the body to speed the rate of evaporation thus lowering the body temperature. Under normal circumstances, the patient's temperature will lower which is an outcome of nurse's intervention. Seemingly, if the nurse administers an antipyretic to a patient with high fever it is expected that the fever will go down. The nurse should be able to document the effect of his or her interventions on the patient that is the outcome of the intervention (Ehrenberg et al., 1996).

Discharge Notes. Discharge notes are a detailed record of the patient's integrated activities during the time of hospitalization until the discharge. It highlights the key interventions done to the patient and the plan of continuing care at home or on transfer to another facility in case of a referral.

In summary the VIPS documentation model provides a structured way of documenting nursing care that makes nurses think more about how they interact with patients, allowing more of a nursing focus approach (Bjorvell et al., 2003; Blair & Smith., 2012). This type of documentation facilitates skilled nursing care as a valuable method of recording nursing information (Thoma & Pittman, 1972, as cited in Ehrenberg et al., 1996).

Operationalization of Concepts of VIPS Model of Nursing Documentation in the Study

The overarching concepts of the VIPS model will be used in this study to guide the documentation process of nursing care. They are well-being, intervention, prevention and safety. These four concepts are the major goals of documenting care in nursing practice.

Well-Being. The study aims at improving the well-being of patients through good nursing care that is, well documented in the patient chart. The nurses will be able to improve patient well-being by taking proper history through assessment, making a proper nursing diagnosis and giving the right interventions, which is, communicated to other health professionals through patient records

Integrity. In this study, integrity of nurses is their desire to adhere to document all aspects of care that a patient receives as their professional obligation. The nurses' act of documenting care willingly with or without supervision reduces nursing errors and omissions, thus upholding the patient's integrity.

Prevention. A nurse can prevent medication errors or omission by practicing good documentation. Nurses carry out interventions to prevent disease occurrence through patient education, by giving information to a patient and their family pertaining a health problem, he or she will be preventing occurrence of the disease or preventing complications of the disease.

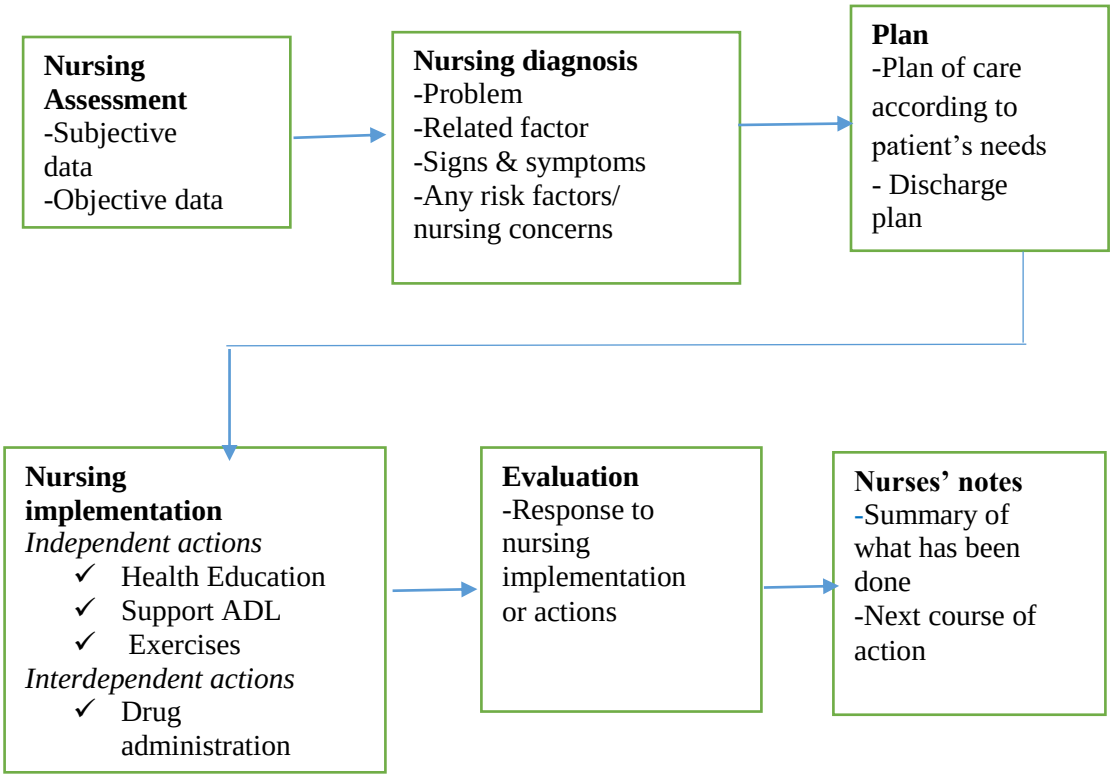
The nurses' education, which is a preventive measure, will be documented in the patient's file as evidence of work done. Nurses are involved in patient care like treating pressure areas to prevent occurrence of bedsores. Nurses also make observations on the

patient's well-being by monitoring the vital signs with an aim of identifying any potential health problems and make interventions to prevent disease and possible complications.

Safety. Patients are safe when nurses document drugs administered. This will prevent overdose through repeated administration of the same drug by other nurses or health care team members. Documentation of the drugs will also prevent omission of treatment thus promoting safety and augmenting the healing process. Nurses also ensure patients' safety by writing any known allergies of drugs or food to the patient in their records to enable other health practitioners administering them to patients.

The overarching concepts are going to be the drivers of documentation using segments of the nursing process. These are nursing history, nursing diagnosis, nursing intervention and nursing outcome. The reason for the selection of these elements is that these are key aspects that comprise nursing care. Nurses are encouraged to know their patients through history taking, which will enable them to identify patient's needs and make appropriate interventions which should be well documented in patients' record.

Figure 2: Operationalization of VIPS Model of Nursing Documentation with Selected Elements of Nursing Process



Note: (Operationalization of VIPS model of documentation adapted from literature reviewed).

In operationalizing the theory (Figure 2), the study is going to use only four segments of the nursing process that is; nursing history and nursing status combined, nursing diagnosis, nursing intervention and nursing outcome.

Nursing assessment. In this study, nursing history and nursing status are being combined to nursing assessment, which is the first phase of nursing process. The nurse will get information through interaction with the patient, caretakers and the patient health records. The nurse will do a physical examination, head to toe assessment and get objective data from the patient. Through interaction with patient and family, the nurse

will find out the reason for admission, any sensitivities, history of chronic illness, if patient is on any medications and patients' social history. If the nurses know the patients' history, it will help to treat and safeguard the patient. For example, knowing the patient's sensitivities to medications or any agent will help the nurses not to administer it as part of nursing care. This will be documented in patient chart for any other health provider to note thus ensuring patient safety as the key aspects of VIP that are the target goals of the nursing documentation of care.

Nursing Diagnosis. Nursing diagnosis in this study are the problems that a nurse identifies through nursing assessment for each patient. The problem may be a potential or actual problem affecting patients' well-being. The nurses will document them as nurses' diagnoses. When the diagnosis is actual, it will have problem, related factor, then signs and symptoms. When the problem is not actual but there areindications that it can occur, the nurses documents this as a potential or risk diagnosis. When the diagnosis is potential, there is problem but related factor and there are no signs and symptoms. The identified diagnoses become the basis for nurses to plan their interventions in order of priority.

Nursing Plan. Nursing plan is where a nurse sets approaches on how to help deal with the current or assumed health problem. The nurse makes a care plan according to patient's priority needs and the nurse considers a discharge plan from the time patient is admitted.

Nursing Implementation. Nursing implementation is the act of carrying out planned activities that aim at improving patient well-being according to her plan of care. In this study, intervention will be referred to as implementation, which is the common terminology use under nursing process. Implementation is of two types; implementation

of independent actions that are nurse-initiated actions like bed bathe, oral care, health education to mention a few. The other category is dependent implementation where a nurse carries out activities ordered by physician like drug administration.

Evaluation. Outcome is the result of an implementation when using nursing process. In this study, the outcome will be referred to as evaluation. The nurses will be able to evaluate if the implementation has yielded any response for the patient. Results of the intervention will be, documented in the patient's chart with the aid of the checklist. The patient's response to any nursing action like drug administration, tepid sponging will be evaluated and documented. For example, a sick child is given an antipyretic that will lower a high temperature. The outcome of the nurse's intervention of drug administration that the nurse will evaluated and documented. The nurse's evaluation helps to see if the intervention was effective and if it was not then the patient is re-assessed and the cyclic process continues.

Nurse's notes. Nurse's notes is a summary of what the nurse has done during a specific shift. The purpose of using nursing process in care is to help the nurse make a chronological yet comprehensive patient notes at the end of his or her shift. It highlights events during the duty that were performed on patient and next course of action.

Additional Terms to Operationalize

Knowledge of Documentation. Knowledge of documentation is the ability of the nurse to know what, how, when to write in the patient's chart and what has been done in terms of care. The documentation should be systematic using the universally agreed on criteria of the nursing process.

Practice of Documentation. Practice of documentation is act of a nurse recording what she or he has done for the patient as a way of communicating to other nurses and health care providers. The nurse should document patient care from the time the patient was admitted in the hospital until discharge.

Documentation Checklist. A documentation Checklist is a simplified guide outlining aspects that the nurse must write in the patient record pertaining nursing care provided. Using the selected segments of the nursing process as described by the model, the study formulated simplified outlines that nurses followed to document care. All nurses caring for patients on medical-surgical wards used it to document care. In this study, nurses used the documentation checklist created for this study using the selected segments of nursing process (Appendix D) as a reminder to improve on their documentation practices.

Summary

Chapter one described the introduction of the study, the background to the study and the problem statement. The chapter stated the purpose of the study, study objectives and the significance of the study to nurses and nurse leaders. It also described the theoretical framework and its variables.

Chapter Two: Literature Review

This chapter presents the literature reviewed concerning nurses' knowledge and practice of documenting care. It will review the role of nurses in documenting care and the challenges of nurses in practice of the documentation. The literature reviewed will also discuss how checklists has been used to document nursing care and other measures that have been useful to improve nurses' documentation of care.

Globally, and in Uganda, Nursing Documentation Remains a Professional Responsibility of Nurses to Show Evidence of Nursing Care

This section is going to define nursing documentation, explore the history of nursing documentation and describe the role of nurses in documentation. It will also discuss the importance of documentation.

Nursing documentation is a written or electronically generated information that describes the care provided to a particular client or group of clients (Hassan et al., 2018). According to Duclos-Miller (2016), essential components for nursing documentation include patient plan of care, evaluation of the effectiveness of the care provided, and communication between the patient or family and other healthcare providers on the patient's progress and response to nursing interventions.

History of Nursing Documentation

The history of nursing care documentation was started in the early days of Nightingale and was defined as the record of nursing care that is planned and given to individual patients and family by nurses (Wang et al., 2011 as cited by Andualem et al., 2019). Virginia Henderson, a nurse theorist, promoted the use of documentation when she introduced the idea of using nursing care plans to communicate nursing care during

the 1930's. Since the 1970’s, nursing documentation has become more important reflecting the changes in nursing practice, regulatory agency requirements and legal guidelines, (Chelagat et al. 2013)

There are different frameworks of nursing documentation in nursing practice, which include narrative charting, problem-orientated approaches, and clinical pathways lastly focus notes (Andualem et al.2019).

Narrative charting is the type of nursing documentation where a nurse tells the story of the patient and their care management from the time of admission to discharge (Darby, 2023). The narrative includes interventions done and how patients responded to them. It is meant to provide clear nursing history, interventions, patient status and any other significant information to guide the medical team to offer high quality, efficient care (Darby).

The problem-oriented approach is an additional documentation structure. Nurses use this type of record to outline the patient's issues (Vati, 2015). This makes it easier to arrange targeted care and keep the problem in focus. In practice, nurses record patient information using clinical pathways as well.

A clinical pathway in nursing is an evidence-based multidisciplinary care management strategy that specifies an appropriate order of clinical interventions, timeframes, milestones, and expected results for a homogeneous patient group, according to Lawal et al., (2016) & Rotter et al., (2019). A clinical pathway's goal is to enhance patient care by preventing information duplication to enable evidence-based treatment (Rotter et al.).

Nurses record procedures, instructions, and actions done for the patient in accordance with focused charting guidelines released by the Department of Developmental Services in the State of Connecticut in 1996. As the globe develops, nursing is steadily moving from a paper-based to an electronic model.

Nurses' Role in Documentation

It is required of nurses to document the care they give to their patients. The documentation of patient care, evaluations, results, and treatment outcomes is one of the responsibilities of nurses worldwide (Hearthfield, 1996 as referenced by Alkouri et al., 2016). The purpose of nursing documentation, according to Barathi et al. (2020) and Perry et al. (2019) is to regularly report on patients' assessments, care given, evaluations, and responses to that care. In order to help the medical team, comprehend the patient's care trend, nurses must gather data in a systematic manner. This process must start with bedside handover, risk assessment, and clinical observations (Barathi et al.).

In order to develop a nursing diagnosis and create a personalized nursing care plan for each patient, it is the nurse's responsibility to confirm, evaluate, and convey the information obtained (Barathi et al. 2020). They went on to say that nurse duties as healthcare providers include, ensuring proper documentation of patient care, which include the date and time of any interventions. Omissions can happen in practice, and it is the nurse's responsibility to promptly, and honestly correct any documentation inaccuracies (Barathi et al.). According to Nakata et al. (2015), nurses are responsible for documenting vital signs, drugs given, intake and output, admissions, discharges, births, deaths, and shift change reports. The Saskatchewan Registered Nurses Association

(SRNA), (2021) states that a nurse's responsibility in documentation is to provide an account of all the professional work completed while they are on duty.

Importance of Documenting Nursing Care

Documenting nursing care is a key responsibility of the nurse who has carried out any intervention on the patient. Nakate et al., (2022) noted that documentation of nursing care had a positive effect on patient care, nurses' relationship with patients, professional focus as well as practice routines. They further noted that documentation improved individualization of care, reduced nurses' omission in care, and improved patient outcome. Reviewed literature has further showed that documentation of nurses reflects the choice of interventions and the effects of the interventions done on patients (De Groot et al., 2022).

Nursing documentation helps in improving the quality of patient care through continuity of care (Ahmed et al., 2021; McCarthy et al., 2019). In addition, Mednikoff, (2022) and Shala et al., (2021) in their studies noted that nursing documentation improved communication among the healthcare providers and facilitated quality care planning. In the same study, Shala et al. and SRNA, (2021) highlighted that proper documentation supported continuity of care and facilitated safe patients care. Reviewed literature mentioned that complete nurses' documentation aided nurses to assess and communicate relevant information pertaining patients and plan patient care (Øfsti et al., 2022; Shala et al.).

Studies by Laukvik et al., (2022), Nakate et al., (2022) and SRNA, (2021) highlighted that documentation of nursing care was important for planning and

implementation of individualized patient care. The individualized nursing care improves patient outcome.

Documented nursing care is very important in protecting nurses in case of litigation issues. Many times, nurses have been accused for negligence and omissions in courts of law and their defense has only been in well-documented nurses' notes. Nurse's notes are the only evidence and prove that care was given (Barathi et al., 2020; Cooper et al., 2021). The documented evidence can be used in courts of law if the plaintiff feels that, there was some form of omission that affected the client's health during the time of care.

Nurses spend the lengthiest period with the patients as compared to other health professional. However, their work cannot be visible if they do not document it. Good nursing documentation improves the credibility of the nurses and makes the nursing profession visible (Elhanafy & Elshazly, 2021). Nurses' contribution to health care system can only recognized through proper documentation of their roles (Gizaw et al., 2018 as cited by Elhanafy & Elshazly). Through documentation, nurses' input in patient care is known and amount of time spent on nursing care is observable and nursing work visible (Barathi et al., 2020; Øfsti et al., 2022; SRNA, 2021). When nurses have not documented what is done it is difficult to know what has been done or not done. Documentation is key in nursing care as it helps in informing us the patient's story (De Groot et al., 2022).

In a healthcare setting, many interventions maybe done on a specific patient by different health care providers. When the nursing care is not well, documented patients may miss some agreed on actions. In such occurrences, documentation works as a reminder to the nurses about patient's clinical assessment, plan of care, clinical evaluation

and professional judgment regarding the provision of patient care (Mamykina, 2012 as cited by Kasaye et al., 2022; Øfsti et al., 2022; SRNA, 2021). A documentation checklist acts, as a reminder for information that might have be forgotten by the nurses thus is a better intervention (Mednikoff, 2022).

Ahmed et al., (2021) in their study on the quality of nursing documentation and its effect on continuity of patients' care highlighted that documentation facilitated effective care as patient needs could be traced from assessment throughout the care period. A good nurse would want to follow up the progress of the patient under his or her care and this can only be possible when the trends of care are documented in patient chart. The documented care helps in tracking patients' progress of the health condition and helps in making informed decisions grounded on patients' profile (Kasaye et al., 2022; Øfsti et al., 2022; SRNA, 2021).

