UNIVERSITY OF CAPE COAST

ASSESSING THE UTILISATION OF THE NURSING PROCESS IN THE 24-HOUR NURSING REPORTS AT EFFIA NKWANTA REGIONAL HOSPITAL

ASANTEWAA AMMA MENYA

2020

UNIVERSITY OF CAPE COAST

ASSESSING THE UTILISATION OF THE NURSING PROCESS IN THE 24-HOUR NURSING REPORTS AT EFFIA NKWANTA REGIONAL HOSPITAL

BY

ASANTEWAA AMMA MENYA

Thesis submitted to the School of Nursing and Midwifery, College of Health and Allied Sciences, University of Cape Coast, in partial fulfillment of the requirements for the award of Master of Nursing

AUGUST 2020

DECLARATION

Candidate's Declaration

I hereby declare that this thesis is the result of my own original research and that no part of it has been presented in whole or part for another degree in this University or anywhere.

Candidate's Signature……..Date:..……

Name: Asantewaa Amma Menya

Supervisors' Declaration

We hereby declare that the preparation and presentation of this thesis were supervised in accordance with the guidelines on supervision of thesis laid down by the University of Cape Coast.

Principal Supervisor's Signature……..Date:……...

Name: Dr. Andrew Adjei Druye

Co Supervisor's Signature: …….Date:……

Name: Prof. Akwesi Kumi-Kyereme

ABSTRACT

Nurses are expected to provide quality care to their patients and families using the nursing process and document as such. However, it is unclear whether the content of the 24-hour nursing reports reflects the nursing process in Ghana. This thesis, therefore, sought to explore how the 24-hour nursing report reflects the nursing process, and identify factors that influence documentation of the 24-hour nursing reports at Effia Nkwanta Regional Hospital. The study used a descriptive qualitative approach. Thirty-nine (39) reports and nine (9) registered nurses were purposively selected for document review and one-on-one interviews respectively. The findings showed that the most documented phase of the nursing process in the 24-hour nursing reports were assessment and interventions (100%). The most documented assessment data was the vital signs which were found in all reports. Interventions recorded were mostly routine care such as vital signs and serving medication. Nursing diagnosis, objectives and outcome criteria and patient strength were the least documented (0%, 0%, and 4% respectively). Evaluation statements were presented in 95% of the records. However, no evaluation statement met the standard as indicated by the nursing process. Nurse characteristics and work situations were reported to have influenced documentation. A standardised format for report writing must be developed by the nursing administration based on the nursing process in the study area. Staffing and supplies must be improved by hospital management to enhance documentation.

KEYWORDS

Effia Nkwanta Regional Hospital

24-hour nursing reports

Nursing process

ACKNOWLEDGEMENTS

I am grateful to the Almighty God for his guidance and protection throughout my period of study and the writing of this report. My appreciation goes to my supervisors Dr. Andrew Adjei Druye and Prof. Akwesi Kumi Kyereme whose guidance and encouragement, cordial relation and excellent supervision made this work a success. I am indebted to the staff of Effia Nkwanta Regional Hospital especially the sampled population whose voluntary participation made this work a reality. My heartfelt thanks go to the authors of the various books and published articles I used in writing this thesis. To my dear husband who supported and encouraged me throughout this program, I say God richly bless you.

DEDICATION

To my children Alyssa, Edmund, Velma and Lois Menya

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

AIDs	Acquired Immune Deficiency Syndrome
ANA	American Nurses Association
BP	Blood Pressure
CVA	Cerebrovascular Accident
DM	Diabetes Mellitus
ECRI	Emergency Care Research Institute
ENRH	Effia Nkwanta Regional Hospital
GHS	Ghana Health Service
HIV	Human Immune Virus
HPT	Hypertension
IRB	Institutional Review Board
JCAHO	Joint Commission on Accreditation of Healthcare Organisations
NMC	Nursing and Midwifery Council
NREM	Nursing Role Effectiveness Model
OPD	Out Patient Department
RBS	Random Blood Sugar
RGN	Registered General Nurse
RTA	Road Traffic Accident
TPR	Temperature, Pulse, Respiration
UNAIDS	United Nations AIDS
WHO	World Health Organisation

CHAPTER ONE

INTRODUCTION

Background to the Study

The expectation among healthcare managers and regulators for accountability in healthcare has resulted in an emphasis on the need to create evidence for the quality of healthcare given by healthcare professionals including nurses. Observing and recording patient's information are two inseparable processes in the delivery of nursing care. Documentation or recording is a nursing action that produces a written and/or electronic account of pertinent client data, nursing clinical decisions and interventions, and the client's responses in a health record (Bernaman, Snyder, Kosier & Erb, 2010; Perry & Potter, 2006). Nursing documentation is an evidence in support of a fact and could be any physical or symbolic sign, preserved or recorded, intended to represent, to reconstruct, or to demonstrate a physical or conceptual phenomenon and should be viewed as access to evidence (American Nurses Association [ANA], 2010). It can also be referred to as "the process of identifying, collecting and making publicly available existing records that are of enduring historical value and necessary to enable one make a better-informed decision (Suter, 2003). Accurate patient information is a prerequisite for quality healthcare hence, documentation is fundamental to the delivery of quality healthcare. Therefore, providing evidence of the quality nursing care rendered to the client is an important nursing responsibility that cannot be overlooked.

Scruth, (2014) identified essential points of quality nursing documentation as must reflect the objective clinical judgment of the nurse,

what they hear, see, or have expressed to them directly from the client. In addition to the above, the record must be patient-centered, present the client's perceptions just as reported to the nurse along with the nurses' response or interventions and must contain the actual work done by the nurse such as education, physical intervention, or psychosocial support. Scruth further stated that, nursing documentation must be presented in a sequential, logical manner; be time sensitive, with recording done immediately after the event. The records must also satisfy legal requirements providing a comprehensive description of the client's experience, demonstrating that the nurse understands the client's diagnosis and condition with interventions to manage any issues arising on their watch that have the potential to affect the client's outcome. These will help make the records comprehensive, structured, accurate, consistent and enhance effective communication between caregivers for continuity of care and the safety of the patient (Alkouri, Alkhatib, & Kawafhah, 2016).

The 24-hour nursing report is one of the records that are collated by the nurse during the care of a patient. Others may include the nursing care plan, treatment sheets, and the 4hourly temperature chart. The 24-hour report is a narrative progress note of the series of events occurring during a patients care. This report provides essential information on patient for each shift to oncoming nurses and gives opportunity to comprehend the information, ask questions and get clarification on issues that are not clear. This information may include both physician orders and nurse-initiated actions. Generally, the report routinely gives details on the patient's name, condition during each shift, description of vital signs, problems identified and nursing care render as

well as patient response to care. Health facilities might have slightly different formats for writing reports but they all have similar basis. The formats employed in writing the 24-hour nursing reports may include the PACE and DAR formats (Boucheix & Coiron, 2008; NDMU, 2018). Others also use the SOPIE format in writing the 24-hour reports. Nevertheless, the entire range of nursing activities, including the decisions processes, explanation of acts or omission, and care outcomes (Alkouri, et al., 2016; Yocum, 2002) must be evident no matter which format or system in use. Accurate recording of the patient information ensures accurate transfer of information among nurses and other care givers and ensures coordination of nursing care across shift. Increasing reports of fallen standards of nursing in recent times had been based on the claim that nurses have neglected their duties and are not practicing according to professional standards. The report written by the nurses could be seen as one of the anecdotal evidences regarding the quality of the care rendered hence there is the justification of the claims of fallen standards and improving the record will enable it serve this purpose better.

Nursing documentation can be improved with the introduction of the nursing process into the clinical setting (Oroviogoicoechea et al. 2008) in Alkouri et al, (2016). Effective recording is a key evidence for the quality nursing care provided. Despite reports of inconsistencies and inaccuracies in nursing documentation, application of the nursing process in documentation including the 24-hour report writing can increase the accuracy and consistencies of the records. In most countries today, the nursing process is considered an important component of professional nursing practices. The nursing process provides nurses with an established, scientific approach to

providing nursing care and documenting nursing activities. The nursing process also provides a systematic framework for the delivery of nursing care and hence its application in the writing of the 24hour nursing report will enhance its structure and content. Again, nurses are mandated by nursing regulatory bodies all around the world, including Ghana, to use the nursing process as a professional tool for meeting the total health needs of patients, families, and communities (Nursing and Midwifery Council [NMC], 2017) and are expected to document as such (Rajkoič, 2016). Nursing documentation should provide complete and accurate information on the care rendered to a patient and the family and should be guided by the general principles of documentation (Bernaman et al., 2010; Chelagat et al., 2013). As suggested by Abdul-Wahab & Elsayed, (2014); Bernaman et al.; Harkreader, et al (2007), the records need to be in sequence, must be brief as well as complete and should provide information on prevention of illness care, the identified issues being addressed, the plan of care, actual care provided, the clinical reasoning for the choice of care the client's response and/or outcome of the interventions, and future plans (Abdul-Wahab & Elsayed, 2014; Bernaman et al.; Harkreader, et al 2007). Nursing process helps incorporate these stated points into the nursing documentation including reports as the process guides the sequence of clinical reasoning and action of the nurse and allows the nurse to assess, diagnose, plan, implement and evaluate nursing care activities as well as amend care depending on the outcome of implemented care.

Although there are no specific studies in Ghana describing the content of the 24-hour nursing reports, the reports forms part of nursing

documentation and could suffer the same fate as all other documentation. Reports indicated numerous shortfalls in nursing documentation, such as being inaccurate, incomplete, and fragmented (Chelagat et al., 2013). As reported by Dawn (2000), information content in the shift report has lesser information compared with other nursing records. This has an impact on the report written on admitted patient specifically making it deficient in the activities and the process that was undertaken by the nurses to ensure the full recovery of the patient. As stated by the code of professional conduct by the Nursing and Midwifery Council of Ghana (NMC), Ghana, the nurse takes full responsibility of his/her actions and inactions and has the full responsibility of ensuring accurate documentation of all procedures and care rendered to patients, and relatives. But this responsibility is not given much attention as nurses concentrate more on caring for the patient and see documentation to be a time-consuming and less important task (Cunningham, Kennedy, Nwolisa, Callard, & Wike, 2012). This status quo has been further reinforced by the shortage of healthcare professionals (including nurses) which has compelled the registered nurses to be surrounded by a variety of activities during the working shift has contributed largely to this (Chelagat et al.,2013). Other challenges include inadequate knowledge of nurses on the importance of documentation, shortage of materials for documentation in some hospitals and numerous types of documentation requirements as indicated by (Chelagat et al., 2013). Patients' reports are thus "empty" as it is unable to provide a detailed information on the care they received, offering less information to people who depend on it for further actions, cannot provide the necessary information needed in situations of medico-legal issues, leads to

reimbursement of less amount by third-party payers e.g. National Health Insurance Scheme among many other issues and generally reduces the quality of care rendered to patients (Johnson, 2011; Lindo et al., 2016).