Through nursing documentation valuable data for research in nursing can be attained which has the potential to improve health outcomes (Cooper, et al., 2021; Elhanafy & Elshazly, 2021). Through the documented literature, many issues that affect health can be identified and they become a basis of research study (Mednikoff, 2022). The documented care can then be used as a basis of teaching plans (Gizaw et al. 2018 as cited by Elhanafy & Elshazly) to improve on the quality of care for patients.

Documented care in patient record helps to reflect the trends of patient response to all nursing interventions Ahmed, et al., (2021) and helps in making timely decision concerning patient care management. Andualem et al. and Kassie et al., (2023), revealed that nursing care documentation was essential for early recognition of patients'

deteriorating condition. This was coupled with effective communication and response by members of the interdisciplinary care team and leads to decreased hospital mortality.

In summary documentation of nursing care is paramount in day-to-day care of patients to the care management team. In nursing practice, timely documentation of care will help the nurse to identify if there are any performance gaps thus improving patient outcome. Nurses have to keep a clear record of patients care from the time patient is admitted to discharge.

Globally and in Uganda Nursing Process is used to Guide Practice and Documentation Nursing of Care

This section is going to describe the history and application of nursing process in documenting care. In 1958, a nurse theorist Ida Jean Orlando developed the nursing process that works as a guide for nursing documentation (Toney-Butler & Thayer 2023). Nursing process provides nurses with useful description of how nursing should be performed (Toney-Butler & Thayer, 2023). The nursing process framework has five steps that are cyclic in nature as discussed below

Assessment phase is the first step of the nursing process where a nurse collects and organizes information about the patient, family or patient's environment as it is relevant to patient's well-being (Faubion, 2024; Toney-Butler & Thayer, 2023). The data collected is categorized as subjective data: that is, what the patient or family reports. The nurse also collects objective data: that is what the nurse observes as she examines the patient: for example, a skin rash, other examples of objective data include the past medical records and diagnostic results (Faubion, 2024).

Nursing diagnosis is the second step of the nursing process that describes, “Clinical judgments about individual, family, or community responses to actual or potential health problems/life processes” that can be managed by independent nursing interventions (AL-Salih, 2022; Faubion, 2024). The diagnoses can be actual if the problem is evident or potential when there is danger of developing a complication of the problem. For example, a child may have diarrhea with no signs of fluid loss but as a nurse I know continued loss of fluid from diarrhea will cause fluid volume deficit. The nursing diagnosis reflects the nurse’s clinical judgment about a patient’s response to potential or actual health issues or needs (Faubion, 2024).

Planning is the third step of nursing process where the nurse develops measurable goals and outcomes as well as a plan of care designed to assist the patient in resolving the diagnosed problems and achieving the identified goals and desired outcomes (AL-Salih, 2022). The goals and outcomes formulated during this phase directly affect patient care and are based on evidence-based nursing practices (Faubion, 2024).

Implementation is the fourth step of nursing process where the nurse puts the plan of care into effect (Faubion, 2024 & Wayne, 2023). It involves action or doing and the actual carrying out of nursing actions outlined in the plan of care (Wayne, 2023). According to AL-Salih (2022), implementation can be independent plans (nurse initiated)-any action the nurse can initiate without direct supervision, dependent (Physician initiated)-nursing actions requiring monitoring orders.

Evaluation is the final phase of the nursing process. Although evaluation is considered the last step of the nursing process, it does not indicate an end to the nursing process. Instead, evaluation should be an ongoing process carried out in daily nursing

activities that ensures quality nursing interventions and the effectiveness of those interventions (Faubion, 2024). This then results in reassessment and the continuation of the nursing process making it cyclic in nature. Nursing process (NP) is considered a framework upon which all nursing care is based (Faubion, 2024). However, the challenges associated with the use of nursing process like low staffing level, high workload, nurses' attitude and continuous education should not be underrated (Azevedo et al., 2019).

The nursing process guides the documentation of nursing care by enabling nurses to organize their findings systematically (Toney-Butler &Thayer, 2023). The nursing process guides nurses to capture a client's background information or nursing history referred to as admission form, numerous assessment forms, nursing care plan and progress notes, which would be hard to do without the framework (Wikipedia).

In addition, the nursing process guides a nurse to record a constructive document for nursing communication (Wikipedia). According to Azevedo et al. (2019), nursing process guides documentation by organizing care in order to inscribe quality into the care provided. The NP helps to develop an organized documentation of all nursing care starting with nursing assessment, head to toe examination; nursing diagnosis; patient response to nurses' actions; planning patient activities and implementing on how to achieve them (Azevedo et al., 2019). The NP further works as a framework to guide nurses to document the outcome of care through evaluation of actions and patients' progress in relation to what the nurses expected out of their care (Azevedo et al., 2019)

According to Ernstmeyer and Christman (2021), nursing process aids in; promoting quality patient care, decreasing omissions and duplications, provides a guide for all staff

involved in providing consistent and responsive care that encourages collaborative management of a patient's health care problems. According to Batista de Oliveira and Peres, (2022) in their study done in Brazil they noted that nursing process documentation required nurses to have knowledge about standardized concepts, of assessment, diagnosis, planning, implementation and evaluation which guide to document and avoid ambiguity in records.

In Uganda, both the nurse leaders and nursing staff have not embraced the use of nursing process. A study done in one of the regional referrals hospitals in Uganda reveals that there are no designed forms for the nursing process to be used by nurses thus leading to the low implementation of the nursing process (Ninsiima et al., 2023).

Globally and in Sub-Saharan Africa Studies Have Shown That Nurses' Knowledge on Documentation and Documentation Practices are Inadequate

This section will discuss the knowledge of nurses regarding documentation of nursing care and explore their practices of documenting care. Literature will be reviewed to evaluate the magnitude of the problem globally and in sub-Saharan Africa.

Nurses' Knowledge on Documenting Care

Knowledge of documenting care is the ability of the nurse to know how to record, when to record and what to record. The literature reviewed shows that nurses globally have inadequate knowledge of nursing documentation (Hassan, et al., 2018; Tasew et al., 2019). When nurses lack knowledge of documentation, it affects negatively on the practice of documenting care. Studies by Tasew et al. exposed that a proportion of nurses had deficient knowledge regarding nursing documentation, yet others did not know the

principles of documentation. Their findings revealed that, 57% of the respondents had poor knowledge of documentation.

To provide effective and focused care, nurses should be well versed with documenting care, as it is the basis of any care plan. However, literature has demonstrated that globally nurses' knowledge of documentation is still inadequate. Studies by Ali, et al., (2020); Andualem, et al., (2019); Ayele et al., (2020) revealed that, 54.6%, 43% and 69% of nurses had inadequate knowledge of documentation respectively. Fouad et al., (2021) revealed that 46.02% of the participants had correct answers regarding the knowledge about nursing documentation.

In a study done by Seidu et al., (2021), 84.6% participants had satisfactory knowledge on nursing documentation and a systematic review by (Bunting & Deklerk, 2021), discovered that 82.5% had knowledge of the SOAPIE framework. Kasaye et al. (2022), in their quantitative findings noted that 60.4% of health workers had good knowledge on documentation, 90.7% of the study participants identified activities supposed to be documented and 71.5% of the health workers in the study were aware that any educational intervention given to patients was supposed to be documented in patients' records. They further establish that 84.8% of the health workers agreed that documentation was their professional duty.

A study in Saudi by Barathi et al., (2020) discovered that 24% of nurses had moderately adequate knowledge, 62% nurses had adequate knowledge and 14% nurses had inadequate knowledge of documenting nursing care. More studies done in Ethiopia exposed 54.6% of nurses had good knowledge of documentation and this was associated to gender and monthly salary (Andualem et al., 2019).

Hajjul et al., (2018) in their qualitative survey revealed that nurses had knowledge of documentation and knew its implication in continuity of care. The same study cited need for continuous support and educational intervention to ensure adherence to the nursing documentation procedure. Finally, Nakate et al. (2015) found that 43.2% of nurses in Uganda had sufficient knowledge of nursing documentation.

Nurses Practice of Documenting Care

Globally studies conducted have revealed that nurses still do not adequately practice documentation. Research conducted in Ethiopia by Tasew et al. (2019) and Andualem et al. (2018) revealed that, respectively, 47.8% of respondents and 47.5% of research participants had good documentation practices for nursing care. According to Tamir et al.'s 2021 study, 47.5% of nurses in Ethiopia used good nursing documentation. The study also discovered that receiving standard nursing documentation training was positively correlated with recording the care given.

Bjerkan et al., (2021) and Seidu et al., (2021) in their studies discovered that nurses had avoidance behavior towards documentation practice and only 74.0% adequately practiced nursing documentation. Research findings established that, some nurses needed educational intervention to adhere to nursing documentation practices Hajjul et al. Akter et al., (2020), exposed poor practice of nursing documentation as none of the nursing care was recorded and Andualem et al., (2019) 40.8% of nurses did not document care. In the same study, literature showed that important nursing care activities like Glasgow coma scale, bed bath, heparin lock before and after medication etc., were not totally documented in patient’s records.

A study in Saudi done to assess the knowledge of nursing documentation and recording systems of nursing care among staff nurses showed that documentation of nursing care among nurses was inadequate at 47.8% (Kala et al., 2020). The inadequacy was associated with shortfall of documenting sheets, lack of time and familiarity with operational standard of nursing. The same study recommended that there should be adequate documentation material to enhance the practice of documenting by the nurses.

Qualitative studies by Kasaye et al., (2022) and Andualem et al., (2019) documentation practice among nurses revealed that only 47.2% had knowledge of documentation and 47.5% of nurses had good nursing care documentation practice. Documentation practices were associated with the nurses' attitude towards nursing care documentation and availability of operational standards Andualem et al., (2019). In the same study, they discovered that documentation practices were related to age of the nurses. The older nurses 25-29 years had better documentation practices as compared to their counterparts of 20-24 years.

According to Kasaye et al., (2022) motivation of nurses was key in documenting care. Reviewed literature revealed that motivated nurses were 3.49 times better in documentation than those who were not motivated. They further cited that the ratio of nurse to patient directly affected the practice of documenting care. Findings of the study disclosed that, when the ratio of nurse to patient was low, documentation was well done. However, on some shifts where the nurse patient ratio was so high, documentation of became inadequate due to the competing demands of patients' care.

Studies identified lack of trainings, supervision and feedback, shortage of documenting materials, lack of computerized system, poor knowledge and the habit of

delaying tasks as major gaps to the documentation practice among nurses (Kala et al., 2020; Kasaye et al., 2022). The same studies recommended need to train nurses in order to improve on their knowledge regarding documentation of nursing care and help the nurses understand the institutional policy about documentation.

Hajjul et al., (2018) in their qualitative study found out that nurses' documentation practices were dependent on availability of supervisors or auditing processes. When supervision was regular, documentation was better and when it was irregular, nurses did not document care provided. The study by Corraya et al., (2021) showed that, 65.45% of nurses had good documentation practice 84.6% nurses preferred to document care any time when convenient and 15.4% of nurses preferred documenting care at the end of shift hour. This is against the standard of documentation, as care must be documented immediately it is provided. A study in Saudi by Barathi et al., (2020) showed nurses' practice of documenting care was inadequate at 47.8%.

Challenges Related to Nurses Knowledge on Documenting Care

Research has indicated that some nurses lack sufficient understanding of the significance of documentation (Johnson, 2011, Sum & Chebor, 2013 as quoted by Tasew et al., 2019). This has made it more difficult for many nurses to document care as needed by standard.

Globally numerous nations do not have nursing documentation frameworks that serve as guidelines for documenting care. As stated by Björvell et al. (2009) and Moldskred et al. (2021) many nurses are facing difficulties in aligning their documentation with the nursing process, which forms the foundation of nursing documentation. When De Groot et al.'s (2019) applied nursing process in their systematic

study found that the documentation was of excellent quality. It is still problematic that the nursing process has not reflected in the nursing documentation. The lack of reflection of the nursing process in the nursing documentation continues to be a problem for the documentation's quality (Azevedo et al., 2019 as quoted by De Groot et al., 2022; Batista de Oliveira & Peres, 2021).

Challenges Related to Nurses Practice of Documenting Care

Due to time constraints, workload, and a lack of awareness about nursing documentation, many nurses still face difficulties in maintaining accurate and legally sound documentation (Andualem et al., 2019; Nakate et al., 2022). Much as nurses would like to document care, there has been a backlash that it takes time that would rather be spent on other tasks (Gallegos & Alderden, 2023; Nakate et al., 2022). A study by Gallegos and Alderden (2023) revealed that, nurses spent 33% of their time interacting with technology to document care as compared to 22% of 12 hours shift giving direct care and the charting increased with every new update in care.

Cooper et al. (2021) claims that paperwork takes a lot of time and takes nurses away from providing patient care by taking up time that could be spent with patients. The mean self-reported time for clinical documentation during morning shifts was 50.4%, afternoon shifts were 40.7%, and night duty was 37.9%, according to the study's findings.

According to Tasew et al., (2019) Barathi et al., (2020) and Nakate, et al., (2022) lack of time followed by shortage of documenting sheets, inadequate staff, lack of motivation from supervisors and lack of obligation from employing institution affected the documentation practice. Other studies disclosed that patient load, lack of in-service training and lack of support from nursing leadership also affected the practice of

documenting care (Hameed & Allo, 2014 as cited by Tasew et al.; Kebede et al., 2016; Taiye, 2015). There are inadequate documentation principles including objectivity, specificity, clearing and consistency, comprehensive, respecting confidentiality and factuality (Alkouri et al., 2016 as cited by Andualem et al., 2019). In Africa, nurses view nursing documentation as an important practice towards patient care though the act of documentation remains problematic due to lack of pre and post-service training, lack of resources and supplies, lack of comprehensive nursing education lack of time and overcrowding (Nakate et al., 2015 as cited by Andualem et al. 2019).

The research conducted in Ghana and Kenya demonstrated the deficiency of nursing documentation information and the absence of a systematic approach (Johnson, 2011; Sum & Chebor, 2013 as quoted by Tasew et al. 2019). Research conducted by Tasew et al. and Barathi et al. (2020) revealed that nurses had difficulties in documenting practices due to their unfamiliarity with the operational standard of nursing documentation.

Duplication of data is an issue at healthcare facilities where paperwork is still the primary means of documentation (Cooper et al., 2021). One nurse will often open a different file for the patient if they are unable to locate the necessary notes. The analysis found duplicate documentation and identified superfluous paperwork.

Their study on the effects of a documentation practice-training program for nurses on the job versus off the job, Elhanafy & Elshazly (2021) found that documentation used up 50% of the nurses' shift time, suggesting that it is a time-consuming task. Nonetheless, nursing documentation offers useful information for nursing research, which could enhance patient outcomes (Gizaw et al., 2018 as quoted by Elham & Eman). According to De Groot et al. (2019), a review of the literature has shown that, employing standard

terminology, user-friendly formats, and processes that are in line with the nursing process improves documentation.

In conclusion, competent documentation practices require that nurses possess a solid understanding of documentation. Research has indicated that nurses still require education regarding the significance of documenting nursing care, which could lead to an improvement in their documentation practices.

Globally and in Uganda, Various Strategies Have Been Tried to Improve Documentation of Nursing Care

The methods that have been employed in the past to enhance nursing care documentation worldwide and in sub-Saharan Africa will be examined in this section. In-service training, mentorship, creating documentation frameworks, enhanced oversight by nurse leaders, and the documentation checklists covered below are some of the tactics that have been used to improve nursing documentation.

In-service training

Norushe et al. (2004) define in-service training as instruction that is methodically prepared and executed by a mentor within an organization during regular working hours with the aim of closing performance gaps. It was discovered that nursing documentation was better among nurses who received in-service training (Okaisu et al.). In Uganda, where there was an educational program that included classroom-based training and mentorship, a five-day session on documentation was added to the new nurses' orientation program to address gaps in documentation that were found (Okaisu et al.).

Obioma (2017) initiated a research-based initiative to provide nurses with new training on how to accurately-document patient care in their notes. This educational

intervention enhanced the caliber and volume of nursing documentation. The study also showed a noteworthy rise in the documentation of nurse diagnoses, objectives, and discharges. The results of the study showed that better nursing care documentation procedures and retraining of nurses (Johnson et al. 2011, as reported by Obioma).

Mentorships

Individuals with varying degrees of experience and skill engage in a complicated process of interaction called mentoring, whereby the mentors provide help to their peers or subordinates (Lovric et al., 2018). They went on to say that, the purpose of mentoring in nursing practice is to help nurses become more knowledgeable and proficient in a particular area of interest. Okaisu et al. (2014) employed mentorship as a tactic in their study to enhance nurse documentation habits.

As part of the mentorship program, nursing staff members were assigned to wards, theaters, and intensive care units to observe how those departments documented patient care. The curriculum demonstrated a significant improvement in the nurses' documentation practices and helped them acquire the preferred knowledge and skills of nursing documentation.

Strengthen Nursing Hospital Leadership

A well-documented nurse leader's responsibility is to supervise and uphold the delivery of safe, high quality nursing care (Asmirajanti et al., 2019 as quoted by Lamb et al. n.d). According to Lamb et al., nurse leaders can mentor supervisees on documentation standards for care if they have a deeper understanding of quality report analysis, documentation standards, and performance improvement. According to Lamb et al., nursing supervisors must give staff members’ timely and regular feedback in order to

maintain the benefits of excellent documentation practices. The study found that departmental cooperation with nurse leaders and organizational support improved unit effectiveness when it came to documenting care. It is the responsibility of nurse leaders to mentor and encourage other nurses to advance their nursing documentation skills (Taylor, 2003; Nakate et al. as referenced by Nopriyanto et al., 2019).

Developing a Documentation Framework

The structure of progressive notes for nurses and midwives were organized using a documentation framework (Langtree & Wood, 2022). The kind of framework utilized depends on the institution's policy and procedural documentation rules. The availability of a framework for documenting nursing actions, according to Bjerkan et al. (2021), increased nurses' documentation practices. An inpatient medical record format for healthcare professionals showed a significant improvement in inpatient medical record completeness in an action study conducted in Uganda at the Mbale CURE hospital by OKaisu et al. (2017)

Documentation Checklist

The College of Nurses Manitoba (2022) defines a documentation checklist as a condensed document that illustrates how the nursing process is applied in nursing care. The nursing process is reflected in the documentation checklist used in nursing practice (College of Registered Nurses). A documentation checklist should be employed as soon as a procedure is finished, according to the College of Registered Nurses of Manitoba (2022). This will help with precise information to recall information and good communication with other members of the healthcare team.

In their study, Krishnamohan et al. (2019) found that the use of checklists increased patient observations from 34% to 87%, fluid balance documentation from 8% to 76%, and documentation practice from 26% to 79%. Their research also showed that using checklists encouraged medical professionals to attend to details of patient care that they might have overlooked otherwise. The same study showed that using a checklist to document care led to a noticeable improvement in important areas of patient assessment and care. Their documentation checklist, which outlines important components of care, assisted in streamlining complicated documentation processes.

A well-designed documentation chart translated to better documenting of inpatient care, permitting better patient tracking, enhanced team communication, and better patient outcomes, according to Muinga et al., (2021) and Krishnamohan et al., (2019). According to a study by Kasaye et al. (2022), hospitals with access to recommended formats for documentation had a 3.12 times higher likelihood of having appropriate nursing documentation practices than hospitals without such resources

A documentation checklist, according to Comagine Health (2023), helps medical professionals to provide high-quality care and attend to patients' needs. In addition to lowering liability risk and promoting the greatest possible patient outcome, the documentation checklist allowed nurses to document patients' responses to care. The quality and completeness of the information in the patient notes was evaluated with the additional aid of the documentation checklist. A checklist can be used to increase a health provider's proficiency with documentation, according to Comagine Health.

A literature analysis has shown that the documentation checklist appears to be a more straightforward manual for nurses to document the nursing care they have given. With the

use of the VIPS model, this information will direct the proposed study's formulation of a documentation checklist, which will enable an assessment of its impact on Ugandan nurses' knowledge and documentation practices.

Summary

The literature on documentation as a professional duty of nurses and a system of accountability for completed work has been given in this chapter. The literature on difficulties of nursing documentation and how it affects patient care has also been highlighted. The literature on nurses' understanding of documentation and their documentation practices has also been synthesized. Finally, a study of the literature was conducted on the several approaches that have been taken globally used to raise the level of nurses' documentation practices and expertise.

Chapter Three: Methodology

Chapter three describes the methodology of the study. It embraces the study population, study design, sample selection for the participants, and the study location. It explains how data was collected, what tools were used to analyze data, and how the ethical considerations were observed.

Research Design

A quantitative quasi-experimental research design was used for the study. In order to assess the impact of the intervention, I provided a pre- and post-questionnaire to nurses working in medical-surgical wards. I evaluated the impact of my educational intervention on nurses' knowledge and documentation practices of nursing care in a general hospital in the mid-western Uganda. I employed a pretest-posttest questionnaire because the study was predictive (Polit & Beck, 2017, p. 16).

Population

The accessible population was qualified nurses allocated in medical-surgical wards of a general hospital in Uganda. Whereas the target population consisted of all qualified nurses employed in the facility, these nurses worked in medical-surgical wards, provided care and documented it.

Study Setting

The study was conducted at a general hospital located in the mid-western region of Uganda, with a total bed capacity of 109. On average, the medical-surgical wards accommodate approximately 70 patients daily. The hospital has a total of 65 nurses who provide care across all departments, not exclusively in the medical-surgical wards. This site was specifically selected for the study due to its active admission wards and the relatively large nursing workforce supporting patient care.

Sampling Plan

The study employed consecutive sampling to recruit the study participants. This enabled all qualified nurses employed by the hospital in its medical-surgical wards to take part in the research (Polit & Beck, 2017, p. 254).

Sample Size

There were 65 nurses, of whom 44 participated in the study. Nurses were approached over two separate days, and those who were willing to take part completed the questionnaire and participated in CME. Since a maximum of 44 nurses could be on duty at any given time, this represented the largest possible sample size available during the study period

Researchers collected quantitative data from the target sample size and conducted regression analysis for statistical examination. According to Polit and Beck (2017, p. 744), regression analysis is a statistical process used to forecast the values of dependent variables based on an independent variable.

Inclusion Criteria

All qualified nurses who worked in medical-surgical wards for at least six months, willing to take part in the study and were on duty during the study period qualified to participate in the study. The reason being that, this category of nurses provided nursing care to patients in medical-surgical wards. The exclusion criteria were ward in-charges and all staff enrolled for further studies.

Data Collection

The hospital administration gave clearance following the approval from UCU REC. The Principal Nursing Officer (PNO) drafted an invitation for the nursing staff's general meeting, which took place in Out Patient Department. Notifications of

upcoming meetings were posted on various staff forums, such as the main noticeboard and WhatsApp groups. The PNO (Principal Nursing Officer) introduced the research team to the staff members during the meeting. The objectives of the research, as well as the prerequisites for participation in the study were outlined. Staff members were informed about the CME that would be open to all. Qualified staff members who were interested in participating in the study were invited to stay once others had reported to work. Prior to participation, all participants completed consent forms (Appendix A).Upon completing the pre-intervention questionnaire (Appendix B), participants were informed that the same questionnaire would be completed again following the intervention. The Principal Investigator assigned codes to participants using a master list. These codes replaced names on the questionnaires. The same codes were used for both the pre- and post-intervention questionnaires.

The Principal Investigator securely stored the consent forms, questionnaires, and master list in a locked cupboard. Only the Principal Investigator had access to these documents. They remained stored until the end of the study, after which the documents would be destroyed.

Following the intervention, the PNO made additional announcements. These were shared on notice boards and WhatsApp groups to inform participants about the second round of data collection. Data collection took place over two days during the day and evening shifts at the hospital."

Nurses who completed the pre-intervention questionnaire and took part in the intervention were invited to complete the post-intervention questionnaire in OPD at a prearranged time. In order to determine the best time for the staff members who were not on duty, I used phone calls to get in touch with them asking them to be there to

complete the post-intervention questionnaire. After reminding everyone of their codes, I asked them to complete the questionnaire. After that, I sealed the completed questionnaires and stored them in my house in a lockable cabinet so they could be analyzed later.

Intervention

An invitation was extended to all staff members to attend a Continuous Medical Education (CME) session on nursing documentation using the nursing process after the research participants completed their questionnaires. Two CME sessions were conducted on consecutive days. The PNO guided on the CME's date, time, and location based on the hospital culture. The lead investigator conducted the CME in accordance with the power point (Appendix-D), nursing process-based documentation checklist (Appendix-C), and teaching plan in (Appendix-E). Teaching nurses on how to use nursing process framework to document care was the main goal of the power point notes. A case study was provided to help nurses with a hands-on experience on documenting nursing care using the nursing process as a framework.

Nurses on the wards were supported in practicing what had been taught during the CME. Guidance was provided in documenting nursing care using the framework of the nursing process, which was assessed at the end of every shift using a checklist (Appendix C) based on the nursing process. A schedule detailing the days allocated for working with nurses on different wards was created and shared with the PNO and ward in-charges. Over a two-week period, three days were spent in each of the following wards: pediatrics, male, and female. A maximum of four nurses were engaged at a time

Description of the Tool

A researcher-developed questionnaire (Appendix B), informed by the existing body of published research on the nursing process and care documentation, was utilized. The VIPS model of nursing documentation, which has its theoretical foundation in Sweden, provided the guiding framework. A self-administered questionnaire was chosen as it is a cost-effective method, minimizes the risk of interviewer bias influencing responses, and reduces the likelihood of incomplete answers from nurses concerned about potential negative feedback on sensitive topics (Saunders & Kulchitsky, 2021). Closed-ended questions were used for their clarity and ease of understanding, allowing the data to be efficiently sorted and categorized for analysis.

Item Analysis

The questionnaire (Appendix-B) that was used in the research study had four sections numbered A through D. It described the participants' demographics, organizational elements that could have an impact on nurses' knowledge and documentation practices, nurses' familiarity with using the nursing process for documentation, and nurses' documentation practices.

The demographic section was made up of four questions (1-4). These were the study participants' sociodemographic traits, which included the individual's age, gender, years of job experience, and educational attainment.

The second section was on organizational factors that could affect the knowledge and documentation practices of nurses in the medical surgical wards. There were six questions (5-11). The goal of the questions was to ascertain whether the organization offered continuing education programs on documentation, whether nurse administrators

conducted random observations to monitor documentation practices, whether the facility had guidelines in place to assist nurses in documenting the care they provide, and whether nurses always had access to documentation materials. Of the six questions, two were ~~on~~ Likert scale items, one was a fill-in-the-blank question, and three were true or false.

The next section was assessing nurses' knowledge of documentation care using the nursing process. They were 17 (12-29) multiple-choice questions on this topic. Every correct response was valued at "1", while every incorrect response was valued at "0". To determine the final knowledge score, the total points earned were computed and expressed as percentage. The questions focused on when and by whom care, was to be documented as well as how to use the nursing process' phases to record the care that nurses offered. The distribution across categories was examined to determine the overall group score. Based on the criteria established by Fang et al. (2021), Guyatt et al. (2011), Hassan et al. (2023), and Özcan et al. (2023), participants scoring above 80% were classified as having very good knowledge, those scoring 70–80% as having good knowledge, 50–69% as average knowledge, and below 49% as poor knowledge.

The last section of the questionnaire was assessing nurses' practices of documenting care and there were 11 questions (30-41) using the Likert scale. Participants were asked to rate the frequency of their practices, ranging from 0= never; 1= rarely; 2=sometimes; 3=frequently; to 4=always. The questions focused on nurses' use of nursing process to document care, and documentation of interventions done both independent and interdependent. They also focused on the timeliness of documenting care and how nurses used the notes to plan for patient care. The mean and standard deviation score for each individual was obtained by summing up their responses and

dividing by the total number of statements. The mean score was the basis for categorizing participants into distinct levels of practices. Participants who scored ≥ 3.5 were considered to have excellent practice, 3-3.4 good practice, 2.5-2.9 fair practice and <2.5 poor practice (Fang et al., 2021; Guyatt et al.

Pilot Study

Ten nurses who worked on medical-surgical wards at a nearby general hospital and shared the same characteristics as the study participants, took part in the pilot study. The pilot helped me estimate how long it would take the participants to complete the questionnaire. Eventually, the consent form provided the estimated time. Immediately following their completion of the questionnaire, the study team met with the staff members who took part in the pilot study to assess the questionnaire for any ambiguities or unclear questions. Before the final distribution of the questionnaire, sections identified as unclear during the pilot study were revised. For example, ambiguous wording was clarified, double-barreled questions were separated, and the response options for some items were adjusted to better capture the intended data. The faculty was informed of the feedback, and the questionnaire was refined to enhance its clarity and reliability. The results from the pilot study were then entered into SPSS to develop the codebook for data analysis.

Validity

Validity is a measure of how well a measuring instrument fulfills its intended role and relates to whether it assesses the behavior or quality that it is meant to measure (Anastasi &Urbina, 1997 as quoted by Sürücü & Maslakçı, 2020). If an instrument has a suitable sample of items for the construct being measured, content validity refers to how well the instrument's content captures the construct (Polit & Beck, p. 310).

Two faculty members with extensive experience guided the researcher to check for comprehension and relevancy of the content of the study. To help accomplish the study objectives, the researcher conferred and discussed with two nursing process specialists to get their opinions on the questions' applicability, thoroughness, and balance. Two experts, who work in the field of nursing education and clinical practice, respectively were consulted.

Reliability

Reliability was established from the results of the pilot study. I calculated the reliability of the tool using Cronbach's alpha (Polit & Beck, p.308) to determine the internal consistency of my tool. Internal consistence is the ability of the questions to measure the same construct consistently (Polit & Beck, p.308). Cronbach's alpha coefficient was 0.80 that indicated that internal consistence was adequate. Reliability is a measure that looks at the extent to which scores are free from measurement errors (Polit & Beck, p.307). Testing reliability helps the researcher attain good results (Sürücü & Maslakçı, 2020).

Data Analysis

Data analysis was done using IBM SPSS Statistics (Version 24). Descriptive statistics were used to analyze demographic data. Descriptive and inferential statistics were used to analyze nurses' knowledge and practice of documentation of care using nursing process and documentation practices of care.

Demographic Characteristics

Demographic data was analyzed using frequencies and percentages. These were used to describe the distribution in the study population, and they were reported in the form of tables.

Factors That Affect Documentation

In order to analyze the organizational factors that might affect nurses' knowledge and documentation practices, frequency and percentages were used. Two factors were related to training: when the staff last trained in documentation, and the specific period in years, months or weeks when they last had any training on documentation. In addition, the following factors were analyzed: if there were any guidelines for documentation at the facility, if nurses had adequate time to document care, if there were spot checks of documentation by the supervisors and lastly if there was availability of documentation sheets on the wards. These findings were reported in the form of tables.

Nurses' Knowledge of Documentation Using Nursing Process

Descriptive statistical measures analyzed the knowledge data. Each individual's overall score for both pre-intervention and post-intervention phases was calculated as a percentage and by category. Overall, group scores were examined by analyzing the mean percentage, category distribution, and mean scores within each category. This information was presented in tables.

Each knowledge item in the questionnaire was evaluated to identify areas of strength and weakness. Percentage scores for each question were reviewed, with scores of 80% or higher considered areas of strength. As the study followed a pre-test and post-test design

with paired results, a paired t-test determined whether the intervention led to statistically significant differences in nurses' knowledge of documentation.

Questions that received grades of less than 49% were categorized as weak points. This helped the researchers in determining whether the intervention had an effect on the nurses' knowledge of documentation using the nursing process. A comparison statistic (paired t- test) was used to look at the effect of the intervention on knowledge. The statistical significance was set at a p-value of <0.05 as seen in table 5.

Nurses' Practice of Documentation Using the Nursing Process

The practice scores were analyzed using descriptive statistical techniques. The mean percentage and category-specific scores for each individual was computed for both the pre- and post-intervention periods. The distribution of scores within each category by percentage and frequency as well as the group's general mean was examined in order to determine the overall group scores.

Specific practice questions with a score ≥ 3.5 were considered to have an excellent practice, 3-3.4 Good practice, 2.5-2.9 fair practice and <2.5 poor practice of documentation. A Wilcoxon signed-rank test analysis was performed because this is a pre-test and posttest study with paired results to see whether the intervention had changed nurses' documentation habits in a way that was statistically significant.

In a similar manner, each item in the questionnaire was analyzed for its performance. This assisted in determining the practices' strong and weak areas. Examining the percentages for each practice item helped with this. A comparison statistic to look at the effect of the intervention on documentation practices of nurses was done using Wilcoxon signed-rank test and the statistical significance was set at a p-value of <0.05.

Ethical Considerations

This section covered the ethical issues concerning the research study, it also discussed the consent form and further outline how privacy and confidential issues were managed. The benefits of study participants, risks, incentives and lastly the social cultural issues were also explained.