This situation seems to be an issue of concern in the nursing profession in both developed and developing countries. Several studies have reported lapses in the documentation made by nurses in various parts of the world and the 24-hour nursing reports might not be an exception. Studies on nursing documentation conducted in some developed countries indicated more than 50% of patients' records having no evidence of implementation of nursing care planning and outcome evaluations (O'Briem & Cowman, 2013). Other studies have reports indicating incomplete patient information, inaccurate and illegible writing, improperly corrected errors (Assanga, & Isiaho, 2017; Broderick & Coffey, 2013; Lindo et al, 2016; Tuinman, De Greef, Krijnen, Paans, & Roodbol, 2017). Although some aspects of nursing care are documented in the records, findings from literature give evidence that most aspects are not recorded or are recorded in few cases (Blake-Mowatt, Lindo, Bennett, 2013; Instefjord, Aasekjaer, Espehaug & Graverhlt, 2014; O'Briem, et al., 2013). Most studies found focused on the shift reports and did not consider the total report for the 24-hour period (McAllen, Stephens, Swanson-Biearman, Kerr, and Whiteman, 2018; Miller, Hamza, Metersky, and Gaffney, 2018; Pevec, 2020; Kihlgren, Lindsten, Norberg, & Karlssor,1992). Quit a number of the studies specifically were concerned with moving shift reports to bedside (Miller, Hamza, Metersky, and Gaffney, 2018; Pevec, 2020). For instance, Kihlgren et al (1992) focused on the content of oral reports and the study was conducted more than 25 years ago.

Similarly, in Ghana, limited studies have been published in the area of nursing documentation in general with no study found on the 24-hour nursing reports. The few studies available focused on the physical features such as reported incomplete, illegible, inaccurate, unsigned documents without dates of entry and not providing patient education on discharge, rather than the core nursing responsibilities (Asamani, Amenorpe, Babanawo, & Ofei, 2014): fluid balance (Abraham et al., 2017), and documentation as a communication tool (Johnson, 2011).

With reference to the above literature, there seem to be limited evidence on utilisation of the nursing process in writing the 24-hour nursing reports. Therefore, more research is required on the subject matter to build the body of evidence necessary to improve nursing documentation that meets the standards of the nursing process in Africa. The study will also provide evidence on the current state of written 24-hour nursing reports with regards to its content and structure in the study area

Problem Statement

To effectively transfer responsibility and accountability of nursing care and enhance communication among nurses and other care givers, the 24-hour nursing report must provide comprehensive patient information for nurses and others to depend on. (Capek, Pascarella, & Wymard-Tomlinson, 2013). Despite its importance in nursing care, the report is often an overlooked piece. Writing the report is not taught in schools and is usually learnt on the job. No specific format exists in many healthcare facilities for report writing and hence, nurses used their discretion to determine what forms the content. Similarly, the nursing process which provides nurses with an established,

scientific approach to providing nursing care and documenting nursing activities has been observed to be strongly tied to the nursing care plan (Duclos-Miller, 2007). The use of the nursing process in other areas of nursing care including writing of nursing reports and documentation is uncertain. Nevertheless, the content of the 24hour nursing reports must reflect the entire range of nursing care and nurse-patient interactions. The reports written on patients are the aggregate of all the documentations made on patients by nurses taking care of the them, thus a poor unstructured documentation could invariably affect the transfer of information among nurses and other care givers.

Anecdotal evidence on the 24-hour report in the Effia Nkwanta Regional Hospital indicates the reports contains lesser information compared to what the nurses do while caring for the patient. The report gives a brief summary of the patient's information, the doctors' orders and the nursing activities undertaken without much details. Secondly, because there is no standardised format for writing the report, the nurses use their own discretion to determine what goes into the report for each patient. Hence, variations may exist across the various wards and within the wards. This defies the consistency criteria in nursing documentation and could lead to missing vital information by other nurses and caregivers who depend on the 24-hour nursing report for information. Notwithstanding this, there seem to be limited literature in Ghana on nursing documentation. Available literature on nursing documentation focused on documentation of fluid balance (Abraham et al., 2017), documentation practice of nurses (Asamani et al., 2014), and documentation as a communication tool (Johnson, 2011). No studies were

found in Ghana on the 24-hour nursing reports. This creates a gap specific to the content and structure of the 24-hour nursing report.

Therefore, this study seeks to assess the utilization of the nursing process in the 24-hour nursing report among registered general nurses.

Purpose of the Study

The purpose of the study was to assess the content of the 24-hour nursing reports in relation to the nursing process and identify possible factors that contribute to the state of the 24-hour reports at the medical and surgical wards of Effia Nkwanta Regional Hospital. Specifically, the study sought to:

1. Assess the content of the daily ward reports with reference to the nursing process.
2. Explore nurse characteristics that influence documentation of the 24-hour nursing reports.
3. Determine the work-environment situation that influences the documentation of the 24- hour nursing reports.

Research Questions

1. How does the 24-hour nursing reports reflect the nursing process?
2. What nurse characteristics influence the documentation of the 24-hour nursing reports?
3. How does work-environment situations impact on the documentation of the 24-hour nursing reports?

Significance of the Study

The study explored the application of the nursing process to the daily ward report and the factors influencing the documentation of the 24-hour nursing reports. The findings from this study provided the researcher with

information on the documentation of all nursing activities as they relate to the nursing process. This will help address the problem of lack of evidence for the content of 24-hour report and help to make recommendations in relation to how best the content of the 24-hour nursing reports could be improved. It will also provide evidence on which components of the nursing process are documented in the reports and provide detailed information on nursing activities including the critical thinking aspects that are less documented in nursing records. This will help improve the content of the 24hour nursing reports and thus, make the reports complete, more comprehensive, well organized and elaborative to enhance communication of patient information among the healthcare givers and improve the quality of care provided to patients as well as ensure patient safety.

The study also provided information on the factors that influence nursing documentation. The identified factors and their impact on documentation could be communicated to managers and administrators of healthcare to enable appropriate manipulation of these factors to ensure improvement in the quality of documentation and enhance patient care.

Information from the study can also provide a basis for the development of practical guidelines for the proper documentation in the patient's records. Most hospitals lack the blueprint for implementing nursing documentation. With this work, the findings will serve as a basis for effective documentation, especially with the participating hospital.

In addition, the study provided a baseline document for other researchers interested in investigating nursing documentation and made a significant contribution to existing literature.

Delimitations

The study concentrated on the content of 24 hour nursing reports with reference to the nursing process steps. Specifically, it concentrates on the extent to which the 24-hour nursing reports reflect the nursing process which is a tool for meeting the total health needs of patients, families and communities.

The study also explored the factors that influenced the nursing documentation. These factors include nurse characteristics such as the nurses' knowledge and attitude towards documentation; work-environment situations such as staffing, workload, availability of documentation materials. It also explored possible ways of improving the quality of nursing documentation.

Again, the study concentrated on only Registered General Nurses (RGN) at Effia Nkwanta Regional Hospital. These nurses were included in the study because documentation forms part of the curriculum for their training and they have the professional obligation to document all their actions. Besides, the registered nurses are obliged by the Nursing and Midwifery Council of Ghana, as well as the Ministry of Health to use the nursing process in meeting the total health needs of patients, families and communities and must document as such. Health assistants, nurse assistants and student nurses were excluded from the study. Geographically, the study was conducted at the Effia Nkwanta Regional Hospital in the Western region of Ghana.

Limitations

The study was conducted at the Effia Nkwanta Regional Hospital and thus, the findings could be specific to the facility. This means that the findings may not be generalized to other nurses in other facilities.

A more effective way of assessing the utilization of the nursing process in 24-hour nursing reports would have been a document review of all reports written by nurses over several years in various health facilities in Ghana. However, the limited time for this study and financial constraints could not allow that.

Definition of Terms

Nursing process: a scientific framework accepted universally for the delivery and documentation of nursing care.

24-hour Nursing Reports: a narrative progress note of the series of events occurring during a patients care written by the nurse during her shift.

Nurse characteristics: refers to the qualities of the nurse that can influence documentation practice. Theses may include the nurses' knowledge on documentation, attitude and perception of the importance of documentation.

Work-environment situation: as used in this study refers to conditions within the hospital be it policies, routines or organization of work, staffing.

Organization of the Study

The study was organized into five chapters. Chapter One discussed the introduction, background to the study, statement of the problem, research questions, purpose of the study, significance of the study organization of the study and delimitation. Chapter Two looked at review of some related literature and the theoretical perception. This was followed by Chapter Three which dealt with research methodology touching on research design, population sampling, instrumentations, and procedure for gathering data and how the data was analysed. The Fourth Chapter discussed the results of the

study and finally, Chapter Five looked at the summary, conclusions, recommendations and areas for further research.

Chapter Summary

This chapter gave a background to the study by presenting a brief overview of documentation in nursing, the 24-hour nursing reports and briefly described the current literature on the 24-hour nursing reports. It also presented the problem statement as well as the purpose of the study. No studies were found in Ghana on the 24-hour nursing reports. Available studies indicate that most studies on nursing documentation examined the physical characteristics of the records. The chapter also presented the research objectives and research questions to be answered by the study.

The study sort to explore the quality of nursing documentation. Specifically, the study is concerned with analyzing the extent to which nursing reports reflect the nursing process, factors that influence the nursing process as well as ways to improve the quality of nursing documentation. Delimitations, limitations, the definition of key terms and the organization of the study were also presented. The study is limited to Registered nurses working at the Effia Nkwanta Regional Hospital and the report has been organized into five chapters.

CHAPTER TWO

LITERATURE REVIEW

Introduction

The study assesses the utilization of the nursing process in the 24-hour nursing reports among registered general nurses at Effia Nkwanta Regional Hospital. This section reviews literature concerning the research topic. The literature search was conducted in relevant electronic databases such as EBSCO Host, google scholar, and PubMed. The search was done using keywords and their synonyms such as nursing, nursing process; "documentation (recording; reporting), nursing and nursing process, shift reports. The search was narrowed to include articles published within the last ten years that were relevant to the research questions under study. Textbooks in nursing were also consulted for literature on the nursing process and nursing documentation. Additionally, published and unpublished thesis on nursing documentation was obtained from the research repository of some universities in Ghana.