Ethical Approval

A letter from the head of UCU's Department of Nursing introducing the researcher to the research study site (Appendix H). After discussing the research proposal with the hospital director of the study site, he gave administrative clearance (Appendix I). Thereafter the letter of administrative clearance was presented to the Uganda Christian University Research and Ethics Committee (UCU, REC) together with all other documentation. Then the UCU REC gave approval for me to carry out my study as scheduled.

Consent Form

Each participant who agreed to take part in the study filled out a consent form (Appendix A). The study topic, objectives, potential benefits, confidentiality concerns, and participant rights were explained in depth in the consent form. Additionally, it specified that before completing the second questionnaire, participants would have the option to withdraw from the study without it having any impact on their work. All nursing staff, regardless of their decision to participate in the study, had access to the training and mentorship provided by this research.

Privacy

In a scientific investigation, privacy pertains to an individual's ability to manage who has access to their data and their entitlement to privacy protection (Polit & Beck, 2019, p.141). It ultimately comes down to keeping study participants' personal information private. The identity of study participants remained confidential to protect their privacy. On the questionnaires, participants used codes. The codes were sealed and placed in an envelope. The envelope containing the consent forms was sealed as well. The Principal Investigator was the only individual with access to the locked cabinet that contained both sealed packages.

Confidentiality Issues

According to Human Research Protection (n.d.), confidentiality is the handling of information that a person has disclosed in a relationship. Based on trust and with the expectation that the information will not be revealed to others without consent in ways that are inconsistent with the original disclosure's understanding. It all comes down to how a researcher manages the data that they gather for their study.

Participants were assured that any publication or presentation based on the study's findings would not reveal their identities. Access to the data was restricted to the Principal Investigator and the statistician during the analysis phase. Collected data and signed consent forms were stored in separate sealed envelopes and kept in a secured cabinet. All digital data required password protection for access. Upon completion of the analysis, the physical questionnaires were destroyed by incineration.

Benefits

Nurses who participated in the study may have gained more knowledge on documenting care using the nursing process and improved their documentation practices.

Risks in the Study

The study was quasi-experimental, and posed no risk for human subjects as seen in studies that involve trials on human subjects.

Use of Incentives

Nurses were not paid to participate in the study, though a token of 10,000 Ug. Shillings was given at the end of second data collection in appreciation to the participants' time.

Social Cultural Issues

The PI was conscious of the diversity of cultures inside the hospital's healthcare system where the research was conducted. Efforts were made to ensure that interactions with study participants were free from personal cultural bias, demonstrating cultural competence. Cultural sensitivity was maintained by exploring the social and cultural concerns relevant to the healthcare professionals in the study setting. Upon arrival at the hospital, an effort was made to understand the leadership and organizational culture within the healthcare system, with particular attention to the dynamics between nurses and their leaders, as well as between nurses and patients. In the medical-surgical wards, collaboration occurred with nurses of all cadres, which contributed to bridging the educational gap between the researcher and the study participants.

Summary

In Chapter 3, the research design, study population, study setting, study sample size, and inclusion criteria for study participants were covered as approaches that were used in the study. The chapter also covered the questionnaire, the tool's validity and reliability, data analysis, ethical concerns, risks, remunerations, and cultural considerations. Chapter 4 will present the results of the study.

Chapter 4: Presentation of Results

Chapter 4 presents the findings of the study on the effect of introducing a nursing process-based checklist on the nurses' knowledge and practice of documenting care in medical-surgical wards in a district hospital. The chapter will discuss the findings of the demographic data, organizational factors and the effect of an educational intervention and introduction of nursing process-based documentation checklist on nurses' knowledge and practice of documenting nursing care in medical-surgical wards. Both pre-intervention and post intervention data analysis was analyzed using IBM SPSS Statistics (Version 24).

Demographic Results

The study presents the collected demographic data as frequencies and percentages. The data describes the demographic characteristics of the participants in this study as shown in Table 1. The data collected on demographic variables in the study included: age, gender, highest-level qualification in nursing, years of experience, and the timing of the last training on documentation.

In Table 1, the demographic findings of the study respondents were as follows. The age categories ranged from 26-55 years, those ranging from 26-30 years accounted for 21%. The female nurses constituted 75%. The results showed that most of the participants had worked between 6-10 years representing 32% and only one had a work experience of between 31-35 years representing that is 2%. Fifty percent of the participants had a diploma in nursing, 43% had certificates and BSc. nurses were the least represented among the participants with only 7%.

Table 1: Selected Demographic Characteristics of Participants

Selected Demographic Characteristics of Participants (n=44)

Category	Frequency (f)	Percent (%)
Age (in years)		
26-30	9	21
31-35	6	14
36-40	7	16
41-45	7	16
46-50	7	16
51-55	8	18
Gender		
Male	11	25
Female	33	75
Work Experience (in years)		
1-5	4	9
6-10	14	32
11-15	6	14
16-20	9	20
21-25	8	18
26-30	2	5
31-35	1	2
Highest Qualification earned		
Certificate in Nursing		
Diploma in Nursing	19	43
BScN. Nursing	22	50
	3	7

Factors That Affect Nurses' Practice of Documenting Nursing Care

Tables 2 and 3 present the frequencies and percentages of the organizational factors investigated in the study. They are "if the participants had any CME on nursing documentation at their place of work", "when last the participants were trained in nursing documentation", "if there are spot checks of nurses' documentation by their immediate supervisors" and if there were "guidelines for documenting nursing care" in the hospital. The study also explored if nurses had enough time to document care and lastly availability of documentation sheets on the wards.

Table 2: Factors That Affect Nurses' Practice of Documenting Nursing Care

Factors That Affect Nurses' Practice of Documenting Nursing Care (N=44)

Factor	Frequency (f)	Percent (%)
Any CME after graduation or at work		
Yes	11	25
No	33	75
Last documentation training (in years)		
None	34	77
≤ 1	3	7
2-5	3	7
6-10	3	7
11-20	1	2
Spot checks		
Yes	12	28
No	31	72
Guidelines for documenting nurse care		
Yes	2	5
No	40	91
No response	2	4

Seventy-five percent of the workers stated that they have never had any CME on documentation at their workplace since they graduated from school. More significantly, 77% had never trained in nursing documentation whether at school or workplace and 2% had just trained in the last year as shown in Table 2. Additionally, the study findings revealed that 72% of participants reported that there were no spot checks by their immediate supervisors to check on their documentation while 91% reported that there were no guidelines for documenting nursing care. Only 5% percent of participants stated that they did have guidelines and 4% did not even respond to the question as seen in Table 2.

Table 3: Factors That Affect Nurses' Practice of Documenting Nursing Care

Factors That Affect Nurses' Practice of Documenting Nursing Care N=44

Factor	Frequency (f)	Percent (%)
Time for Documenting Care		
Rarely	9	21
Sometimes	23	52
Frequently	7	16
Always	5	11
Availability of Documentation Sheets on Wards		
Rarely	9	21
Sometimes	31	71
Frequently	3	7
Always	1	2

Table 3 is representing additional organizational factor that could aid documentation of nursing practice. The investigator had interest in knowing if the participants had adequate time to document care and 52% reported that they *sometimes* had adequate time

to document nursing care. Additionally, 21% said that they *rarely* had adequate time to document care and only 11% of the participants *always* had adequate time to document care.

Availability of documenting sheets on the ward was another significant factor investigated. The study revealed only 2% *always* had documentation sheets, 7% reported *frequently* had documentation sheets, 21% *rarely* had documentation sheets and 71% *sometimes,* had documentation sheets.

The Effect of the CME on Nurses' Knowledge of Documenting Care

The following section describes the effect of an educational intervention on the nurses' knowledge of documenting care using the nursing process. The section includes the descriptive findings, statistical findings and the analysis of the performance of each question.

Descriptive Findings

The descriptive findings section describes each participant's pre-intervention and post-intervention scores. In addition, the comparison of participants' knowledge by categories is also given.

Comparison of Nurses' Knowledge of Documentation Using Raw Scores. I calculated the mean percentage for each individual's score on both the pre-intervention and post-intervention knowledge assessments. Appendix J presents the specifics of the pre-intervention analysis, while Appendix K details the post-intervention analysis. The mean percent score for nurses' knowledge score on documentation using nursing process was 51% in pre-intervention and 89% post intervention.

Comparison of nurses' Knowledge by Category. I compared nurses' knowledge of documentation by categorizing their knowledge scores into different levels. The levels were categorized as highly knowledgeable, better knowledgeable, fairly knowledgeable, and less knowledgeable as seen in Table 4.

Table 4: Comparison of Nurses' Knowledge of Documentation Using Nursing Process by Categories

Comparison of Nurses' Knowledge of Documentation Using Nursing Process by Categories (N=44)

Knowledge level	Pre-CME		Post-CME		% change
	F	%	F	%	
Highly knowledgeable (80^{+})	0	0	36	82	82
Better knowledge (70-79)	4	9	4	9	0
Fairly knowledgeable (50-69)	23	52	4	9	-43
Less knowledgeable (<50)	17	39	0	0	0

Before intervention, there was no nurse in the category of *highly knowledgeable*. The results before the educational intervention revealed that only 9% had *better knowledge*, 52% were *fairly knowledgeable* and 39% were *less knowledgeable* about documenting using nursing process. After the intervention, 82% of participants were *highly knowledgeable*. The *better knowledge* category remained constant at 9%, and 9% were in

the *fairly knowledgeable* category. No participant was in the category of *less knowledgeable*.

Statistical Findings

Table 5 describes the statistical findings section by comparing the mean for the knowledge of the participants before and after the educational intervention. A paired *t* – test was performed to compare nurses' knowledge. The mean score pre-intervention was 22 and after post- intervention 39. The statistical significance achieved the P-value of 0.02 and before intervention, CI was 22±0.004 and CI, 39±0.003 after intervention was

Table 5: Comparing Mean for Nurses' Knowledge Before and After CME

Comparing Mean for Nurses' Knowledge Before and After the Continuous Medical Education Using Paired T-Test (N=44)

	Mean	SD	P-value CI
Before Intervention	22	0.14	
After Intervention	39	0.11	22±0.004 0.02 39±0.003

Analysis of Performance of Knowledge Questions

The analysis of the performance of knowledge questions section compares the participants' performance against each knowledge statement. The effect of the intervention on nurses' knowledge (Appendix K) as shown in the post-intervention column. I analyzed each item in the questionnaire to evaluate its performance and to identify areas of strength and weakness.

Appendix K shows that before the educational intervention there was no area of strength that is ≥ 80%. There were areas of weakness ≤ 50% that included “distinguishing independent nursing actions from dependent nursing actions, identifying steps of nursing process and prioritizing patients’ concerns, the characteristics of nursing process, categorizing subjective or objective data when to documenting care, and lastly where to document vital observations”. The weakest area was describing “the characteristics of nursing process”: that scored 16%.

After the educational intervention, strong areas included “the ability of the nurses to know that nursing concerns are documented as independent nursing actions*”*, and *what to include when writing nurses notes using the nursing process.* Another strong area was the understanding that 'anything done during patient care must be documented' as evidence of the care provided. Nurses also knew the components of a complete nursing note and were able to differentiate dependent actions from independent actions. Lastly, the nurses knew that the “nursing process was cyclic in nature”. There were no weak areas after the educational intervention (Appendix K).

The Effect of a CME on Practices of Documenting Care

The practice section describes the descriptive findings, statistical findings and the analysis of the performance of each question. It identifies the participants’ practice of documenting nursing care before and after the intervention. I had two questions in this practice section that were negatively worded, and I reversed the responses during the scoring as described in the data analysis of the practice section in chapter 3.

Descriptive Findings

The descriptive findings presented the study findings on the effects of an educational intervention of having continuous medical education on practice of documenting care. This section will discuss raw scores, categories and comparison analysis.

Comparison of Nurses' Documentation Practice. An analysis of each individual's overall score for both pre-intervention and post-intervention was calculated using mean score. At pre-intervention (Appendix L), the overall mean practice of documenting care was 1.9. Nevertheless, after the intervention (Appendix M), the overall mean practice score of the study respondents increased to 2.9.

Comparison of Nurses Practice of Documentation by Category. This section presents the analysis of practice scores regarding nurses' practice of documenting care. The investigator calculated the scores by summing up the individual responses and divided them by the total number of statements. The researcher used a nursing process based checklist, which the participants used as a reminder and guideline to document care. The results in Table 6 shows that before intervention there was no nurse with *excellent* and *good* documentation practice. However, after intervention 5% gained *excellent* practice and 36% *good* documentation practice respectively. *Fair* category had 2% and 98% in the *poor* category of documentation. After intervention, all these categories improved with 52% in the *fair* category and only 7% remained in the *poor* category.

As shown in Table 6 there was a decrease in the percent change of participants with poor and fair practice categories (-91% and 50% respectively). After the continuous

medical education, most participants had fair and good documentation practice. A minority improved to excellent practice category.

Table 6: Comparison of Nurses' Documentation Practice Using Nursing Process by Categories

Comparison of Nurses' Documentation Practice Using Nursing Process by Categories (N= 44)

	Pre-CME		Post-CME		
Practice Level	F	%	F	%	% Change
Excellent (≥ 3.5)	0	0	2	5	5
Good (3 to 3.4)	0	0	16	36	36
Fair (2.5 to 2.9)	1	2	23	52	50
Poor (< 2.5)	43	98	3	7	-91

Statistical Findings

This section includes the comparison of the documentation practice before and after the intervention using the mean and standard deviation. It describes the statistical findings of the effect of an educational intervention on participants' documentation practice as shown in Table 7.

Table 7: Comparing Nurses' Documentation Practice Using Wilcoxon Signed Ranks Test

Comparing Nurses' Documentation Practice Using Wilcoxon Signed Ranks Test (N=44)

	Mean	SD	p-Value
Before Intervention	1.9	1.9	
After Intervention	2.9	2.9	0.76

As shown in Table 7, the mean for documentation practice before the intervention was 1.9 and after the intervention, it was 2.9. The Wilcoxon signed rank test result of 0.31 achieved the P-value of 0.76. CI was -6.0 pre-intervention and 8.0 post-intervention. This shows that continuous medical education did yield a positive change on the documentation practice of nurses though it did not reach the level of statistical significance.

Analysis of Performance of Documentation Practice Questions

Pre intervention there were two areas of strength: "I document the medication I have administered" and "looking at previous note helps me plan patient care". Post intervention there were four areas of strength with a mean ≥ 3.5. The items included "I document the medication I have administered", "I document the health education or advice I have given to patients", "I document immediately after I have provided care to the patient" and lastly "looking at previous note helps me plan patient care".

The pre-intervention data identified several areas of weakness, including "it is not my responsibility to document patients' discharge plan", "I use nursing process to document nurses' notes", "I know how to document the nursing concerns or diagnoses I find", "I am

able to document interventions I do for every patient", and lastly, "I use nursing process framework to document care".

However, after intervention, areas of weakness still existed and these are; "I use nursing process to document nurses' notes", "I know how to document the nursing concerns or diagnoses I find", "I am able to document interventions I do for every patient, and lastly "I am able to document patient's response to intervention". Then participants still did not have the confidence to document care using nursing process framework. There was also a challenge documenting priority diagnoses for patient care and lastly some participants stated, "It was not their responsibility to document patients' discharge plan". Conclusively the findings showed some improvement to better categories however, 7% of the study participants remained in the *poor* category of documentation (Appendix N).

Summary

Chapter 4 has presented the two study objectives considering the effect of continuous medical education on nurses' knowledge and practice of documenting nursing care provided on medical-surgical wards using nursing process- based checklist as a guide and reminder to document care . Chapter 5 will address the study outcomes.

Chapter 5: Discussion, Recommendations and Conclusion

Chapter 5 intends to discuss study findings that were informed by the study objectives. The first study objective was to identify the effects of a nursing process-based documentation checklist on nurses' knowledge of documenting care in medical surgical wards. The second objective was to describe the effect of a nursing process-based documentation checklist on nurses' practices of documenting care in medical-surgical wards in a district hospital in Midwestern Uganda. The chapter will also discuss recommendations, limitations, areas for further study, application of the theoretical framework to the study, plans for disseminating the findings and then a conclusion section.

Demographics

The majority of the participants in this study were aged 26-30 years. This finding agrees with the descriptive and predictive study done in Uganda by Ministry of Health (2023) that revealed that Uganda has a young health workforce with most health workers below 45 years of age.

Twenty-five percent of the study participants were male, highlighting the ongoing gender imbalance within the nursing profession. This finding aligns with observations by Lalam and Nabushawo (2022), who noted a striking level of gender inequality in nursing across selected hospitals and training institutions in northern Uganda. Such gender disparities reflect deep-rooted social and cultural norms that continue to shape perceptions of nursing as a predominantly female profession, potentially limiting the recruitment and retention of male nurses.

Regarding educational qualifications, fifty percent of the participants were diploma nurses, with only 7% holding a Bachelor of Nursing Science degree. Okuonzi et al. (2024) similarly reported that diploma nurses constitute nearly half of the nursing workforce in Uganda, while bachelor's degree holders remain a small minority. This trend suggests that diploma-level education remains the primary route into nursing, possibly due to greater accessibility and fewer barriers compared to higher-level qualifications. The limited number of nurses with bachelor's degrees may influence the profession's capacity to meet complex healthcare demands and advance clinical leadership.

These findings, supported by Ministry of Health (2023) data and recent studies, underscore systemic challenges in both gender representation and educational advancement within the nursing profession. Addressing these challenges is critical to fostering a more diverse and highly skilled nursing workforce capable of delivering quality healthcare services.

Factors That Affect Nurses' Practice of Documenting Nursing Care

Seventy-five percent of participants in the study had never received any Continuous Medical Education (CME) on documentation at the workplace. This highlights a significant gap in ongoing professional development, particularly in a critical area like nursing documentation. The same pattern was reported by Ali et al. in Khartoum State–Sudan, where 75% of respondents had also not received any CME related to documentation. Jasem and Younis (2024), who found that 90% of their study participants lacked such training, echoed similar concerns in Iraq. Even though the percentage was lower in Ethiopia, Amene et al. (2022) still reported that nearly half (46%) of nurses had

not received documentation training. These findings underscore a widespread issue across different healthcare settings.

The absence of CME in nursing documentation carries significant implications for the quality of care. Accurate and timely documentation is a cornerstone of patient safety, continuity of care, legal protection, and communication among healthcare providers. Abd El Rahman (2021) demonstrated that training interventions significantly improved nurses' knowledge of documentation, reinforcing the value of CME as a tool for skill enhancement and service quality improvement.

Several factors may contribute to the lack of CME opportunities in healthcare facilities. These include limited institutional funding, shortage of qualified trainers, lack of prioritization by hospital administration, and heavy workloads that prevent nurses from attending training sessions. In some cases, staff may not be aware of available programs, or there may be no structured system to implement ongoing education. Additionally, rural and under-resourced health facilities often face logistical barriers to organizing such sessions.

Expanding access to CME especially in essential competencies like documentation can play a vital role in building a more competent, confident, and accountable nursing workforce. Addressing these systemic barriers is therefore essential for improving both documentation practices and overall healthcare delivery.

The availability of documentation guidelines plays a crucial role in ensuring consistent, accurate, and standardized recording of patient care. In the current study, 90.9% of participants reported the absence of any documentation guidelines in their wards. This point to a significant structural gap that can undermine the quality and

reliability of nursing documentation. Without clear, accessible guidelines, nurses may rely on personal judgment or informal practices, which can lead to inconsistency, omissions, and potential risks to patient safety.

Ali et al. similarly observed a lack of documentation guidelines in their study in South Sudan, highlighting that this issue extends beyond a single setting and may reflect broader systemic challenges in healthcare management and policy implementation across some regions. In contrast, studies like that of Andualem et al. (2019) in Amhara, Ethiopia demonstrate the positive outcomes that can be achieved when documentation guidelines are available. In that setting, nurses reported that their documentation aligned with established regulations, suggesting that the presence of clear protocols can enhance both compliance and quality.

The lack of guidelines may stem from several factors, including limited institutional capacity to develop and disseminate standardized tools, weak regulatory oversight, and a general under-prioritization of nursing documentation within healthcare systems. In some settings, even when guidelines exist, they may not be regularly updated, distributed, or reinforced through training.

Strengthening the availability and visibility of documentation guidelines is essential. Not only do they support nurses in maintaining accurate records, but they also serve as a legal and professional safeguard. Embedding these tools into daily practice through routine audits, supportive supervision, and ongoing training can help build a stronger culture of accountability and care continuity

Seventy-two percent of the participants stated that, their supervisors never checked their documentation. This discovery relates to a study done in Indonesia by Hajjul, et al.

(2018) where the nurses stated, “Our greatest problem primarily is caused by inadequate supervision in the documentation process (pg.112)”. They mentioned that organizational support was a crucial link to improving the quality of nursing documentation. The nurses in the study further said, “The management only care about documentation when we get closer to hospital accreditation” (pg. 112). In another study in Egypt by Abd El Rahman et al., (2021) 63% of participants cited that their documentation was not supervised by their supervisors. A similar study by Bolado et al., (2023) in South Ethiopia also found that supervisors had not checked 80% of participants’ documentation.

Having enough time to record care was one of the organizational aspects that influenced documentation. Compared to a survey conducted by Amene at el. (2022), where 59% of respondents had time to document care, only 11% of respondents in the current study said they had enough time to do so. This result might be related to the low staffing numbers, as each department had only one nurse per shift during this study. The burden of patient care would be too much for the on-duty nurse, leaving them with little time to record any interventions. The availability of documentation sheets was another organizational factor. According to the current study findings, 70% of ‘ Respondents, occasionally had papers for recording their work. This result is consistent with a prior study conducted in Ethiopia by Amene et al. (2022), in which more than 70% of participants claimed that documentation sheets were available.

The Effects of CME on Nurses’ Knowledge of Documenting Care

The study findings disclosed that the educational intervention had a statistically significant difference on the nurses’ knowledge of documentation using the nursing process. Before intervention, there was no participant within the *highly knowledgeable*

category, however, afterwards the mean score improved to *highly knowledgeable*. According to the findings of Andualem et al. (2019), Azevedo et al. (2019) and Hassan et al. (2018) in Egypt, Brazil, and Ethiopia, respectively, the majority of the nurses initially possessed a reasonable level of expertise. This is also consistent with research conducted in Egypt by Abd El Rahman et al. (2021) and Abdallah et al. (2020), which found that nurses had a high level of documentation knowledge.

After the intervention, only two categories remained; that is *highly knowledgeable* and *better knowledge* of documentation using the nursing process. The results after intervention are a clear indication that the educational intervention and use of documentation checklist positively influenced nurses' knowledge of documenting care. The findings are comparable to quantitative quasi-experimental studies done in Brazil where documentation checklists were introduced and afterwards, the findings showed a superior statistical difference to the pre-intervention findings by Linch et al. (2017).Oliveira & Peres, (2021). These results showed that nurses' understanding of documentation utilizing the nursing process had significantly improved because of the educational intervention. The pre-intervention weak points demonstrate that not enough is being done to teach nurses about nursing process documentation. Every educational intervention has had a significant influence on nurses' understanding of recording care, according to the literature (Linch et al.: Oliveira & Peres).

Effective of CME on Nurses' Practice Documenting Care

In the pre-intervention data, two items were found to be in the *excellent* category. These include "I document the medication I have administered" and "Looking at previous note helps me plan patient care". Two items were in the category of *good* namely "I

document the health education or advice I have given to patients" and "I document immediately after I have provided care to the patient". Lastly, eight items scored poor documentation practice. These items included; "I use nursing process to document nurses' notes". "I have a challenge documenting the nursing concerns or diagnoses I have found". "I am not able to document interventions I have done for every patient". "I have difficulty documenting patient's response to intervention." "I use nursing process Framework to document care". "I lack confidence documenting using nursing process framework". "I struggle documenting priority diagnosis for patient care". Lastly, "It is not my responsibility to document patients' discharge plan". This findings could have been attributed to several reasons like not knowing what to document, how to document and possibly low staffing levels during the study.

However, post data intervention revealed three items in the *excellen*t category. These are identified as; "I document the medication I have administered", "I document the health education or advice I have given to patients", "I document immediately after I have provided care to the patient", then "Looking at previous note helps me plan patient care". Two items were in the *good* category and they were "I use nursing process to document nurses' notes", and "I use nursing process framework to document care". The remaining six items that rest remained in the *poor* category. The findings discovered that after the education intervention, nurses had *fair* documentation practices. Before the intervention, a number of participants "struggled documenting priority diagnoses for patient care". However, after introduction of the documentation checklist this item improved. According to Susriweti et al (2022); and Oliveira and Peres, (2021) in their quasi-experimental studies done in Indonesia and Brazil introducing a documentation checklist,

the documentation practice of nurses improved as compared to the pre-intervention practice where nurses were using the narrative model.

Some participants stated that, “it was not their responsibility to document patients discharge plan” before intervention and after intervention. These findings do not resonate with Indonesian nurses who realized that it was their responsibility to document patients’ discharge plan after introduction of documentation checklist (Susriweti. et al., 2022).

A study with a quasi-experimental design by Jasem and Younis (2024), the pre-intervention mean score was categorized as poor practice and post intervention the score progressed to good practice. Their educational intervention resulted in an even stronger positive effect on nurses’ practice than my study.

The results of the study revealed that when a nursing process-based documentation checklist was introduced while not achieving statistical significance, the nurses’ practice of documenting care showed a positive trend. The findings align with a Norwegian study by Moldskred et al. (2021) that used a standardized audit tool matched to nursing process to quantify nursing practice documentation. A pre-audit review of the records was done prior to the tool's introduction, and the results revealed poor documentation procedures. The post-audit results indicated a moderate improvement in nurses' documentation after the audit tool was introduced and used by nurses. The findings are comparable to those of Hassan et al. (2018), Tamir and Mengistie (2021), in which most of the nurses had fair documentation practices. These results demonstrate that educational interventions have a positive effect on the nurses’ documentation practices.

Application of Theoretical Framework

The VIPS Model of Nursing Documentation's ideas and tenets were used in this investigation. It helped me create a documentation checklist, create the study questionnaire, and prepare and complete my CME. The five steps of documenting described in the VIPS model served as the basis for the preparation of the continuing medical education on nurses' documentation utilizing the nursing process. In the same way, I made sure that every part of the model was covered in my questionnaire by following the nursing process steps that were represented in the model. "Well-being, integrity, prevention, and safety," or VIPS as it is spelled in Swedish, are the cornerstones of the documentation paradigm. For every nursing action that makes use of the nursing process, the four VIPS principles serve as the overall goals of nursing care.

Recommendations

Nurse leaders should prioritize in-service training for nurses on the use of nursing process as the documentation framework. Facilities should periodically organize continuous professional development on documentation of nursing care using nursing process. All nursing training institutions should emphasize the use of the nursing process as a framework to document care and it should be used during their clinical placements.

Nurse Supervisors should continuously supervise nurses' documentation as the studies show that this improved the practice of documenting. Studies by Abd El Rahman et al. 2021; Bolado et al., 2023; Seidu et al., 2021, demonstrated that spot-checks improve documentation practice so it should be done to keep nurses mindful of documentation. Lastly, there should be availability of documentation tools where paper documentations is being used.

Areas for Further Study

Researcher are recommends a study nursing documentation practices using an observational study design to evaluate the generalizability of the findings of this study. It is recommended that researchers replicate this study in multiple general hospitals to increase the number of participants and enhance the generalizability of the findings. The additional studies can look at the availability of documentation tools in healthcare institutions, the role of nurse leaders in documenting nursing care, and the practice of nurses in relation to nurse-patient ratio. There may be need for a lengthier period to coach nurses on how to document care using nursing process.

Nurse leaders can create and adopt a nursing process-based checklist. Other studies on effects of mentorship and coaching on nursing documentation could be done in other health facilities.

Limitations

The use of a self-administered questionnaire to collect the data from my respondents, which could have been linked with a response bias. I also used a researcher-developed tool; therefore, it did not have strong validity and reliability.

This study was done in a single district and a single health facility. As such, the study findings could have been influenced by environmental and circumstantial factors, which may not necessarily be a similar situation in other health facilities across the country.

Dissemination Plan of My Findings

The study findings will be presented in CME at my facility to my coworkers at work and the study site, respectively. After that, I will submit my study findings to peer-reviewed journals for publication.

Conclusion

The study findings showed that an educational intervention and introduction of nursing process-based documentation checklist had a statistically significant effect on nurses' knowledge of documentation using the nursing process and influenced their documentation practices. The study was relevant since it addressed documentation of care given, which is a fundamental aspect of patient care. In order to guarantee patient safety and continuity of service, nursing documentation is essential.

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Appendix A: Informed Consent

Title of research study: The effect of a nursing "process based" documentation checklist on nurses' knowledge and practices of documenting care in medical-surgical ward in a District Hospital in Midwestern Uganda.
Principle investigator: Akugizibwe Eva: +256-756562877/+256-773441481
Email: akugizibweeva@gmail.com
This research is a requirement for completion of a master of nursing science degree from Uganda Christian University P.O. Box, 4- Mukono

Introduction and purpose of study: Nursing documentation is fundamental to enhance good clinical communication. Proper documentation in patient's chart tells a chronological story about their care and health status. The purpose of the study is to determine the effect of a nursing process-based documentation checklist on nurses' knowledge and practices of documenting care in medical-surgical wards in a district hospital in Midwestern Uganda.

Description of the research: The study is Quasi-experimental research. I will have a pre and post intervention on nurses working in medical-surgical wards to assess the effect of my intervention.
Subject participation: You have been selected to participate in the study because you are working in a medical-surgical ward, provide nursing care and you document the care given. You will complete the questionnaire that takes about 15-20 minutes before and 4 weeks later after the intervention. You will be required to attend the Continuous Medical Education.

Potential Benefits: Those who will participate in the study may improve their use of the nursing process and documentation practices.
On completion of the second questionnaire, you given 10,000as an appreciation of your time.

Potential Risk and Discomforts: There are no potential risks of participating in the study.

Confidentiality: In order to maintain confidentiality, you will not be identified in any publication or presentation that uses the information collected from you.

Rights of participants: You have the right to withdraw from participation any time before the second questionnaire is submitted.

Contact information for ethical concerns or to withdraw consent:This study has been approved by UCU REC. **Supervisor**: Dr. Grace Nakate +256-772-439-526 or mail: gracentale@ymail.com

Authorization Statement

I have read this consent form and I agree to be a participant in this study. I have been given the opportunity to ask questions regarding the study, and I have received answers to my questions. I acknowledge that I am aware of what this study involves, that I am at least 18 years old, and that I have received a copy of this Informed Consent form.

Participant's Signature	**Date**
Participant's Name	
Signature of Researcher	**Date**
Researcher's Name	

Appendix B: Questionnaire

Date: ……

Questionnaire Number: …….

Please read the questions carefully and respond correctly or tick in appropriate box.

Section A: Biographical Data

1. How old are you? ☐
2. What is your gender: Male ☐ Female? ☐
3. Work experience in years …….
4. Highest Qualificatio… ☐ Certificate in nu☐g ☐ Diploma in nursing ☐ Sc. nursing ☐ Masters in nursing

Section B: Organizational Factors (tick your responses)

5. Have you had any CNE/CME on nursing documentation since you graduated from school or started working with the organization?

Yes ☐ No ☐

6. When did you last have training on nursing documentation? State in week, months years) …….. ……

7. Do you have spot checks of your documentation by your immediate supervisor?

Yes ☐ No ☐

8. Do you have guidelines for documenting nursing care in your hospital?

Yes ☐ No ☐

Tick appropriate response

	Scale	**1**	**2**	**3**	**4**
Qn	**Item**	**Rarely**	**Sometimes**	**Frequently**	**Always**
9	Do you always have adequate time to document nursing care?				
10	Is there availability of documentation sheets on the wards?				