The section presents the theoretical review, empirical review and the conceptual framework. The theoretical review section looked at the nursing process and the Nurse Role Effectiveness model which were the two major theoretical frameworks that informed the conceptualization of the study. The empirical review was organized following the objectives of the study. It, therefore, presents literature on the extent to which the 24-hour nursing reports reflect the nursing process, nurse characteristics that influence nursing documentation, work-environment situation that influences nursing documentation as well as how to improve the quality of nursing

documentation. The reviewed literature together with the theories guiding the study informed the conceptual framework for the study.

Theoretical Review

The Nursing Process

The nursing process is an individual-centered and comprehensive approach to patients care. It is a systematic, client-centered method for structuring the delivery of nursing care (Bernaman, et al., 2010). The nursing process is also defined as a systematic manner of determining the client's problems, making plans to solve them, initiating the plans or assigning others to implement it, and resolving the problems identified (Harkreader, et al., 2007). Chabeli, (2007) gave a similar definition of the nursing process as "a systematic, problem-solving approach used to identify, prevent and treat actual or potential problems of the patient and promote wellness. The purpose of the nursing process is to define patient goals, determine the nurse's role, provide consistency of care, customize care interventions, promote holistic treatment and provide quality patient care. The nursing process gained additional legitimacy in 1993 when the phases were included in the American Nurses Association (ANA) standards of nursing practice (Bernaman et al., 2010).

The term nursing process was first used by Lydia Hall, a nursing theorist, in 1955. She introduced three steps, which were observation, administration of care and validation. The steps in the nursing process went through a series of evolution. In 1967, it was made up of four steps, which were assessment, planning. Implementation and evaluation. In 1980, a step was added and it became assessment, diagnosis, planning, implementation and evaluation. In 1991, another step was added to make it Assessment, diagnosis,

outcome, planning, implementation and evaluation. The five phases nursing process remains well known among nurses as the third phase in the six phases, which is the outcome, is inherent in the other phases.

The nursing process has distinctive characteristics that enable the nurse to respond to the changing health status of a client and provide individualized care. It is cyclic and dynamic, client-centered, focuses on problem-solving and decision making, interpersonal and collaborative style, universal applicability and critical thinking.

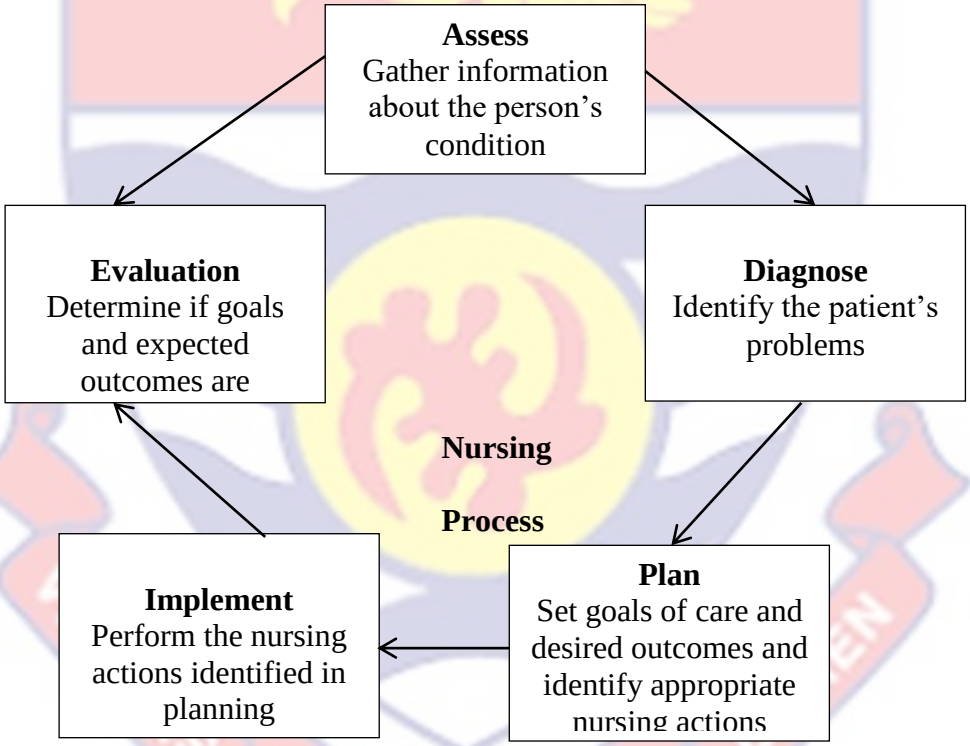

Figure 1: The Nursing Process

Assessing

The nursing process begins with the initial and ongoing assessment of the patient. The assessment stage of the nursing process involves the collection of data from the patient and their families concerning their health condition and the perceived problems of the patient (Stonehouse, 2017).

Assessing is the systematic and continuous collection, organization, validation and documentation of data (Bernaman et al., 2010). It involves the systematic gathering of comprehensive, relevant, valid, reliable and complete patient information from patients and other credible sources to identify health problems, diagnose and plan, implement and evaluate nursing care (Chabeli, 2007).

During assessment, both objective and subjective data are collected through observation, interviewing, and physical examination (Bernaman et al, 2010). Subjective data is what the patient tells the nurse, how they are feeling, levels and sensation of pain and as such are opened for interpretations (Stonehouse, 2017). Objective data can be measured and usually used to confirm the subjective data given by the patient.

Assessment is carried out during all phases of the nursing process as all phases of the nursing process depend on the accurate and complete collection of data. The nursing assessment focuses on a client's response to health problems and includes the clients perceived needs, health problems, related experience, health practices, values and lifestyle (Bernaman et al., 2010). An assessment helps in discovering the need of the patient which can then be addressed with the appropriate and effective nursing interventions (Haapoja, 2014).

As indicated by Bernaman et al., (2010), the Joint Commission on International Accreditation Standards for Hospitals (2017), mandates all healthcare providers to have an initial assessment of clients consisting of a history and physical examination and documented within 24 hours of admission as an inpatient.

Diagnosing

Diagnosing deals with analyzing the data collected, identifying health problems, risk and strength and formulating diagnostic statements (Bernaman, et al, 2010). In other words, the nurse concludes the assessment data collected, compare different hypothesis and forms diagnostic statements that describe the patient's needs. The nurse employs critical thinking skills, scientific knowledge, and social skills to interpret the assessment data and identify the client's strengths and problems (Bernaman et al. 2010; Haapoja, 2014). Chabeli, (2007) describes the diagnosis phase as an intellectual activity that requires the nurse to use the diagnostic reasoning process to draw conclusions about the patients' health status and determine the need for nursing intervention.

The nursing diagnosis is formulated out of the problems identified and the care planning activities that follow this phase depends on the diagnosis formulated. Nursing diagnosis focuses on the client's problems rather than on the nurses' problems in providing care. The nursing diagnosis is stated for problems that the nurse is accountable to and capable of diagnosing and treating independently (Harkreader, et al., 2007). Accurate diagnosis enables the nurse to select or design interventions to meet the client's individual needs (Bernaman et al., 2010; Harkreader, et al., 2007). Paans, Sermeus, Nieweg and Schans (2010), cautions that the diagnostic process made by the nurse should be documented in a way that is understandable for the colleagues and other healthcare team members, hence appropriate nursing diagnosis classifications must be used. However, the process of forming nursing diagnosis out of identified problems is a major challenge in the implementation of the nursing

process (Baena de Moraes Lopes, Higa, Oliveira, &. Christoforo, 2010). Lusardi (2012) further explained that many nurses can identify the patient's problems but the process of making the problems clearer and forming ideas can be challenging.

Planning

Planning, the third phase of the nursing process follows the process of diagnosing. It is a deliberate, systematic decision making and problem-solving stage. At this stage, the identified problems or nursing diagnoses are prioritized (Harkreader, et al, 2007). The process of planning begins with the identification of goals and possible strategies to meet the goals. That is, goals for care are formulated, nursing interventions are selected and written down. Goals need to be set in both long and short terms and must be Specific, measurable, achievable, realistic and timely.

The nursing plan includes steps needed to support the client during medical care and to help the client become independent in self-care. The plan must also include strategies to manage other problems that could influence the resolution of the client's primary problem (Harkreader, et al, 2007: Stonehouse, 2017).

There are three forms of planning which include initial, ongoing and discharge planning. Initial planning is done by the nurse when a patient is admitted and an admission assessment has been conducted to identify problems. Ongoing planning is done by all nurses when new information is obtained by the nurse and the client's response to care is evaluated. Discharge planning is concerned with anticipating and planning for the needs of patients after discharge (Bernaman et al., 2010). It may include arrangements for home

healthcare after hospital discharge, rehabilitation services, learning to walk on implanted hip joint, etc. (Harkreader, et al, 2007). All planning activities should be documented in the client's record to ensure coordination of care among members of the healthcare team (Harkreader, et al., 2007).

Implementation

Implementing is the action phase of the nursing process where the plans developed in the planning phase of the nursing process are implemented. During implementation, the nurse initiates nursing care activities to solve patients' actual and potential problems, and also observes the patient's response to care rendered (Chabeli, 2007). Implementing nursing interventions helps solve the client's actual and potential problems which may be physical, psychosocial, or spiritual (Bernaman, et al. 2010; Harkreader, et al, 2007). Effective implementation of nursing intervention requires the skills of teaching, collaborating, monitoring, among others and documenting the activities as well as the resulting client's responses in the nurse's progress note (Bernaman et al, 2010).

Evaluating

Evaluating which is the last phase of the nursing process is a planned ongoing, purposeful activity in which the client and the healthcare professional determine the client's progress towards the achievements of goals or the effectiveness of the nursing care plan (Bernaman et al., 2010). It forms the basis for determining whether the nursing intervention should be terminated, continued or amended (Bernaman et al, 2010). The evaluation also examines the quality of nursing care delivery and link positive client's outcome to quality care (Harkreader, et al, 2007). Although it is considered as

the final stage in the nursing process, it is ongoing throughout the various phases of the Knursing process.

Documentation made by nurses in the client's record provides evidence of care given and should give information on the client's ongoing status and reflect the full range of the nursing process (Bernaman et al, 2010). The nursing process provides every nurse with an established, scientific approach to providing nursing care. The process accounts for all significant data and actions taken by the registered nurse and the documentation of such will give the record a structure, organized and sequential and thus easy to comprehend. Therefore, nursing documentation of patient care should follow the nursing process, to ensure systematic documentation of care (Duclos-Miller, 2016). The American Nurses Association (ANA) also requires a competency for the nurse, to document specific information at various phases of the nursing process to meet professional standards (ANA, 2010).

As the nursing process gives details of the care rendered to patients, and it's a universally accepted model for the delivery of nursing care, the study seeks to examine the content of the 24-hour nursing reports using the nursing process as a measurement tool.

Importance of the Nursing Process to Nursing Documentation

Presumably, good documentation quality, especially in cases where the nurses use structured language that has been agreed on makes the reports clearer and patient care more efficient and effective (Jones, Lunney, Keenan & Moorhead, 2011). Employing the nursing process in nursing documentation will, therefore, provide structure to the record and standardize language to communicate nursing activities. As argued by Muller-Staub (2009) that, a lack

of standardized structure in documentation poses a challenge to clinical problem discussion.

In this study, the key concepts in the nursing process (Assessing, Diagnosing, planning, Implementation and Evaluation) forms the pillars on which the study is conceptually grounded. These concepts capture the entire range of activities undertaken by the nurse when caring for the patient and family and allow for the documentation of the actual care rendered as well as the critical thinking activities undertaken by the nurse during patient care. Its application in this study will allow for a comprehensive assessment of the content of the 24-hour nursing reports.

In spite of the benefits of the nursing process to this study, it cannot form the sole theoretical basis for the study. The main objective of the study is to explore the application of the nursing process to the 24-hour nursing reports and identify nurse characteristics and work-environment situations that affect documentation in nursing. The theoretical framework for the study must therefore look at both the content of the 24-hour nursing reports and the factors that influence the documentation. However, the nursing process focuses much on the nurses role and the activities undertaken by the nurse during the care of a patient. It focuses on the process of assessing a patient and family, analysing the data obtained to arrive at a nursing diagnosis, planning to solve the patients and family problem, implementation of the plan of action and finally evaluating care. The nursing process does not include information on factors that influence the performance of the nursing roles which is one of the objectives of this study. Therefore, the Nurse Role Effectiveness model

which is a framework that postulates the relationship between the nurse nursing process and factors that influence its application was revealed.

Nursing Role Effective Model

The Nursing Role Effectiveness Model (NREM) by Irvine, Sidani and Hall (1998), is a model that describes how structure impact on processes to produce outcome. The model states that, in healthcare, structure component such as workload, health status can impact on the process, which include nursing activities to produce outcome. The conceptual model has guided the development of a program of research aimed at identifying and measuring nursing-sensitive outcomes (Irvine et al.,1998), has been used as a framework to guide nurses' quality improvement activities (Irvine et al.,1998), and for curriculum design of a graduate course on quality improvement of nursing services. For example, the model was used to guide the improvement of nursing care of patients who were post-coronary artery catheterization (source).

. It therefore provided ideas on how the nurses' personal characteristics and the work-environment can influence the content of the 24 hour nursing reports and nursing documentation in general. (Irvine, et al.). It is made up of three (3) components which are the (a) structure, (b) process and (c) outcome (Figure 2).

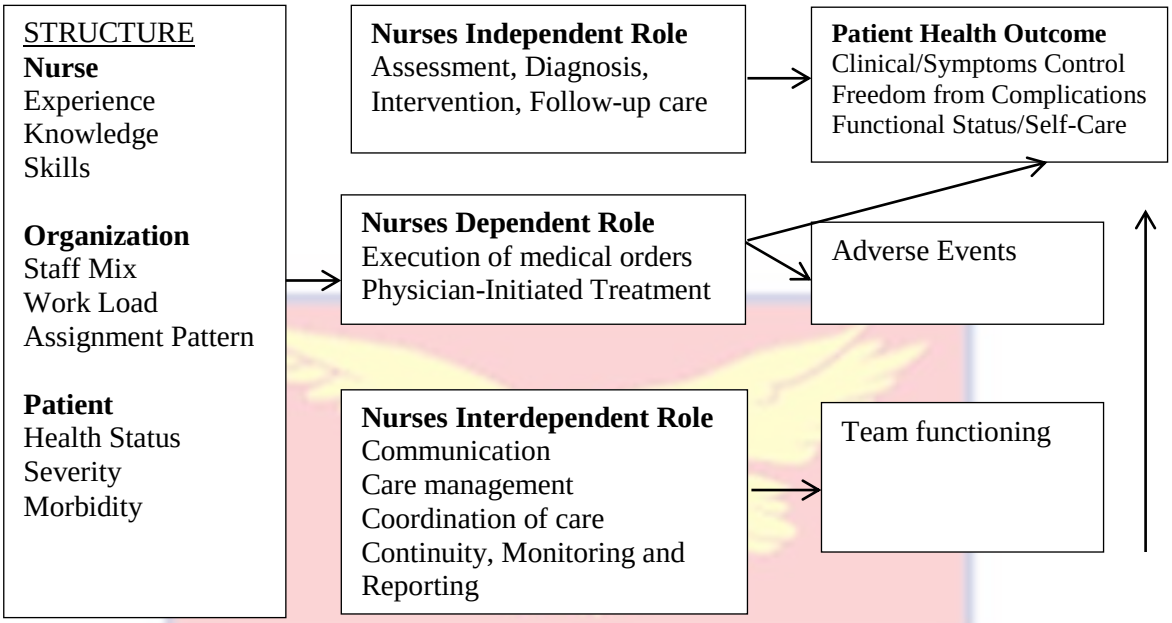

Figure 2: The Nursing Role effectiveness model

Structure Component

The structural component of NREM consists of nurse, patient, and nursing unit variables that influence the process and outcomes of healthcare. Nurse structural variables include nurse working experience, formal or continuing education, as well as psychological variables such as self-efficacy. A patient structural component consists of the patient characteristics that influence decisions about nursing care and/or patients' capacity for good outcomes. These include patients' age, education, health status and health expectations. Organizational structural variables include factors within the practice setting that influence nurses' ability to engage in effective role performance such a nurse staffing, leadership, and structures to support role clarity and professional autonomy (Irvine et al., 1998).

Process Component

The process component is made up of the various roles undertaken by the nurse within the healthcare settings. It is made of independent, interdependent and dependent roles (Irvine et al., 1998). The nurse independent role consists of activities and responsibilities for which only nurses are held accountable. Such activities are initiated by a professional nurse and do not require a physician's order. Nurses' independent role comprises the activities of patient assessment, decision-making, nursing intervention, and follow-up. Examples of independent role functions include diagnosing activities, (e.g. physical examination), planning activities (prescribing treatments), and care-related activities (e.g., patient education) (Irvine, et al., 1998). The interdependent role comprises the role functions and responsibilities that nurse's share with other members of the health care team. These activities are partially or dependent on the function of other healthcare professionals (Irvine, et al., 1998). It includes the activities and functions in which nurses engage that promote continuity and the coordination of patient care. These responsibilities may include nurse monitoring and reporting change in the patients' health conditions and coordinating health services.

The nurse dependent role consists of functions and responsibilities initiated by the physician but carried out by the nurse upon a physician's order. The process component of the NREM influenced the framework for the current study as it prescribes the various roles of the nurse ie dependent, independent and interdependent roles. As the nursing process focuses primary on the independent roles of the nurse, this framework helped to clarify the dependent and the interdependent roles for the purposes of this study.

Outcome Component

The outcome component of the model is made up of patients' health status, the patients' perceived health benefits from nursing care and the direct and indirect cost associated with nursing care (Irvine et al, 1998). It could also be defined as patient outcomes which include general patient state, behavior, or perception resulting from nursing interventions (Irvine, et al.1998). According to theorists, six major nursing outcomes could be identified. These are preventing complications, clinical outcomes, such as symptoms control, knowledge of disease and its treatment, functional health outcomes, patient satisfaction and healthcare cost. However, this component in the NREM was not included in the formulation of the framework for this study. This is because, the study focused solely on the content and the 24 hour nursing reports and which factors can influence its documentation. The study did not include the outcome or product of the interaction of these components.

Relationship among the Components

The specific relationship exists among the structure, process and outcome components of the model as well as among specific elements of the components.

Structure and Process

The structure component influences the process component. The ability of the nurse to undertake effectively the independent, interdependent and dependent nursing roles are influenced by the nurse variable, patient variable as well as the organizational structure variable (Irvine, et al 1998). For instance, a nursing intervention requires an effective process of nurse-patient interaction and an accurate patient assessment leading to a plan of care.

Irvine also identified that organisational structure variables, such as adequacy of staffing, affected the quality of nurse-patient communication. Individual nurse characteristics (structure component) such as inadequate knowledge and skills, failure to comply with policies and procedures can affect safe medication administration (process component).

Structure and outcome

The structure component can have both direct and indirect effects on the outcome component such as clinical function, satisfaction and cost outcomes. (Irvine, et al 1998). Organizational variables such as nurse staffing are related to outcomes such as prevention of complications and cost in treatment (Irvine, et al 1998).

Process and outcome

Process variables such as nurse's independent, dependent and interdependent roles have a direct effect on outcome variables such as clinical outcome, patient satisfaction, cost, coordination of care among others. According to Irvine, et al (1998), hospital length of stay for instance which is an outcome variable, has been empirically linked to the quality of nursing care. Understanding the relationship among specific variables of the structure, process and outcome components is necessary for arriving at valid conclusions in relation to outcome endeavors. It also contributes to the development of a solid knowledge base in the healthcare delivery system and assists in the redesigning of appropriate quality improvement strategies (Irvine, et al.,1998).

In relation to this study, the structure and process component of the model, and the relationship that exists between them contribute to the framework on which the study was conceptually built. The structure

components nurse characteristics and the environmental factors were adopted. Under the nurse factors, the knowledge and attitude of the nurses were relevant to this study. Under the organizational components, the staff mix and workload were adopted. The NREM describes how structures impact on processes to produce positive outcomes. This supports the objectives of the study that looks at the factors that can influence the quality of the content of nursing documents and how those factors could be modified to improve upon the general documentation practice of nurses.

In this section, two theories relevant to the study were discussed. First, the nursing process which formed the lens through which the content of the 24-hour nursing report was assessed.. Secondly, the nurse role effectiveness model that informed the concepts for factors that influence the documentation of nursing actions in the 24 hour report.

Empirical Review

This section of the literature review is dedicated to the review of researches done by others which are related to this study. The researcher tried to identify similarities and differenced between this research and earlier studies conducted on the subject area. The review was done on the basis of the purpose, methodology and findings of the study.

Application of the Nursing Process in the 24-hour Nursing Report

Nursing reports need to be organized and structured for easy accessibility and understanding of its content. Akhu-Zaheya, Al-Maaitah, and Hani (2017) asserts that structuring nursing record content enhances effective communication among healthcare team members, improve care delivery and ensures the provision of quality care to patients. In support of this, the World

Health Organisation makes it clear that valuable information is one that is accurate, relevant, structured and presented in an easily readable form (World Health Organisation [WHO], 2003). Healthcare information should be able to meet the accountability requirement to measure quality from patient and provider perspective and promote excellent clinical care (WHO).