Section C: Nurses Knowledge of Documentation Using Nursing Process (circle the best response)

11. When I amusing nursing process to document care given to patient I would start with …… (step).
    a. Nursing Diagnosis or Concerns
    b. Assessment
    c. Nursing Plan
    d. Implementation
12. You are a nurse on duty and you want to document information for identifying nursing concerns or diagnosis. This would come from……
    i. Subjective data
    ii. Objective data
    iii. Independent nursing actions
    iv. Interdependent nursing actions.
    a. i&ii
    b. i& iii
    c. ii & iii
    d. iii & iv
    e. All of the above
13. What do you understand by documenting nursing care?
    a. It is writing patient treatment
    b. It is writing a nursing diagnosis
    c. It is writing everything done by nurses
    d. It is writing down physician's order
14. When I am using nursing process to document care, my documentation should include
    a. Physician orders
    b. Patients' assessment notes
    c. Progressive notes
    d. b and c only
15. Documentation of care is a responsibility of;
    a. Ward in charge
    b. Nurse on duty
    c. Junior nurse
    d. All the above
16. When documenting care, a complete nursing note should include;
    a. Date, time, ward, signature
    b. Date, time, signature, printed name, designation
    c. Time, name and designation
    d. Date, time, signature, printed name

17. When I am to document the medications I have administered it is categorized as,
    a. Independent action
    b. Dependent action
    c. Planning
    d. Evaluation

18. From a legal standpoint, if you provide care and do not document it, then care:
    a. was done
    b. was not done
    c. was done by yourself and a co-worker
    d. was only half done

19. In what step of the NP is prioritizing of patient concerns done?
    a. Assessment
    b. Implementation
    c. Planning
    d. Evaluation

20. When I am considering the effectiveness of the care I have given, my documentation reflects what phase of the nursing process?
    a. Implementation
    b. Evaluation
    c. Re-assessment
    d. Planning

21. When I review a patient's file, I notice although the nursing process is presented as an orderly progression of steps, inreality, there is great interaction and overlapping among the five steps. This characteristic of the nursing process is described as:
    a. Systematic
    b. Dynamic
    c. Interpersonal
    d. Cyclic

22. A patient complains about feeling nauseated after lunch. As a nurse on duty you will document that complaint under which category of data?
    a. Subjective
    b. Objective
    c. Signs and symptoms
    d. Overt

23. When does a nurse document an action towards patient care that involves administration of medications?
    a. Before the end of shift
    b. Before the next dose of medication is due
    c. Within one hour of giving the medication
    d. Immediately after giving the medication

24. A nurse is documenting the intensity of a client's pain in the patient's chart. What category of data is it?
    a. Assessment
    b. Planning
    c. Subjective
    d. Objective

25. Nurse Mary has admitted a newly diagnosed diabetic patient and she is helping her and family understand this condition before she makes her documentation in patient record. What kind of activity is this?
    a. Implementation
    b. Independent
    c. Dependent
    d. Assessment

26. A student has reviewed a client's chart before beginning assigned care. Which of the following actions does she want to do?
    a. Plan
    b. Evaluate
    c. Implement
    d. Diagnose or identify patient concerns

27. What part of the client's record is commonly used to document specific client variables, such as vital signs?
    a. Progress notes
    b. Nursing notes
    c. Critical path
    d. Graphic record

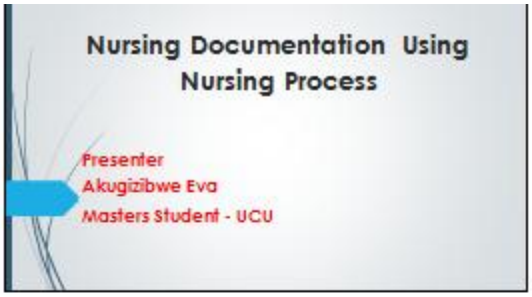
28. The nurse is reviewing a client's record. When reading the history, physical, and nurses progress notes, she anticipates finding which of the following?
    a. Assessment and nursing plan
    b. Results of laboratory and diagnostic studies
    c. Nursing documentation and Care plan
    d. Information from other members of the health team

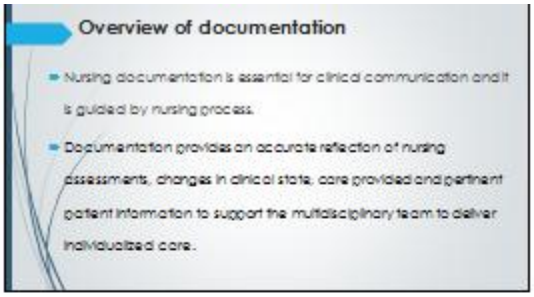
Section D: Nurses' Practice of Documentation

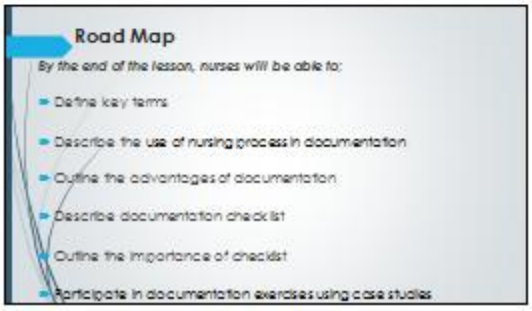
End

	Scale	**0**	**1**	**2**	**3**	**4**
	Statement	**Never**	**Rarely**	**Sometimes**	**Frequently**	**Always**
29	I use nursing process to document nurses' notes					
30	I have a challenge documenting the nursing concerns or diagnoses I have found					
31	I document the medication I have administered					
32	I am not able to document interventions I have done for every patient					
33	I have difficulty documenting patient's response to intervention					
34	I document the health education or advice I have given to patients					
35	I document immediately after I have provided care to the patient					
36	I use nursing process framework to document care					
37	I lack confidence documenting using nursing process framework					
38	I struggle documenting priority diagnosis for patient care					
39	It is not my responsibility to document patients' discharge plan					
40	Looking at previous note helps me plan patient care					

Appendix C: Power Point Slides







Definition of terms Cont.

- **Nursing Process;** is a systematic, rational method of planning and providing care which requires critical thinking skills to identify and treat actual or potential health problems and to promote wellness (Toney-Butler, &Thayer, 2023).

Steps f Nursing Process Steps

- Nursing process is cyclic in nature.
- After evaluation we re-assess and the cycle continues.

Assessment/Observation

- Assessment is the first step and involves critical thinking skills and data collection: subjective and objective.
- Subjective data involves verbal statements from the patient or caregiver.
- Objective data is measurable, tangible data such as vital signs, intake and output, and height and weight (Toney-Butler, &Thayer).

Assessment Cont.

- Sources of data include: patient, primary caregivers who may or may not be direct relation family members and friends can provide patient data
- What do we do with the assessment findings?
- How do you record the findings?
- Where do you record the findings?
- Who reads the finding?

Case Study

Chen 4 year old female was brought by the mother with h/o. cough & fever for 3 days

On examination

- She is febrile and irritable
- Has nasal flaring
- P/O- there's chest in drawing
- Temperature 39.1 degree Celcius
- Respiration 24 time per minute
- Pulse 126 B/M
- Mother gives h/o failure to feed & weight loss

Doctor reviewed patient & prescribed

- IV ceftriaxone 1 gm od- S/T
- IV paracetamol 220mg tds- S/T
- Oxygen administration 1 SLM/m
- IV fluids 1 SLM in 24 hours

Diagnosis/concerns

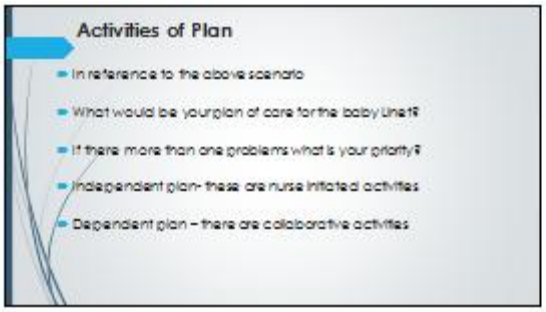
- Nursing diagnosis is the nurse's clinical judgment about the client's response to actual or potential health conditions or needs on the part of the patient, family, or community (Toney-Butler, &Thayer).
- According to our case study above what are your nursing diagnosis or concerns as a nurse?
- Form 3 small groups of three- brain storm the above question

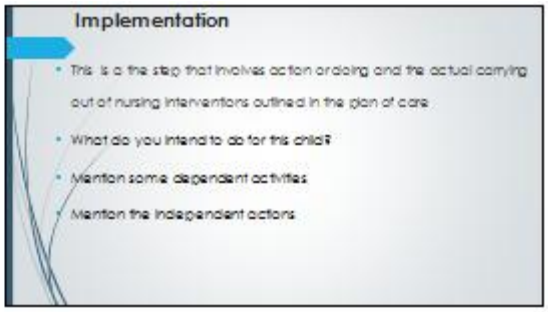
Plan

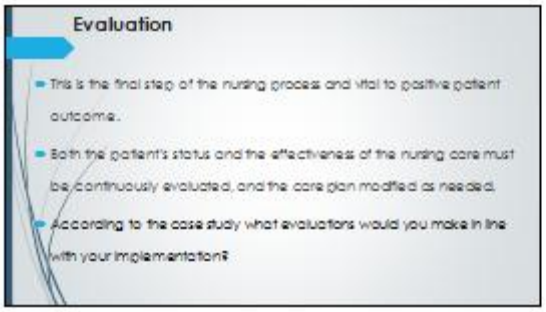
- Care plans provide a course of direction for personalized care tailored to an individual's unique needs.
- D:\Research proposal\RESEARCH TOOLS -FINAL\Rvs Documentation checklist & 3-2014 FINAL COPY.docx

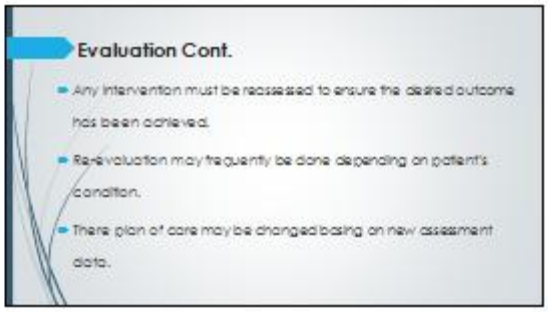
Types of Plans

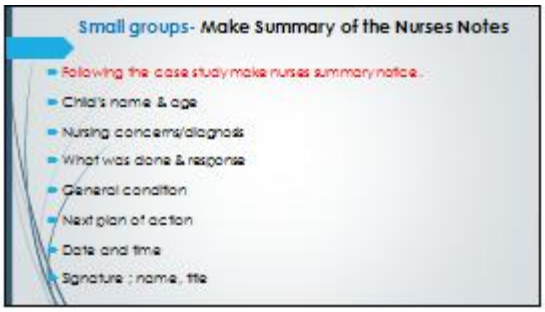
- **Initial plan:** this starts on admission
- **On-going plan:** done by all nurses working on the patient to determine changes in the health status of the patient
- **Discharge plan:** it is a process for anticipating needs after discharge like; follow-up, referral, discharge through physiotherapy. Example newly diagnosed diabetes on insulin train self injection and diet modification .

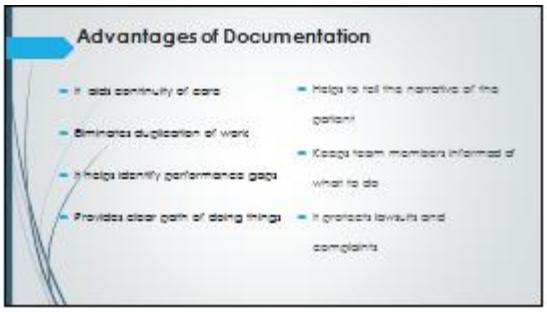

Activities of Plan
In reference to the above scenario
What would be your plan of care for the baby Lina?
If there more than one problems what is your priority?
Independent plan- these are nurse initiated activities
Dependent plan – there are collaborative activities

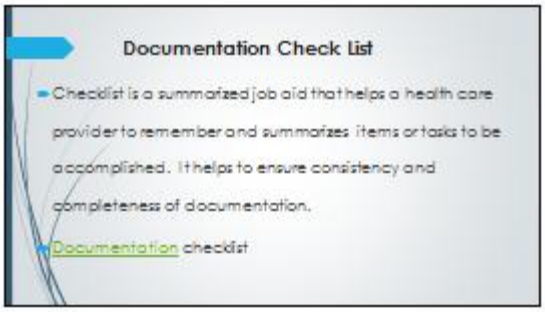

Implementation
This is a the step that involves action or doing and the actual carrying out of nursing interventions outlined in the plan of care
What do you intend to do for this child?
Mention some dependent activities
Mention the independent actions

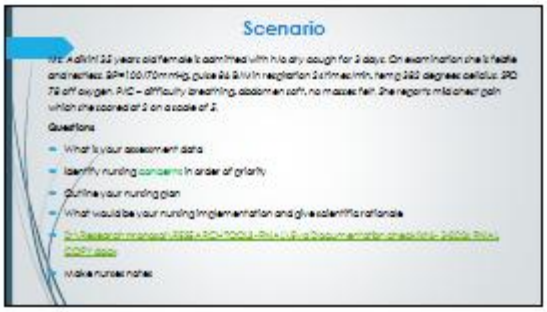

Evaluation
This is the final step of the nursing process and vital to positive patient outcome.
Both the patient's status and the effectiveness of the nursing care must be continuously evaluated, and the care plan modified as needed.
According to the case study what evaluations would you make in line with your implementation?


Evaluation Cont.
Any intervention must be reassessed to ensure the desired outcome has been achieved.
Re-evaluation may frequently be done depending on patient's condition.
There plan of care may be changed basing on new assessment data.


Small groups- Make Summary of the Nurses Notes
Following the case study make nurses summary notice.
Child's name & age
Nursing concerns/diagnosis
What was done & response
General condition
Next plan of action
Date and time
Signature ; name, title


Advantages of Documentation
It aids continuity of care
Eliminates duplication of work
It helps identify performance gaps
Provides clear path of doing things
Helps to tell the narrative of the patient
Keeps team members informed of what to do
It protects lawsuits and complaints


Documentation Check List
Checklist is a summarized job aid that helps a health care provider to remember and summarizes items or tasks to be accomplished. It helps to ensure consistency and completeness of documentation.
Documentation checklist


Scenario
Questions
What is your assessment data
Identify nursing concerns in order of priority
Outline your nursing plan
What would be your nursing implementation and give scientific rationale
Make nurses notes

Importance of Documentation Checklist

- Improves documentation practice (Krishnamohan et al., 2019)
- Improves assessment of key aspects of patient
- Simplifies complex processes of documentation by describing key aspects of care
- Translates to better documentation of inpatient care thus facilitating better patient tracking, improved team communication and better patient outcomes.

Importance of Documentation Checklist Cont.

- Enables health workers to offer quality care and meet patients' needs
- Permits nurses to record patients' responses to care and reduced risk for liability and supported the best patient outcome
- Helps to assess the completeness and quality of information included in patients' notes.
- Builds health providers competency with documentation

Summary

- Nursing documentation should be aligned with the 'nursing process' and reflect the principles of assessment, planning, implementation and evaluation. It is continuous and nursing documentation should reflect this.

References

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Appendix D: Documentation Checklist

In-patient No……
D. O.A----------
Name ----------sex----------age-------
Address----------Ht.
Medical history----------
Surgical history ----------
Gynecological & obstetrics history ----------
Any allergies ----------
Tick **(Y) for YES** items documented and **(N) for NO** items not documented

Activity/item	Day 1 Date ---------				Day 2 Date-----				Day 3 Date----------				Day 4			
	Day		Eve		Day		Eve		Day		Eve		Day		Eve	
	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N
Head to toes assessment																
Cardiovascular																
Respiratory																
Mobility																
Reproductive system																
Integumentary																
Sleep pattern																
Pain																
Objective data ✓ Vital signs																
✓ Weight																
✓ Intake output records																
Nursing diagnosis/ nursing concerns ✓ Problem																
✓ Related factor ✓ Signs and symptoms																
✓ Any risk factors/ nursing concerns																
Plan of care according to patient's needs																

Discharge plan																
Implementation																
✓ Independent actions																
✓																
✓																
✓																
✓ Dependent actions																
✓																
✓																
✓																
Evaluation																
Patent response to nursing implementation																
Nurses Summary notes																

Appendix E: Teaching plan

Uganda Christian University
Faculty of Health Science
Masters Nursing Science Program

Course: Research
Student: Akugizibwe Eva
Registration No: RM21M11/013
Hospital: Kiryandongo General Hospital
Supervisor: Dr. Karen Drake

Teaching Plan
Teaching Methods:

- Lecture
- Illustration
- Case study

Teaching Aids:

- Projector
- Checklist

Main Content

Time	Objective	Teachers activity	Staff activity	Remarks
9:00 am to 9:05 am	Create rapport	✓ Greet staff ✓ Introduce myself ✓ introduce the purpose of the CNE	Greet staff Self-introductions	Respond to greetings
9:05 am to 9:15am	Review staff 's knowledge on NP	Tell a successful story on the patient who was nursed using nursing process	Listen to the story	Respond to any concerns
9:15 am to 9:30 am	Introduce nursing process	Display the power point presentation	Read the displayed slides	**Define NP** A systematic, rational method of planning and providing care which requires critical thinking skills to identify and treat actual or potential health problems and to promote wellness steps of nursing process **steps of NP** • Assessment • Diagnosis • Plan • Implementation • Evaluation