The nursing process model is recognized by the World Health Organisation (WHO) as a model for delivering nursing care and has been widely used for documentation of care over the years. It still serves as the basic structure for recording patient care in a variety of settings (Akhu-Zaheya, et al., 2017: Soranto et al, 2014). The nursing process which is a scientific approach to care accounts for all significant data and actions taken by a registered nurse and thus gives a clear reflection of the care rendered when used for documenting care (Duclos-Miller, 2007). As reported by Jefferies, Johnson and Griffith (2010), the core of quality nursing documentation should include: the principle of patient-centeredness, recording the nurse's actual work and writing to reflect the nurses' objective clinical judgment, should be logical, be sequential, written as events occur, record variances in care and fulfill the legal requirement. In view of the numerous reports of inaccuracy, incomplete, fragmented and poor-quality documentation, it is necessary to improve the process of recording and incorporate the steps of the nursing process to make the records more organized, structured and detailed (Gomes, Cubas, Pleis, Shmeil, & Peluci, 2016).

Despite its wide usage in nursing care and the benefits, it has on the quality of care received by the patients, the nursing process is not adequately

used in documentation. Various reasons have been given to justify this situation including busy schedule, shortage of staff, lack of adequate knowledge and training on its use, non-availability of the nursing process forms at the centers, not mandated to use it and not necessary within some settings (Omonigho, 2015). This is confirmed in a descriptive study conducted by Omonigho to assess the knowledge and use of the nursing process among public health nurses for documentation of care in Southwest Nigeria. Forty (40) public health nurses were purposively selected. Findings from the study indicated that, although 60% of participants have had practical training on care planning and 10% have recently attended a workshop on the nursing process, no documentation was identified that used the nursing process and respondents indicated they do not use the nursing process in giving care.

A literature search on the content of the 24-hour nursing reports in relation to the nursing process yielded no results. However, the few studies identified investigated the shift or handover reports. Lamond, (2000) for instance investigated the content of change of shift reports in two (2) acute medical and two (2) acute surgical wards across two (2) National Health Service Trust in south -east England. The purpose of the study was to examine the role nurses change of shift reports play the processing of information and planning of care by nurses. A two-by-two design was utilized, comparing two hospitals and the types of wards (acute medical or acute surgical). Five (5) consecutive reports on each ward were audiotaped and the medical notes and nursing documentation for a total of fifteen (15) patients on each ward was examined. In all, content analysis was conducted on a total of sixty (60) patients medical notes, nursing documentation and shift reports. The

researcher concluded that, information is recorded more frequently in patients charts and notes than is communicated during shift reports. He added that the most frequently recorded in the patients' reports were the fluid output, followed by input and then physical assessment information such as pulse, temperature, blood pressure, respiration rate and blood sugar levels. Personal information of patient, such as the name, age, date of admission, diagnosis and operation were usually mentioned before giving specific patient information.

The study used two different settings and compared records from charts, notes as well as verbal information during hand over. It therefore provided an objective and a clear picture of the content of the hand over reports. However, the study presented the number of times each parameter was recorded in each of the wards as it used a quantitative content analysis approach. Hence, the report failed to provide information on how these parameters were reported in the records.

Similarly, Abraham, Kannampallil, Brenner, Lopez, Almosa, Patel & Paatel (2016) conducted a study in a sixteen (16) bed medical intensive care unit at an academic medical center in Texas using a case study. Sixteen critical care nurses participated in the study over a period of two (2) months. All participants used a paper-based body system-based handoff tool to document patient care information with the information organized into head-to-toe body system-based information format. Data was collected by audio recording of the communications during shift reports, general observation of the nurse workflow and semi-structured nurse interview. Data was analysesd using a qualitative content analysis specifically, the conventional analysis based on the Sequential Conversational Analysis (SCA) findings revealed that, the content

of the communication during hand off was made up of assessment and planning related to the cardiovascular system (7.4%), neurology (7.3%), pulmonary (9.6%), order reviews (8.6%), and problems (8.1%). Discussion of labs (1.7%), special orders (0.7%), allergies (0.5%), were limited in the handoff communications. The study also reported a significant association between the speaker and the content of communication with both outgoing and incoming nurses focusing on lines and medications. Incoming nurse also focused on order review (13%). The study was limited to the critical care unit and used only critical care nurses. Hence it does not provide detailed information on handoff information for all nurses. However, the use of the Sequential Conversational Approach gave the researcher the opportunity to give detailed information on the communication process and content of the handoff reports as the SCA did exploratory in nature.

Tang and Carpendale (n.d) also conducted an observational study to guide the design and development of technologies to support information flow during nurses shift change. The goal of the study was as to find out how information sharing process unfolds during a nurse's shift change in a hospital setting. The study was conducted at the 21st century ward. The study employed two (2) patient care mangers and 37 registered nurses three undergraduate nursing students. A total of 25 minimally intrusive observations were conducted during all the nursing shifts, in addition to informational interviews. The study reported that, information was mainly distributed in digital patient records, paper-based patient care summaries, white boards and verbal hand over. Information content across the various media included patients' diagnosis, allergies, medical health history, laboratory and diagnostic test

results, in paper-based, diagnosis, allergies, nursing orders, diet, scheduled medications. From the personal notes of the nurses, the types of information found included demographic list of patients such as name, age, gender, room number and caring physician. Historical information, for example patients past medical history-initial diagnosis, treatment, illness trajectory. Alert- specific allergies, isolation status, resuscitation level.

The study was observational in nature and as such gave the researchers the first-hand information on how handovers occur and the type of information that was transferred from one nurse to the other during hand overs. Although it gave a clear picture of the handover process indicating the various sources of information during hand over, it provided minimal details of the information transferred from one nurse to the other during a shift change.

In addition to the above studies which were specific to the change of shift reports, other studies identified in relation to the application of the nursing process to documentation in general shows poor documentation of all the stages of the nursing process (Afolayan, Donald, Baldwin, Onasoga, & Babafeni, 2013; Akhu-Zaheya, et al, 2017; Asmirajanti, Hamid & Hariyati, 2019; Azevedo, Guedes, Araujo, Maia and Cruz, (2019) Hayrinen, Lammintakanen & Saranto 2010; Instefjord, Aasekjaer, Espehavig & Graverholf, 2014). Other include Kamberi, (2018); Lindo, et al, (2016) Mbithi, Mwenda, & Karonjo, (2018); Mwangi, Meng'anyi & Mbugua (2019); Ojowole & Samole; (2017); Paans, Sermeus, Nieweg, & Van Der Schans, (2010); Semachew, (2018); Setz & D'Innocenzo, (2009); Thoroddsen, Sigurjonsdottir, Ehnfors, & Ehrenberg, (2013).

Kamberi, (2018) reported that knowledge on nursing diagnosis is high (95.94%) among the 43 nurses recruited for the cross-sectional study in Vlore Reginal hospital. Its use in a clinical setting was nevertheless low (46.51%).

Mbithi, et al. (2018), reported poor recording of all stages of the nursing process. The objective of the study was to establish the observed utilization of the nursing process among nurses in five selected public health care facilities in Kenya. The researchers used a cross-sectional design. A structured questionnaire and an observational checklist were used to collect data from the nurses who were providing care to patients. Data were analysed using descriptive statistics. Respondents documented performance on the nursing process and results show that out of the 249 respondents observed, only 10% (24) of them performed and documented patient assessment data fully. The same study reported that only 4% (10) of the respondents fully formulated the nursing diagnoses while most [71.5% (178)] of the respondents never formulated any nursing diagnosis at all. Objectives and outcome criteria fully documented by 7% (18). However, most [72% (179)] of them did not document any expected outcomes at all. Also, only 12% (30) of the respondents fully documented nursing care intervention while 71.5% (178) of them never documented any nursing interventions at all. In the documentation of evaluation, only 2% (4) of the nursing care evaluations were fully documented with 87% (217) of the nursing care evaluations not being documented at all. Fully to partially only 28.5% (71) of the respondents were able to carry out their procedures and document (fully-partially documented) according to the steps of the nursing process.

Generally, the findings from the study indicated poor recording of all the steps of the nursing process. The questionnaire and observational checklist used by the researcher was vital in providing a more credible finding from the study. The use of the observational method however, did not allow for reasons to be attributed to why this level of the nursing process documentation was observed among the participants. However, it provided an opportunity to report on the situation as it occurs. The study also used multiple study sites that were necessary to observe the situation in similar settings and identify variations in the findings obtained.

Hayrinen, et al. (2010) evaluated whether nurses have documented patient care in compliance with national nursing documentation model in electronic health records, which means the use of the nursing process and the use of standardized terminologies in different phases of the nursing process. Finland developed the Finnish Model of standardized Nursing Documentation based on the WHO nursing documentation model and use of Finnish Care Classification (FinCC) as part of the national HER project in Finland. The standardized nursing documentation model consists of the phases of the nursing process (needs assessment, nursing diagnosis, planning, nursing intervention, evaluation). A retrospective descriptive approach was employed. The data for the evaluation consisted of the electronic care plans of 67 neurological patients and 422 surgical patients in the central hospital in 2003 – 2006 in the North Karelian Central Hospital, Finland. The content of the nursing process was evaluated quantitatively using criteria created on a scale of 0-3, with the highest score representing the most comprehensive documentation. Needs assessment and planning scored less than 1 (0.02- 0.93)

on both the neurological and surgical departments. Diagnosis, nursing interventions and evaluation scored high (2-2.95) on the neurological department but low (0.02 – 1.67) on the surgical departments. In the documentation of nursing diagnosis, aims of care, nursing interventions and nursing outcomes, the Finish Classification of Nursing Diagnosis (FiCND), or the Finnish Classification of Nursing Interventions (FiCNI) were used. Nursing diagnosis and aims of care were documented using the FiCND major categories or subcategories. The care components used varied according to the care specialties reflecting the needs of different patients. Planning or performed nursing interventions were documented using the FiCNI major categories or subcategories. Planned interventions were recorded together with aims for care or independently using the FiCNI. Nursing outcomes were recorded using the Care Component level of the FiCND and all components of FiCND were used.

Although the documentation was done using the recommended standards, the content was not detailed and did not reflect the relationship between the various phases of the nursing process. The results indicated a score of less than 3 for all phases of the nursing process, indicating classification was used but the nursing care aims, nursing interventions, outcomes of nursing were not related to the nursing diagnosis.

The above findings are further strengthened by a quantitative descriptive retrospective study conducted by Ojowole et al. (2017). The study reviewed the admission records of patients admitted to the male and female medical and surgical wards for the years 2014, 2015 and 2016 at a private teaching hospital in Ogun State, Nigeria. It was observed that generally, the

frequency of documentation of nursing process steps was low. On the day of admission, finding revealed that documentation of a complete record of assessment in the charts for 2014, 2015 and 2016 was 17.2%, 16.4% and 15.4% respectively. Nursing intervention records was 15.8%, 19.4% and 23.6%; evaluation 20.8%, 16.1%, 15.9%; nursing diagnosis 19.5%, 18.2% and 19.9% for the said years. The approach allowed for the observation of the documentation over a period of three (3). This was necessary for reporting the trend in documentation over some time and provided an objective report on the state of the nursing records.

In another study conducted by Paans, et al., (2010) to assess the prevalence of accurate nursing documentation in patient's records in the Netherlands. The study employed a cross-sectional retrospective using the D-Catch instrument. The sample of 10 hospitals was randomly selected from 86 general hospitals and 8 university hospitals in the Netherlands. In the 10 hospitals, 35 wards and 341 records were reviewed it was reported that out of the 341 records audited, 28% contained all the nursing process stages. 34% were structured according to the nursing process stages. The personal details of the patient (name, address, date of birth, marital status) were present in 95% of the nursing records. More than 50% of the admission information was complete and contained medical diagnosis and reasons for admission. Progress evaluations were present in at least 50% of the records and were linked to diagnosis. However, in more than 50% of the records, the evaluation represented a more general appraisal of the patient's current state of health. Interventions appeared to result logically from the diagnosis.

The study used the D-catch instrument which is to assess the records which gives both the qualitative and quantitative criteria for assessing the records (Paans, 2011). It, therefore, provided qualitative and quantitative measurement of the structure of the records as well as the content in relation to specific components of the nursing process. The study provided a general overview of the state of nursing documentation in relation to the nursing process. However, the sample was taken from different facilities which might have different work conditions and researchers did not report on how the differences affected the results of the study. Again, the use of numbers to represent the quality criteria did not give a clear picture of the quality of the record.

Similarly, to the findings of Paans et al, (2010), Mwangi, et al, (2019) reported low recording of all the stages of the nursing process. In their descriptive cross-sectional study to examine the utilization of the nursing process among nurses working at a level five hospital in Kenya, the researchers reported that patient identification data was present in 52% of the records. Complete history and physical examination were present in 28% of the records. The majority (72%) of the patients' files lack patient's assessment. Similarly, the nursing diagnosis was missing in 64% of the reports, 64% did not have goals and the same percentage (64%) failed to give interventions related to the goal. Only 12% of the records reported complete evaluation and stated whether goals were met or not.

Semachew, (2018), conducted a descriptive retrospective study design of the nursing processes registration in inpatient records in three randomly selected government hospitals in Amhaa Regional state, North West Ethiopia.

The aim of the study was to evaluate the implementation status of nursing process at the selected hospitals. A total of 338 folders of the patient within the last six months were sampled from the medical, surgical and orthopaedic wards of the selected hospitals. The results from the study indicated that, for all the three hospitals used for the study, more than half (62. 5%, 99%, 95.6%) had nursing process attached to their files. Out of the total of 338 documents reviewed, 107(31%) did not state nursing diagnosis, 185 (54.7%) of nurses stated their plan of care based on priorities. However, 51.2% did no document their interventions based on plan and 179 (53%) did not evaluate their interventions. The study gave a broader picture of which aspects of the nursing process were represented in the reports. However, the use of a quantitative approach limited the presentation of the actual content of the records.

Similarly, Mwangi, et al., (2019) conducted a descriptive cross-sectional quantitative-qualitative study to assess the utilization of the nursing process among nurses working at a level 5 hospital in Kenya. Data on the practice of the nursing process was collected using a checklist and a self-administered questionnaire. The hospitals and the wards (medical, surgical and new-born units) were purposively sampled. Twenty-five (25) in-patient files were sampled. A review of the patients' files led to the conclusion that the majority (72%) of the files lacked daily episodic patient assessment and only one file had a complete daily episodic assessment done. Fifty-two (52) percent of the files had had complete patient identification data, 56% had inadequate preliminary investigations while 48% had incomplete comprehensive history and physical examination. Out of the 25 files reviewed 60% did not have nursing care plans and 32% contained incomplete nursing care plans. Sixty-

four (64) percent of the files had no diagnosis based on the assessment data. In 16% of the files, nursing diagnoses were not prioritized and 8% were incomplete. Only 4% (1) of the files had adequate diagnosis based on data, prioritized and had a plan to address all identified health problems. 64% of the files did not have goals while 20% of the files had goals but not SMART (Specific, Measurable, Achievable, Reliable, Time bound) and 8% had incomplete goals. Only 8% (2) of the files had complete and SMART client-oriented goals. Further review indicated 64% of the files missed nursing interventions related to the goal and scientific explanation. Slightly over a quarter had the interventions though incomplete. Only 12% of the files had a complete evaluation of nursing interventions indicating whether the goal has been met or not and the next course of action. Forty-four percent (44%) of the reviewed files were found to have proper documentation and presence of relevant flowcharts. Most, (48%) of the files had incomplete documentation and flowcharts as required in the nursing process.

The study reported a poor representation of all phases of the nursing process in patient's files. More than 50% of files missed some components of the nursing process. The study used both quantitative and qualitative approaches in the study. However, for the document review, data were collected using a checklist and as such details of the content of the document were not reported on.

In another study, Setz and D'Innocenzo (2009) evaluated the quality of nursing documentation on medical records of patients from a university hospital in Sao Paulo, Brazil. The study reviewed 424 patients' charts. The charts reviewed were from the medical, surgical, emergency, paediatric and

obstetric, and the anaesthetic units of the hospital. From evaluated medical records 41% had the nursing diagnosis and these were 5.2% complete, 75.2% had a prescription of nursing which 3.5% were complete and 45.8% had completed the development of nursing, this 2.6% were complete

Also, Asmirajanti, et al. (2019) reported insufficient documentation of the nursing process. Their study employed a quantitative design with a retrospective approach to review 240 medical records of discharged patients from Dr. Kariadi Hospital in Semarang from July to September 2016. The researchers randomly selected records of the 10 most commonly reported medical and surgical diseases and a hospital stay of more than three days. An observational form that has been tested for validity and reliability was used to collect the data from the patient's progress notes. Results showed that nurses' performance on some nursing activities were below standard (80%). These activities include the assessment of the functional status of decubitus risk (20.8%), biological status (0.4%), formulation of nursing diagnosis (20.8%), identification of patients' home needs (41.3%), quality of life (66.3%), collaboration intervention in drug administration (60.8%), monitoring of vital signs (23.3%), monitoring of daily living activities (37.5%), mobilization/ rehabilitation (37.5%), outcome (46.7%), and resume activities nursing (0.8%). Patients identification data such as name, medical record number, age, weight and height were sufficiently reported (96.7 -100%) in the records. other assessment data such as general appearance, consciousness level, history of allergy had a history scored more than 99%. The results also indicate that nursing activities were not implemented in compliance with the nursing

process as some nurses had not properly conducted a biological assessment before proceeding to formulate a diagnosis and perform an intervention.

The study provided information on which aspects of the nursing process are documented in the patient's records. The use of a quantitative approach allowed data to be represented in frequencies and that gave an objective view of how the various components of the nursing process are represented in the patient's records. However, the use of a qualitative approach may have been more appropriate as it would provide the researchers with the opportunity to assess the quality aspects of the progress noted and provide a detailed description of the aspects of the nursing process that are recorded.

Furthermore, Instefjord, Aasekjaer, Espehavig and Graverholf (2014) reported a similar finding to those presented earlier. Their study assessed the quality of psychiatric nursing documentation and the results indicated 71% of records documented all stages of the nursing process while the remaining 29% documented all stages but one. Nineteen (19) percent of the records had nursing diagnoses correctly formulated with symptoms, consequences and patient resources. Description of outcomes was missing or inadequate and only 5% of records had nursing interventions formulated in a way that specified the content and frequency of the intervention. This report indicates that nursing process documentation among the respondents was quite high as compared to the other studies. This could be attributed to the fact that all nurses in the study facility had completed at least a one-year training in nursing documentation in an electronic record keeping.

Thoroddsen, et al. (2013) conducted a study in 29 wards at the university hospital in Iceland. The study aim was to describe the accuracy,

completeness and comprehensiveness of the information on pressure ulcers documented in the patient's records. The study was a cross-sectional retrospective study with a sample size of 45 from the surgical, internal medicine, geriatric or rehabilitation wards of the Landspitali University Hospital. Of 45 records of patients identified with pressure ulcers, only 27 (60%) had corresponding documentation of the presence of these ulcers in their patient records. The documented pressure ulcers were equivalent to a 12.3% prevalence rate. Of the 27 pressure ulcers recorded, the size was documented for 3, categories for 15 and location for 24. Only one of the 45 patient records had pressure ulcers described appropriately in all phases of the nursing process. In 13 patient records, there was no description of pressure ulcers in any phase of the nursing process. Nevertheless, the findings further stated that all 45 retrievable patients' records had the content organized in the same way and chronological order. The nursing content was structured following the nursing process in all patient records. The presence of pressure ulcers was mostly documented in nursing assessment (when present on admission) or in progress notes (when acquired during hospital stay). Pressure ulcer risk factors were by far most frequently documented in free text in nursing progress notes.

Lindo, et al (2016) assessed the quality of nursing documentation on medical records at three hospitals in Jamaica. 245 records from 7 adult medical wards were audited in a quantitative cross-sectional study. More than 69% of the records had evidence of documentation relating to chief complaint (81.6%, n = 200), history of past illness (78.8%, n = 193), and past health history (79.2%, n = 194; Table 1). In contrast, documented evidence related to

patients' family health history and psychological history were infrequently present (11.0% and 9.8%, respectively). Chi-square analysis revealed that there was a significant relationship between hospitals and four elements of client history documentation (nursing history documented by nursing, p = .0001; chief complaint, p = .015; family history, p = .010; psychological history, p=.011). Age (93.1%) and sex (87.8%) were the most frequently documented demographic data. The number of children, marital status, occupation, education, religious affiliation, and living accommodations was observed in less than a third of the records. Ninety percent of records had evidence of physical assessment being done and reflected varying types of assessment (focused 36.8%; head to toe 29.4%; systemic 23.2%; combination 10.5%), with 3.9% indicating the use of a checklist. The instrument sought to determine the organizing framework that governed the nurses' documentation. Less than 10% of notes had explicit subjective and objective statements of SOAPIE, and 29% included a nursing diagnosis. Eleven dockets (4.5%) reflected nurses' goal, intervention, and evaluation in documenting client care in the first 24 hours of admission. only 4 (1.7%) of the medical records audited reflected evidence of patient teaching within 24 hours of admission (all were from Hospital 1). Topics taught included medication, patient safety, disease process, and plan of care. Finally, less than 15% of medical records audited reflected evidence of discharge planning within 72 hours of admission

In the research of Azevedo, et al. (2019) conducted a study to identify the prevalence of nursing process documentation in hospital and outpatient clinics in Brazil. A quantitative descriptive cross-sectional approach was employed. Nurses responsible for 416 sectors of 40 institutions were

interviewed on the documentation of four phases of the Nursing Process (data collection, diagnosis, prescription and evaluation) and nursing annotations. Of the 416 sectors studied, 89.9% documented at least one phase; 56.0% documented the four phases; 4.3% only documented nursing annotations; 5.8% did not document any phase, nor did the nursing notes. The data collection and diagnosis phase were the least recorded with 78.8%. Prescription and evaluation were high with 82.5% 90.9% respectively.