	5 minutes		***stretch***	***Break***
	Objective	**Teachers activity**	**Staff activity**	**Remarks**
9:35 am to 9:45 am	Outline purpose of nursing process	Ask staff to brain storm then purposes of NP	Outline the purpose NP	I display the power point notes on the purpose of nursing process
9:45 to 9:55 am	Outline characteristics of nursing process	Discuss characteristics of NP	Listen and respond to questions	Display power point notes on characteristics of NP
9:55 am to 10:10 am	Explain the benefits of nursing process	Summarize what has been taught and encourage students to ask question if any	Ask questions for clarity	Respond to staff concerns
		5minutes	*stretch*	*break*
10:10 am to 10:30 am	Introduction of NP based case study	Project case study on application of nursing process	Formulate small discussion groups of 5-6 members. Chose a secretary for every group Staff discuss the questions as secretary writes answers	Flips one question at a time Supervise the group discussions
10:30 am to 11:00 am		Observe	Secretaries present group work	At the end of their presentations I validate their work
11: 00 am to 11:10am	Introduce a NP based documentation checklist		Projects a NP based documentation checklist	Explain the check list
11:10 am to 11: 20 am	Practical use of documentation checklist	Issue out sample checklists	Practice filling the checklist	Review the filled checklists and attend to areas of concern
11:20 to 11:30am	Outline the importance of checklist	Ask staff questions *I will have question card that I will randomly distribute*	Staff will read the question and answer it	Clarify any response that was not right and affirm the right answers.
11:30 to 11:40am	Summarize	Ask questions to review understanding	Answer questions	Clarify subject that has not been well understood

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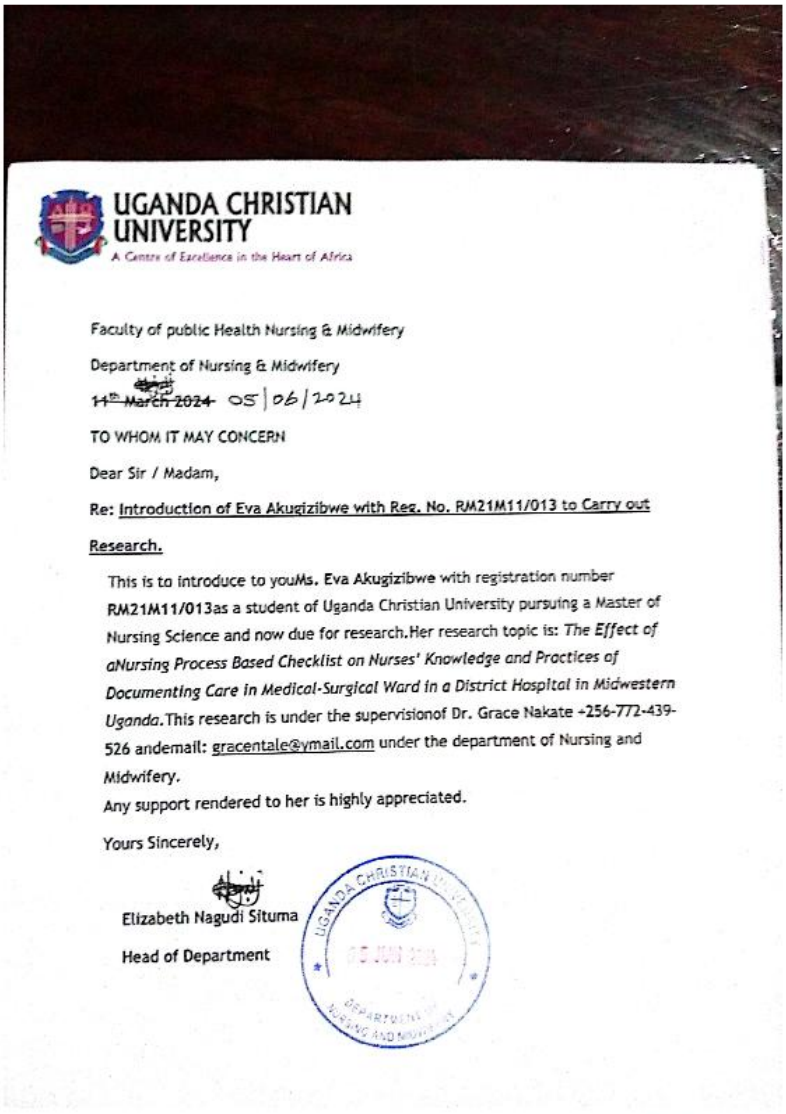
Appendix F: Ghant Chart for Research Proposal

GHANT CHART FOR RESEARCH PROPOSAL								
	May 2021 - April 2022	May 2022- April 2023	May 2023- July 2024	August- September 2024	Oct- 24	November- December 2024	December 2024 - January 2025	Feb- 25
Preparation of thesis proposal								
Preparation of thesis proposal								
preparation & submission of thesis to REC								
Pre-Intervention data collection, intervention & post intervention data collection								
Data analysis								
Report Writing								
Submission of thesis								
Presentation of thesis								

Appendix-G: Introductory letter



UGANDA CHRISTIAN UNIVERSITY
A Centre of Excellence in the Heart of Africa

Faculty of public Health Nursing & Midwifery

Department of Nursing & Midwifery

~~11th March 2024~~ 05/06/2024

TO WHOM IT MAY CONCERN

Dear Sir / Madam,

Re: Introduction of Eva Akugizibwe with Reg. No. RM21M11/013 to Carry out Research.

This is to introduce to you**Ms. Eva Akugizibwe** with registration number **RM21M11/013**as a student of Uganda Christian University pursuing a Master of Nursing Science and now due for research.Her research topic is: *The Effect of aNursing Process Based Checklist on Nurses' Knowledge and Practices of Documenting Care in Medical-Surgical Ward in a District Hospital in Midwestern Uganda.*This research is under the supervisionof Dr. Grace Nakate +256-772-439-526 andemail: gracentale@ymail.com under the department of Nursing and Midwifery.

Any support rendered to her is highly appreciated.

Yours Sincerely,

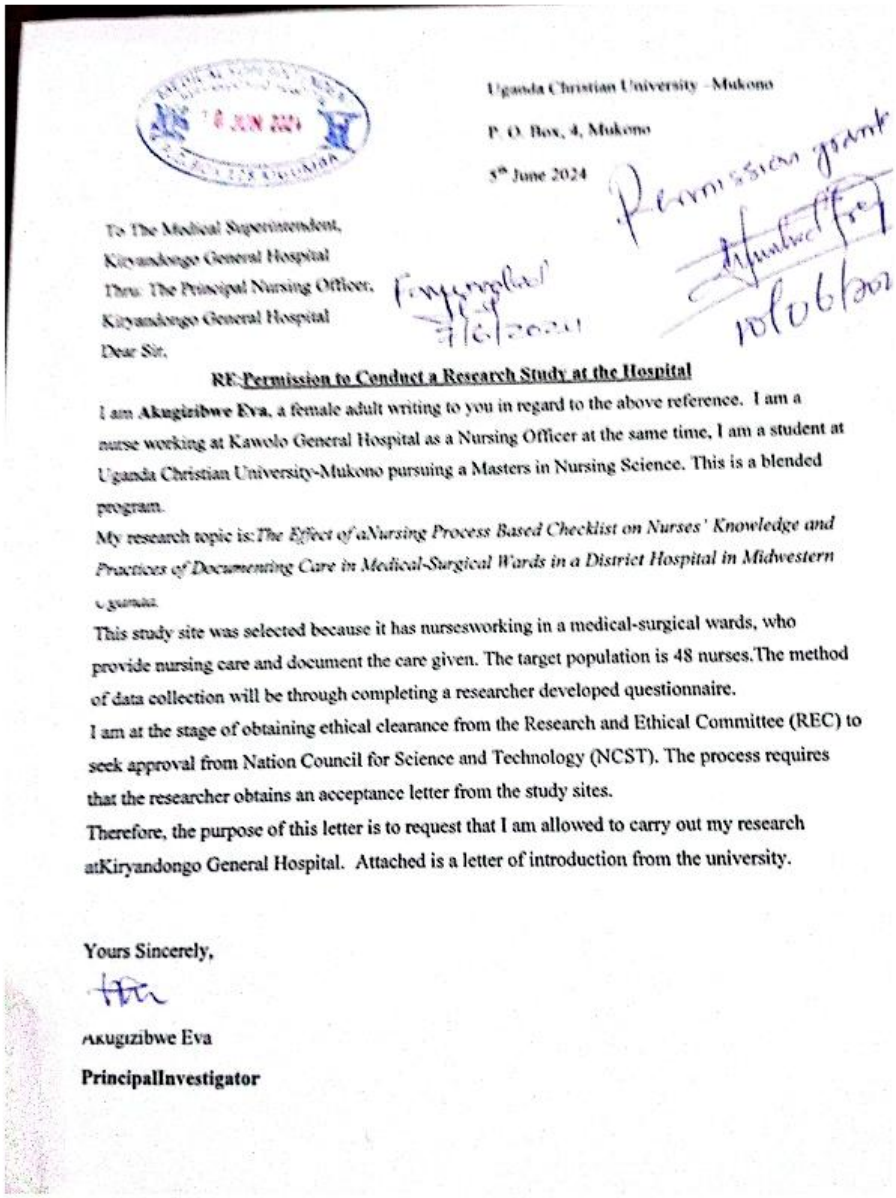
Elizabeth Nagudi Situma

Head of Department

UGANDA CHRISTIAN UNIVERSITY
05 JUN 2024
DEPARTMENT OF NURSING AND MIDWIFERY

CamScanner

Appendix-H: Permission from the Study Site



Uganda Christian University –Mukono

P. O. Box, 4, Mukono

5th June 2024

Permission granted

10/06/2024

To The Medical Superintendent,
Kiryandongo General Hospital
Thru: The Principal Nursing Officer,
Kiryandongo General Hospital
Dear Sir,

RE: Permission to Conduct a Research Study at the Hospital

I am **Akugizibwe Eva**, a female adult writing to you in regard to the above reference. I am a nurse working at Kawolo General Hospital as a Nursing Officer at the same time, I am a student at Uganda Christian University-Mukono pursuing a Masters in Nursing Science. This is a blended program.

My research topic is:*The Effect of aNursing Process Based Checklist on Nurses' Knowledge and Practices of Documenting Care in Medical-Surgical Wards in a District Hospital in Midwestern Uganda.*

This study site was selected because it has nursesworking in a medical-surgical wards, who provide nursing care and document the care given. The target population is 48 nurses.The method of data collection will be through completing a researcher developed questionnaire.

I am at the stage of obtaining ethical clearance from the Research and Ethical Committee (REC) to seek approval from Nation Council for Science and Technology (NCST). The process requires that the researcher obtains an acceptance letter from the study sites.

Therefore, the purpose of this letter is to request that I am allowed to carry out my research atKiryandongo General Hospital. Attached is a letter of introduction from the university.

Yours Sincerely,

Akugizibwe Eva

PrincipalInvestigator

CamScanner

Appendix I: Nurse's Knowledge of Documentation Care Using Nursing Process (Pre-Intervention)

Unique No.	Questions (Nurses Knowledge of Documentation)																		Raw Scores	%	Category by knowledge
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18			
1	0	0	0	1	1	1	0	1	0	1	0	0	1	0	0	0	0	1	10	56	Fairly
2	1	0	1	0	1	0	0	1	1	1	0	0	1	0	0	1	0	0	7	39	Less
3	1	0	1	1	1	1	1	0	1	0	1	1	1	1	1	1	1	0	13	72	Better
4	1	0	1	0	1	0	0	1	0	1	1	0	1	0	0	1	1	0	8	44	Less
5	1	1	0	0	0	0	0	1	0	1	0	0	1	1	0	1	0	0	5	28	Less
6	0	0	1	1	0	1	0	1	0	1	0	0	1	0	1	1	0	0	8	44	Less
7	0	0	0	0	1	1	0	1	0	1	0	0	1	0	1	0	0	1	7	39	Less
8	0	0	1	1	1	1	0	1	1	1	1	0	1	1	1	0	1	0	11	61	Fairly
9	1	1	1	0	1	0	0	0	1	0	0	0	1	1	1	1	1	0	8	44	Less
10	0	0	0	0	0	0	1	0	0	0	1	0	1	1	1	1	0	0	6	33	Less
11	0	0	0	1	0	1	0	1	1	1	0	1	0	0	1	0	0	1	8	44	Less
12	0	0	1	1	1	0	1	1	1	1	0	1	1	0	0	0	0	1	10	56	Fairly
13	0	1	1	0	0	1	0	1	1	0	0	1	1	1	0	1	0	0	8	44	Less
14	0	0	1	1	1	1	0	1	1	0	1	0	1	0	1	0	1	0	10	56	Fairly
15	1	1	1	1	1	0	0	0	0	0	0	0	1	0	0	0	0	0	4	22	Less
16	0	0	1	1	0	0	1	1	0	0	0	0	1	0	0	0	1	0	6	33	Less
17	1	0	1	0	1	0	1	1	1	1	0	1	1	0	1	1	0	0	10	56	Fairly
18	1	1	1	1	0	0	0	1	0	1	0	1	1	0	0	0	1	1	8	44	Less
19	1	1	1	0	1	0	1	1	1	1	1	1	1	1	0	1	1	0	12	67	Fairly
20	1	1	1	1	0	0	0	1	1	1	0	1	1	1	1	1	0	0	10	56	Fairly
21	1	1	1	1	0	0	1	1	0	1	0	1	1	0	1	0	1	0	9	50	Fairly
22	1	1	0	1	1	1	0	0	1	1	0	1	1	0	0	1	1	1	10	56	Fairly
23	1	0	1	0	1	1	1	1	0	1	1	1	1	1	1	1	1	0	13	72	Better
24	1	1	1	1	0	1	1	1	0	1	0	1	1	0	1	1	1	1	12	67	Fairly
25	1	0	1	1	0	1	1	1	0	1	0	1	1	1	0	0	1	1	11	61	Fairly

26	1	0	1	1	1	0	1	0	0	1	0	1	1	0	0	0	1	0	3	17	Less
27	0	0	1	1	1	0	1	1	1	1	0	1	1	0	0	1	0	0	10	56	Fairly
28	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	0	0	0	9	50	Fairly
29	0	1	1	1	1	1	1	1	0	1	0	0	0	1	1	1	0	1	4	22	Less
30	1	1	1	0	1	1	0	1	0	1	0	0	1	0	0	1	1	1	9	50	Fairly
31	1	1	1	1	1	1	0	1	1	0	0	0	0	0	0	1	0	1	8	44	Less
32	0	0	1	1	1	1	1	1	0	1	0	1	1	0	0	0	0	0	12	67	Fairly
33	1	1	1	1	0	1	0	1	0	1	0	0	0	0	0	1	0	1	9	50	Fairly
34	1	1	1	0	1	1	1	1	0	1	1	1	1	0	0	0	0	1	7	39	Less
35	1	0	1	1	1	0	0	1	1	0	0	1	1	1	0	0	0	0	9	50	Fairly
36	1	1	0	1	1	1	1	1	0	0	0	0	0	0	1	1	0	0	12	67	Fairly
37	1	1	1	1	1	1	1	1	0	1	0	1	1	1	0	0	0	0	10	56	Fairly
38	0	0	1	1	1	1	0	1	0	1	0	1	1	1	0	0	1	0	10	56	Fairly
39	1	0	1	0	1	1	1	1	1	1	1	1	1	0	0	1	1	1	13	72	Better
40	1	1	1	0	1	1	0	1	1	1	0	1	1	1	0	1	1	0	11	61	Fairly
41	1	1	0	1	1	1	1	1	1	0	0	1	0	1	0	0	0	0	8	44	Less
42	1	1	1	1	0	0	0	1	0	1	0	1	1	1	1	1	1	1	11	61	Fairly
43	1	1	1	1	1	1	0	1	1	1	1	1	1	0	0	1	1	1	13	72	Better
44	1	1	1	0	1	0	0	1	0	1	1	0	1	0	1	1	1	1	10	56	Fairly
Overall Percentage																					51%
Overall mean																					0.5

Appendix J: Nurse's Knowledge of Documentation (Post-Intervention)

Code	Questions (Nurses Knowledge of Documentation)																		Scores	%	Category by knowledge
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18			
1	1	1	1	1	1	0	1	1	1	1	0	1	1	1	1	1	1	1	16	89	Highly
2	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	16	89	Highly
3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	18	100	Highly
4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	18	100	Highly
5	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	0	1	1	16	89	Highly
6	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	18	100	Highly
7	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	17	94	Highly
8	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	17	94	Highly
9	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	18	100	Highly
10	0	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	16	89	Highly
11	0	1	1	0	0	1	1	1	1	0	1	0	1	0	1	0	0	1	10	56	Fairly
12	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	17	94	Highly
13	1	0	1	1	0	1	1	1	1	0	1	1	1	1	1	1	1	0	14	78	Better
14	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	18	100	Highly
15	1	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	16	89	Highly
16	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	14	78	Better
17	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	17	94	Highly
18	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	17	94	Highly
19	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	18	100	Highly
20	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	18	100	Highly
21	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	18	100	Highly
2	1	1	1	1	1	1	1	1	0	0	1	1	1	1	0	1	1	1	15	83	Highly

2																				
23	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	0	1	1	16	89	Highly
24	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17	94	Highly
25	1	1	0	1	1	1	1	1	1	0	1	1	1	0	1	0	0	0	12	67	Fairly
26	0	0	0	1	1	1	0	1	1	0	1	1	1	1	1	0	1	1	12	67	Fairly
27	1	1	1	1	0	1	1	1	1	1	1	0	1	1	1	1	1	1	16	89	Highly
28	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	17	94	Highly
29	1	1	1	1	1	1	0	1	1	1	1	1	1	0	1	1	0	1	15	83	Highly
30	1	1	1	0	1	1	1	1	1	1	1	0	1	1	1	1	0	1	15	83	Highly
31	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	0	1	1	16	89	Highly
32	1	1	1	0	1	1	0	1	1	0	1	1	0	1	1	1	0	1	13	72	Better
33	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	18	100	Highly
34	1	1	1	1	1	1	1	1	1	3	1	0	1	1	1	1	1	1	16	89	Highly
35	1	1	0	1	0	1	1	1	1	1	1	0	0	0	1	0	1	0	11	61	Fairly
36	1	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	18	100	Highly
37	1	1	3	1	1	1	1	1	1	1	0	1	1	1	1	0	1	1	16	89	Highly
38	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	18	100	Highly
39	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	17	94	Highly
40	1	1	1	1	0	1	1	0	1	1	1	0	1	0	1	1	0	1	13	72	Better
41	1	1	1	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1	16	89	Highly
42	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	17	94	Highly

43	0	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	16	89	Highly
44	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0	1	1	1	16	89	Highly
																			Overall Percentage		89%
																			Overall Mean		0.9

Appendix-K: Analysis of Individual Questions on the Effect of CME on Nurses' Knowledge of Documentation Using Nursing Process

	Pre-CME					Post-CME					
	Correct:		Wrong:		Category	Correct:		Wrong:			
Qn.	N	%	N	%		N	%	N	%	Category:	% change
Knowledge of documentation using Nursing Process											
11	30	68	14	32	Fairly Knowledgeable	40	91	4	9	Highly Knowledgeable	10
12	23	52	21	48	Fairly Knowledgeable	42	95	2	5	Highly Knowledgeable	19
13	36	82	8	18	Highly Knowledgeable	37	84	7	16	Highly Knowledgeable	1
14	30	68	14	32	Fairly Knowledgeable	40	91	4	9	Highly Knowledgeable	10
15	28	64	16	36	Fairly Knowledgeable	36	82	8	18	Highly Knowledgeable	8
16	23	52	21	48	Fairly Knowledgeable	42	95	2	5	Highly Knowledgeable	19
17	17	39	27	61	Less Knowledgeable	40	91	4	9	Highly Knowledgeable	23
18	35	80	9	20	Highly Knowledgeable	42	95	2	5	Highly Knowledgeable	7
19	15	34	29	66	Less Knowledgeable	41	93	3	7	Highly Knowledgeable	26
20	29	66	15	34	Fairly Knowledgeable	36	82	8	18	Highly Knowledgeable	7
21	7	16	37	84	Less Knowledgeable	42	95	2	5	Highly Knowledgeable	35
22	21	48	23	52	Less Knowledgeable	35	80	9	20	Highly Knowledgeable	14
23	39	89	5	11	Highly Knowledgeable	41	93	3	7	Highly Knowledgeable	2

	Pre-CME					Post-CME					
	Correct:		Wrong:		Category	Correct:		Wrong:			
Qn.	N	%	N	%		N	%	N	%	Category:	% change
24	14	32	30	68	Less Knowledgeable	39	89	5	11	Highly Knowledgeable	25
25	9	20	35	80	Less Knowledgeable	41	93	3	7	Highly Knowledgeable	32
26	22	50	22	50	Fairly Knowledgeable	34	77	10	23	Better Knowledgeable	12
27	12	27	32	73	Less Knowledgeable	37	84	7	16	Highly Knowledgeable	25
28	11	25	33	75	Less Knowledgeable	38	86	6	14	Highly Knowledgeable	27

Appendix L: Nurses Documentation Practice Nursing Pre- CME

Codes	Qn29	Qn30	Qn31	Qn32	Qn33	Qn34	Qn35	Qn36	Qn37	Qn38	Qn39	Qn40	Mean	Category by practice
1	3	1	4	4	1	3	3	3	1	1	4	0	2.3	Poor
2	3	1	4	0	0	4	4	3	1	0	0	4	2.0	Poor
3	3	0	4	0	0	4	4	3	0	0	0	4	1.8	Poor
4	3	0	4	0	2	3	3	2	1	1	0	4	1.9	Poor
5	2	1	4	0	1	4	3	2	1	0	0	4	1.8	Poor
6	3	1	4	1	1	4	4	2	1	0	0	4	2.1	Poor
7	2	0	4	1	0	4	4	3	0	0	0	4	1.8	Poor
8	3	1	4	2	1	4	4	3	0	1	0	4	2.3	Poor
9	2	1	4	2	0	3	3	2	1	1	0	4	1.9	Poor
10	2	1	4	1	0	3	4	3	0	1	0	4	1.9	Poor
11	4	1	1	4	3	2	1	0	4	4	4	4	2.7	Fair
12	4	1	4	1	2	3	4	2	1	0	0	4	2.2	Poor
13	3	0	4	1	1	3	3	3	2	0	0	4	2.0	Poor
14	3	0	4	2	2	4	4	2	2	0	0	4	2.3	Poor
15	3	1	4	1	0	4	3	2		0	0	0	1.5	Poor
16	2	1	3	1	0	3	3	3	0	1	0	4	1.8	Poor
17	2	1	3	1	1	3	3	4	0	0	0	1	1.6	Poor
18	3	0	4	1	1	4	4	3	0	1	0	4	2.1	Poor
19	2	1	4	1	2	4	3	2	2	0	0	4	2.1	Poor
20	2	0	4	1	0	4	2	3	1	1	0	4	1.8	Poor
21	2	1	4	0	1	4	3	2	1	1	0	4	1.9	Poor
22	0	0	0	0	0	0	0	0	0	0	0	0	0.0	Poor
23	3	1	4	0	0	4	4	3	0	0	0	4	1.9	Poor
24	3	1	4	0	0	3	3	2	1	1	0	4	1.8	Poor
25	0	3	2	0	2	3	2	1	1	0	4		1.5	Poor
26	2	1	4	1	2	3	3	2	1	1	2	4	2.2	Poor
27	3	1	4	1	2	4	3	3	1	0	0	4	2.2	Poor
28	4	0	4	1	1	3	2	3	1	1	0	4	2.0	Poor
29	3	1	4	1	2	3	2	2	2	1	0	4	2.1	Poor
30	3	0	4	2	1	4	3	3	1	0	0	4	2.1	Poor
31	2	1	4	1	0	3	3	3	0	1	0	4	1.8	Poor
32	4	1	2	3	4	3	1	0	0	0	0	4	1.8	Poor
33	3	1	4	0	1	4	4	3	1	1	0	4	2.2	Poor
34	3	1	4	0	1	4	3	3	0	0	1	3	1.9	Poor
35	0	4	1	0	4	4	3	1	1	0	4	4	2.2	Poor
36	3	1	4	1	1	2	3	2	0	0	0	4	1.8	Poor
37	3	1	4	1	0	3	4	3	1	0	0	3	1.9	Poor
38	1	1	4	0	4	4	4	3	0	0	0	4	2.1	Poor
39	3	0	4	1	0	3	3	3	0	0	0	4	1.8	Poor
40	1	4	0	1	3	4	3	0	0	0	4	4	2.0	Poor
41	2	1	4	1	1	3	4	3	1	0	0	4	2.0	Poor
42	2	0	4	1	1	2	3	3	0	1	0	4	1.8	Poor
43	2	0	4	0	1	3	4	4	0	0	1	4	1.9	Poor
44	3	2	4	0	1	3	3	3	1	0	0	4	2.0	Poor
Mean	2.5	0.9	3.5	0.9	1.2	3.3	3.1	2.4	0.7	0.5	0.5	3.6	1.9	

Appendix M: Nurses' Individual question analysis of Documentation Practice Post CME Scores

ID	Qn 29	Qn 30	Qn 31	Qn 32	Qn 33	Qn 34	Qn 35	Qn 36	Qn 37	Qn 38	Qn 39	Qn 40	Score		Mean Per Participant	Category by practice
1	3	3	4	3	3	4	4	4	3	4	3	4	42		3.5	Excellent
2	3	3	4	3	3	4	4	3	3	2	3	4	39		3.3	Good
3	3	2	4	3	1	4	4	3	2	4	2	4	36		3.0	Good
4	4	3	4	3	3	4	3	2	2	3	2	4	37		3.1	Good
5	2	2	4	2	2	4	4	3	2	2	3	4	34		2.8	Fair
6	4	2	4	2	2	4	4	3	3	2	1	4	35		2.9	Fair
7	3	2	3	4	2	1	4	4	3	4	2	4	36		3.0	Good
8	4	4	4	3	3	4	4	3	1	2	2	4	38		3.2	Good
9	3	3	2	4	3	1	4	4	3	3	3	4	37		3.1	Good
10	3	3	4	2	1	4	4	3	2	3	3	4	36		3.0	Good
11	4	3	4	4	4	3	3	4	4	4	4	4	45		3.8	Excellent
12	4	3	4	3	3	3	4	3	3	3	2	4	39		3.3	Good
13	4	2	4	3	2	4	4	3	3	2	2	4	37		3.1	Good
14	3	2	4	3	3	4	4	2	3	2	2	4	36		3.0	Good
15	3	2	4	2	1	4	3	4	2	1	1	1	28		2.3	Poor
16	3	2	3	3	2	4	4	4	2	3	3	4	37		3.1	Good
17	3	3	4	3	2	3	2	4	1	1	1	2	29		2.4	Poor
18	4	2	4	3	3	4	4	4	1	2	1	4	36		3.0	Good
19	3	2	4	3	4	4	4	3	3	1	2	4	37		3.1	Good
20	3	2	4	2	2	4	3	4	3	2	1	4	34		2.8	Fair
21	3	3	4	2	3	4	4	3	2	2	2	4	36		3.0	Good
22	0	0	4	2	2	3	3	1	1	3	3	1	23		1.9	Poor
23	4	3	4	2	2	4	4	4	2	2	1	4	36		3.0	Good
24	3	2	4	2	1	4	4	3	2	2	1	4	32		2.7	Fair
25	1	4	3	1	2	4	3	2	2	1	4	1	28		2.3	Fair
26	3	2	4	2	3	4	4	3	2	2	3	4	36		3.0	Good
27	4	2	4	2	3	4	4	4	2	1	1	4	35		2.9	Fair

ID	Qn 29	Qn 30	Qn 31	Qn 32	Qn 33	Qn 34	Qn 35	Qn 36	Qn 37	Qn 38	Qn 39	Qn 40	Score		Mean Per Participant	Category by practice
28	4	1	4	2	2	4	3	4	2	2	2	4	34		2.8	Fair
29	4	2	4	2	3	4	3	3	3	2	1	4	35		2.9	Fair
30	4	1	4	3	2	4	4	4	2	1	1	4	34		2.8	Fair
31	3	2	4	2	1	4	4	4	1	2	1	4	32		2.7	Fair
32	4	2	3	4	4	4	2	1	1	1	1	4	31		2.6	Fair
33	4	2	4	1	2	4	4	3	2	2	1	4	33		2.8	Fair
34	4	2	4	1	2	4	4	4	1	1	2	4	33		2.8	Fair
35	1	4	2	1	4	4	4	2	2	1	4	4	33		2.8	Fair
36	4	2	4	2	2	3	4	3	1	1	1	4	31		2.6	Fair
37	4	2	4	2	4	4	4	4	2	1	1	3	35		2.9	Fair
38	2	2	4	1	4	4	4	4	1	1	1	4	32		2.7	Fair
39	4	1	4	2	1	4	4	4	1	1	1	4	31		2.6	Fair
40	2	4	1	2	4	4	4	1	2	2	4	4	34		2.8	Fair
41	3	2	4	2	1	4	4	4	2	1	1	4	32		2.7	Fair
42	3	1	4	2	2	3	4	4	1	2	1	4	31		2.6	Fair
43	3	1	4	1	2	4	4	4	1	1	2	4	31		2.6	Fair
44	4	3	4	1	2	4	4	4	2	1	1	4	34		2.8	Fair
Percentage Mean															2.9	

Appendix N: An Analysis of Individual Questions on the Effect of CME on Nurses' Practice of Documenting Care

Pre-intervention									Post-intervention								
Statement of question	**Frequency**					**Mean**	**SD**	**Category**	**Frequency**					**Mean**	**SD**	**Category**	**Change (+ or -)**
	N	**R**	**F**	**ST**	**A**				**N**	**R**	**F**	**ST**	**A**				
I use nursing process to document nurses' notes	11	13	18	2	0	1.3	0.8	Poor	2	2	14	21	4	2.5	3.2	Poor	
I know how to document the nursing concerns or diagnoses I find	3	3	24	7	7	2.3	2.8	Poor	12	27	1	1	2	0.9	0.5	Poor	
I document the medication I have administered	0	0	6	9	29	3.5	6.7	Excellent	1	2	2	2	36	3.5	7.2	Excellent	
I am able to document interventions I do for every patient	2	7	22	9	4	2.1	2.3	Poor	14	22	4	1	2	0.9	0.6	Poor	
I am able to document patient's response to intervention	2	5	24	9	4	2.2	2.4	Poor	12	17	8	2	3	1.2	1.0	Poor	
I document the health education or advice I have given to patients	6	9	13	4	10	2.0	2.7	Poor	0	0	3	20	20	3.3	5.9	Good	
I document immediately after I have provided care to the patient	1	8	17	8	10	2.4	3.2	Poor	0	2	4	22	15	3.1	5.1	Good	

Pre-intervention									Post-intervention								
Statement of question	**Frequency**					**Mean**	**SD**	**Category**	**Frequency**					**Mean**	**SD**	**Category**	**Change (+ or -)**
	N	**R**	**F**	**ST**	**A**				**N**	**R**	**F**	**ST**	**A**				
I use nursing process framework to document care	14	18	11	0	1	1.0	0.5	Poor	3	2	13	23	2	2.4	3.0	Poor	
I have confidence documenting using nursing process framework	4	4	14	13	9	2.4	3.4	Poor	17	20	4	0	1	0.7	0.3	Poor	
I am able to document priority diagnosis for patient care	3	4	17	14	6	2.4	3.1	Poor	26	16	0	0	1	0.5	0.2	Poor	
It is my responsibility to document patients' discharge plan	18	10	12	2	2	1.1	1.0	Poor	36	2	1	0	4	0.5	0.8	Poor	
Looking at previous note helps me plan patient care	0	1	8	8	27	3.4	6.2	Good	7	1	0	2	32	3.1	6.4	Good	

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DISSERTATION CORRECTION COMPLIANCE REPORT BY THE CANDIDATE (POST VIVA FORM)

Date: 23/8/2025

Name of Candidate: Akugizibwe Eva **Reg. No:** RM21M11/013

Title of Dissertation: Effect of continuous medical education on nurses' knowledge and practices of documenting care in medical-surgical ward in a district hospital in Midwestern Uganda

SN	COMMENTS BY EXTERNAL EXAMINER	ACTION TAKEN	INDICATOR
1	Concerns of the external examiner on how data was collected, statistical tests	All were done in the report shared	Chapter 3 pages. 49, 56 & 56

SN	COMMENTS BY INTERNAL EXAMINER	ACTION TAKEN	INDICATOR
1	Strengthen proposal	I briefly outlined how the VIPs model will be adopted	Page 27
2	Improve on transition and cohesion of sentence	Re-wrote literature review chapter 2	Pages 28- 46
3	Update references with recent studies (2018–2024)	Updated to literature from 2018 to 2024	Pages 28-46

SN	COMMENTS BY VIVA VOCE PANNEL	ACTION TAKEN	INDICATOR
1	Avoid individualized reporting	Eliminated all singular nouns through the dissertation	Entire document
2	Problem statement is not clearly stated	I have incorporated the statistics to show the magnitude of the problem	Page 15
3	Need for a third objective to identify factors that affect documentation	Included the third objective	Page 17
4	Study setting is not adequately described to give a full picture of work load, for example, how big is the hospital in terms of bed capacity, average number of patients on medical and surgical wards, how many nurses per ward	All included	Page 48
5	The study had an inclusion criteria, but no exclusion criteria, and yet there are factors which can affect nurses' knowledge and practice of documentation	Included the exclusion criteria	Page 49
6	Data collection procedure is not very	Already highlighted in the study	Page 51

	clear. Were the nurses recruited on the same day when the invitation was sent? Were all the participants trained on the same day and time?		
7	The discussion is adequate,	I have expounded on the discussion	Pages 74 to 81

Karen B. Drake

Akugizibwe Eva	…….……	……	
Candidate's Name	Signature	Supervisor's Name	Signature