Findings from the study indicate high documentation of all phases of the nursing process. However, the report failed to give details of nursing activities documented at each phase of the nursing process were although the researchers used interviews in the collection of data.

Nurse Characteristics that influence Documentation

Nurses form a larger percentage of the entire healthcare staff and among all healthcare staff, nurses spend the most time with the patients. What and how nurses report the needs of their patients, the condition of the patient, the care they render to their patients and the outcomes of the patient depends on a variety of factors.

Among the nurse characteristics that influence nursing documentation, Kamil, Rachmah, and Wardani (2018), indicated that staff competency is a major concern. Their study was conducted in an Indonesia hospital to identify issues with nursing documentation using a qualitative approach. A total of 35 participants of the facility made up of 14 head nurses and 21 staff nurses were recruited for a focused group discussion. The study reported nurses have varying educational backgrounds and as such there are variations in their competencies in relation to the documentation (Kamil, et al.).

Knowledge and Attitude

The knowledge of the nurse in documentation and record-keeping plays a vital role in her documentation practice (Nuryani & Susanti, 2014). They further explained that nurses' knowledge determined their actions in providing services to patients, thus, nursing care based on knowledge would provide better service than nurses who performed their actions without knowledge. Nurses' knowledge was also very influential in the completeness of nursing care documentation.

There are arguments in the literature regarding the role of knowledge in the documentation of the nursing process. While some studies suggest that knowledge improves the documentation of the nursing process, other studies reported no significant influence between nurses' knowledge and the implementation of nursing care documentation (Afolayan, et al, 2013; Suhita, et al., 2017). Nevertheless, some studies, have also reported more than 50% of nurses to have sufficient knowledge in documentation (Andualem et al, 2019; Taiye, 2015).

The studies that indicate a positive relationship between nursing process documentation and knowledge generally indicated that nurses who are highly and moderately knowledgeable in the nursing process are more likely to implement it in their care and documentation (Aseratie, Murugan & Molla, 2014).

For example, Aseratie, et al. (2014), assert that highly knowledgeable nurses were 27 times more likely and significantly associated with the implementation of the nursing process than low knowledge group nurses. Moderately knowledgeable nurses were positively and significantly associated

with the implementation of the nursing process. In their mixed-method intervention study to assess the knowledge and attitude of nurses towards documentation using forty (40) participants conveniently sampled form six (6) wards of a Ugandan Health Institution, the report indicated that documentation is not done because many nurses are not conversant with the documentation process and the nursing process and do not seem to realize the importance of nursing documentation. Findings also indicated that before the intervention, 70.3% scored less than 80% (inadequate knowledge on documentation) however, after the intervention, 54% of respondents score over 80% (had adequate knowledge on documentation). This implies that providing training on documentation can improve the knowledge of nurses on documentation and help to improve the quality of the records.

In a descriptive survey designed to evaluate the knowledge and practice of documentation of nurses in Ahma Bello University Teaching Hospital, findings indicated that all 290 respondents had sufficient knowledge of documentation (Taiye, 2015). Andualem et al (2019) also reported 54.6% had good knowledge of nursing documentation while 85% of participants knew they should be documented according to the guidelines for documentation.

Other studies reported no significant relationship between nurses' knowledge and the nursing process documentation (Afolayan et al., 2013; Suhita et al., 2017). Suhita, et al., conducted a study to identify barriers in conducting documentation of nursing in inpatient wards and know the factors that influenced nurses in implementing documentation of nursing in Muhammadiya Hospital in Kediri city in Indonesia. The researchers employed

the correlational cross-sectional approach. Independent variables, which were: knowledge, motivation, and work stress and dependent variable, was the implementation of nursing documentation. The findings indicated that most (53.8%) of the respondents had sufficient knowledge with 46.2% having good knowledge of nursing documentation. However, they stated that there was no significant influence between knowledge and the implementation of nursing care documentation as indicated by a P value of 0. 054.

Afolayan, et al, (2013) supported this finding by stating that, knowledge of participants on the nursing process has no significant relationship with its application. Findings from their study show nurse have adequate theoretical knowledge and understanding of the nursing process. Ninety-two (92) percent, (69) respondents had a good knowledge with only 6 (8%) having poor knowledge and 93.3% (70) expressed willingness to apply the nursing process in inpatient care.

These differences may be because, the factors that influence the application of the nursing process to nurse care documentation may be multifactorial and thus, the knowledge of the nurses alone cannot motivate the nurses to document appropriately.

The attitude of nurses on documentation has been identified as one of the factors that influence documentation practice. Studies have reported nurses with a positive attitude towards documentation are more likely to document their nursing actions than those with a negative attitude. Generally, research findings indicate most nurses see documentation as an essential aspect their work as is necessary for continuity of care, legal protection, and enhances the

quality of care (Andualem, et al, 2019; Nakate, et al. 2015; Petkovsek-Gregorin & Skela-Savic, 2015; Taiye, 2015).

A cross-sectional study conducted among 246 nurses in West Gojjam zone Public hospital from February to March 2018. The findings indicated 53.8% of respondents strongly agree on the equal importance of nursing documentation as much other documentation (Andualem, et al, 2019).

In quantitative non-experimental research to examine the perception and attitude of nurses towards documentation in nursing, quota sampling was used to select 592 respondents from ten Slovenian hospitals. Results were that nurses with at least a college degree attributed more importance to documentation compared to those with secondary education. They concluded that nurses perceive documentation as an important part of their work and believe it enhances quality and continuity of care, transparency and patient safety (Petkovsek- Gregorin et al. 2015). In agreement with these findings, Nakate, et al. (2015) revealed respondents strongly agree that nursing documentation was meaningful and necessary for legal protection and a priority for nursing.

Taiye (2015) found that all respondents think it is important to document nursing care and they all like documenting their activities. 98.8%, 96.7%, 100% and 21.7% indicated they document for continuity of care, for early detection of problem, allow better documentation, and serve as legal backing respectively.

Work-environment Situation that Influences Documentation

The American Nurses Association, (2010) in its five tenet characteristics of nursing practice establishes a strong link between the

professional work-environment and the registered nurse's ability to provide quality healthcare and achieve optimal outcomes. To ensure accurate and high-quality nursing documentation, an enabling and conducive environment needs to be created within the healthcare system. In a systematic review conducted by Aqoulah, Ismail, Juni, Shahar and Tubaishat (2018), the environment was identified as a factor that contributes to the quality of nursing documentation. These factors include motivation and supervision from managers and administrators as well as the provision of materials and logistics for documentation.

Motivation by Nursing Leaders

Lack of regular support from management can lead to poor quality documentation as reported by some studies. Kamil, et al, (2018) Stated that the greatest problem encountered by nurses in documentation is primarily caused by inadequate supervision in the documentation process. The findings from their study in Indonesia were that nurses receive minimal attention and support on how to conduct effective and efficient documentation and stated that supervision of staff documentation was intensified during hospital accreditation and the quality decreases afterward. Nakate et al. (2015) added that nursing leaders have not put much emphasis on nursing documentation. The finding indicated that, due to the workload and shortage of staff, a constant reminder from nurse leaders is necessary to ensure adequate and effective documentation. This has also been reported in other studies that nurses feel their notes are not read and so feel reluctant to record (Diali, Toulabi, Gholami, Tarrahi & Khademi, 2016).

Although these studies provided relevant information for this study, a few shortfalls that are identified include the use of questionnaire as a data collection tool and which did not allow the respondents to give detailed information on the topic under study. The use of an interview or a focus group discussion as a data collection method would have allowed the participants to provide explanations to the answers given.

According to Suhita, et al, (2017), 56.4% (44) of the respondents has a medium motivation and 43.6% (34) had high motivation to conduct nursing documentation and reported a significant influence between motivation and the implementation of the nursing care documentation (P-value 0.002). Although the nursing process is taught at all levels of nursing education, there are no follow-ups to ensure its application in the documentation of nursing care (Nakate, et al, 2015). Nurses are therefore not compelled to utilize it in their practice and document as such.

Findings from the various studies suggested frequent monitoring of documentation process by nursing leaders, encouraging staff members to document patient care and making provisions to reduce the workload to help improve documentation practice (Nakate et al, 2015).

Time Factor, Workload and Shortage of Staff

Other factors that were identified in the literature to influence nursing documentation include time, workload and shortage of staff. Nakate, et al. (2015), stated that lack of time to document due to excessive workload have been reported to prevent documentation of nursing activities and others indicated the structural set up of the ward (overcrowding) is a deterrent. In support of this, Taiye, (2015) found 41.7% indicating time constraints were a

major barrier to documentation. Suggestions to enhance appropriate nursing documentation as indicated by participants included nursing leadership working to reduce overcrowding and workload on the ward, encouraging the staff to document, and ensuring interdisciplinary team members use the nursing records (Nakate, et al.). Others include pre-service and continuous education on documentation, placing emphasis on documentation during the training of nurses and creating a uniform documentation system (Nakate, et al.).

Aseratie et al (2014) also added that working in a hospital with the high facility was 248 times significantly and more likely to implement the nursing process than those working in an inferior facility (COR: 2.248, 95%CI: (1.079-4.684), P: 0.03**.** This implies that if the work-environment is improved by providing the necessary facilitating conditions, such as improving the staff strength to help reduce the workloads, nurses will implement the nursing process and document appropriately.

Workload

Another factor that has been implicated in the poor documentation practice is increased patient movement. Workload has been implicated as a major barrier to documentation (Aqoulah, et al. 2018). Available literature suggests that increase workload impacts negatively on the quality of nursing documentation (Aseratie, et al 2014; Kebede et al, 2017; Mutshatshi et al. 2018; Shihundla, Lebese & Maputle, 2016; Suhita, et al., 2017).

A study reported that nurses continuously cited the increased number of patient admissions as an important reason for not recording and stated that staff shortage impact on recording as few nurses attending to many patients

have to record in many forms (Mutshatshi et al. 2018). Aseratie et al. (2014), support the findings of this study that nurses are not recording because of work overload and that nurses encounter major barriers to documentation owing to mismatches between staffing resources and workload. The study further indicates that when nurses experience extra workload, it predisposes them to decreased morale and inadequate work practices, including poor recording practices, which puts pressure on the quality of care rendered to patients. Reports indicate that there is a significant influence between work stress and the implementation of nursing care documentation (Suhita et al. 2017).

For Mutshatshi et al. (2018), the study gave a description of the challenges faced by nurses in documentation from the perspective of the nurse. However, the study participants were nurses working in selected public hospitals in the Vhembe district of Limpopo province in South Africa and hence the findings have limited application to other facilities. The researchers could have given a vivid description of the study participants so that the findings can be applied to settings with similar characteristics as well as other nurses with similar characteristics.

Shihundla, et al, (2016) in their study to identify the effects of increased nurses' workload on quality documentation using a qualitative design reported that workload contributes strongly to incomplete and illegible documentation. The participants for the study reported that they find it difficult to cope with the increased workload associated with documenting patient information on the multiple records that are utilized at health facilities, leading to incomplete information documented on patient records. A similar

report was given by Kebede et al (2017) stating that 19% and 22% of respondents attributed their inability to document the nursing care process to a shortage of time and patient load respectively. It is worth noting that, a balance between healthcare consumer needs and the nurse competencies is mandatory if quality care and subsequent documentation of care is to be achieved (ANA, 2010).

The lack of recording is still a major obstacle in measuring the quality of health care in most low- and middle-income countries (Wang et al. 2016). However, Wang et al., (2016) cautioned that nurses are increasingly being made aware of the role of clinical records in health care litigation. Despite the shortage they are experiencing, nurses must ensure that their notes are 'meticulous' from a legal perspective because an activity that is not documented is considered as not done. Inan and Dinc (2013) also confirm that keeping good records is regarded as an essential professional and legal requirement of being a nurse and postponement of documentation of patient information immediately after the event has occurred might lead to medico-legal hazards.

Time Factor

In another study a qualitative study conducted in selected public hospitals in Vhembe District in Kimpopo, South Africa, using 13 professional nurses purposively sampled from the medical, surgical and paediatric units, using a semi-structured interview guide, it was reported that time constraints pose a serious threat to quality documentation. Nurses reported not having adequate time for documenting the care given to the patient as forms to be completed during recording time requires much writing and depend also on

the nurse ability to recall what to document which usually led to incomplete recording (Mutshatshi, et al. 2018)

A similar report was obtained in the study by Charalambous, and Goldberg (2016) when participants reported that nurses expressed their resentment over the excessive amount of time it took to complete paperwork which they felt was often a repetition, of no benefit and took them away from the patient.

Materials for Documentation

To enhance documentation in nursing, nurses should be provided with stationery and monitoring equipment so that nursing activities can be performed effectively and documented accordingly (Afolayan, et al. 2013; Nakate et al, 2015). Lack of stationery and basic monitoring equipment deter nurses from making observations and recording findings (Nakate et al., 2015). It was also discovered that without designated nursing documentation forms, participants felt that they were disadvantaged and unable to fully document. As well, it takes a lot of time to create or design a reporting system in an era where there is a shortage of staff and increasing workload.

Available literature points to the fact that nurses sometimes experience a shortage of recording materials which makes it impossible to record the care they render to patients. in a respondent self-reported reasons for not documenting nursing care provided obtained from a study by Andualem et al (2019), inadequate sheets were reported by 25.5% of the respondents. Taiye, (2015) supported this finding with 28.3% of respondents stating a lack of proper documentation facilities as a barrier to documentation.

Another study conducted by Mutshatshi, et al. (2018) stated that records of six public hospitals were poor as a result of inadequate provision of recording materials. Their study reported that nurses can perform various activities and plan patient care but such information is missing from the records due to lack of recording materials. It has also been reported that a major challenge affecting the utilisation of the nursing process was the unavailability of materials for documentation. The steady application of Nursing process requires a steady supply of materials for observation, monitoring and assessment and documentation (Afolayan et al 2013).

Summary of Empirical Review

Generally, there is limited studies specific to the content of the 24-hour nursing report. The empirical review identified studies that which examined the content of shift reports and other documentation made by nurses. However, no specific study narrowed on the 24-hour nursing reports. The findings from the empirical review generally suggests poor documentation of all stages of the nursing process with the implementation stage being the most documented. The evaluation stage was the least documented stage according to the studies reviewed. This indicates that, although nursing practice may be guided by the principles of the nursing process, the records do not reflect the nursing process. In addition to that, almost all the studies reviewed employed a quantitative approach and were all retrospective in nature. Most of the studies reported that records were analysed without specifying the types of records.

Numerous factors were found to influence the documentation practice among nurses. These include the nurse's characteristics such as knowledge and attitude as well as other work-environment situation such as workload,

staffing, time factor and motivation from superiors. Among these factors, workload, time factor and staffing were reported as a major threat to the documentation practices of nurses. Availability of materials for documentation, such as pens, papers were also reported to influence the documentation practice of nurses. Also, although most of the studies reviewed analysed patients' records, the articles were not specific on which records were analysed. It is obvious from the studies revealed that limited research has been published on the 24-hour report. As limited studies or no study has analysed the 24-hour nursing report, it presents a significant gap in literature that need to be filled as the 24 hour report summarised all the patients' records and should reflect the nursing process.

Conceptual Framework

A conceptual framework is a narrative or a graphical presentation of the ideas or concepts about a particular phenomenon and the presumed relationship or pattern of correlation among the various concepts and provides a comprehensive understanding of the phenomenon under study (Grant & Osanloo, 2014; Jabareen, 2009; Miles & Huberman, 1994). With regard to this study, the researcher was interested in how the content of the nursing reports reflects the nursing process (assessing, diagnosing, planning, implementing and evaluating). Again, the study considers how the nurse's characteristics such as knowledge, and attitude, and the work-environment situation such as workload, staffing and availability of materials, impact on the quality of the content of nursing documentation.

Two models were provided the basis for a conceptual framework for the study. The first is the nursing process which stands to be one model that is

universal to all nurses since the concept is thought during all levels of nursing education. Although in practice it is not seen, it forms the basis of decision making and the concepts unconsciously use in the delivery of quality nursing care to clients. A nursing record should, therefore, reflect the nursing process. The second model employed in the study was the Nursing Role Effectiveness Model (NREM) by Irvine, Sidani and Hall (1998). The model describes how the structure components which includes the nurse characteristics as well as the work-environment can impact on the process and subsequently on outcomes in healthcare. Again, the empirical review conducted on the research objectives provided information on the various factors that influence nursing documentation such as knowledge and attitude of nurses, staffing and workload, availability of materials for documentation and time factor as reported by other researchers. These either help improves or hinders the documentation of the various components of the nursing process in the records.

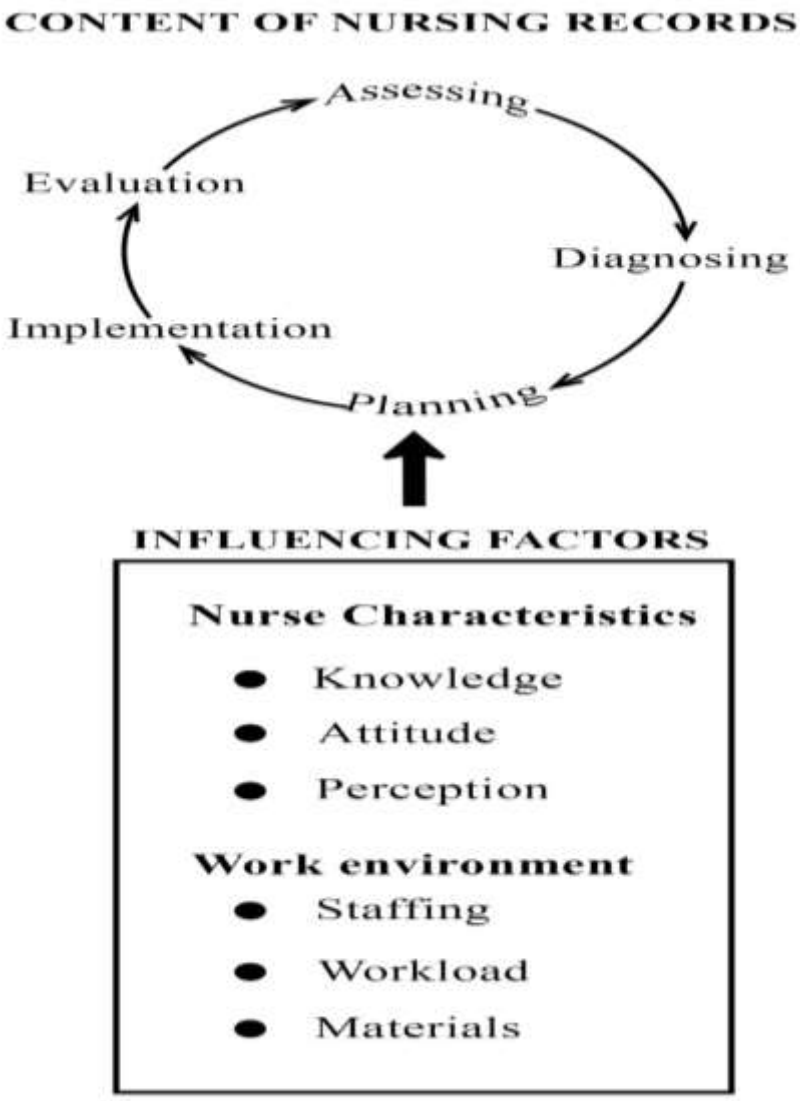

Figure 3: Conceptual framework for exploring the utilization of the nursing process in the 24-hour nursing reports.

The conceptual framework (Figure 3) is a construct of the researcher informed by the nursing process and the NREM Irvine eta al. (1998) and some publications from the empirical review. The framework consists of two parts - the content of the 24-hour report and factors that affect the nurse's ability to document the nursing process in the 24-hour report. The content of the 24 hour report aspect is made of the stages of the nursing process (assessing, diagnosing, planning, implementation, evaluation) which represents the entire

range of actions undertaken by the registered nurse during the care of a patient. The content of the nursing process was therefore utilized as the lense to review the nursing report. It was expected that these must be sufficiently documented in the 24-hour nursing reports.

Component of Influencing Factors

From the literature review, the nurse's ability to document effectively depends largely on the individual nurse characteristics and work-environmental situations. Therefore, these factors are represented in the conceptual framework. As can be seen from the framework, the nurse characteristics includes the knowledge, attitude and perception about nursing documentation. The work situation variables border on circumstances within the healthcare delivery system such, staff levels, workload, nursing assignment patterns, availability of materials for documentation, the size of the papers for documentation, availability of guidelines and policies to guide documentation which can affect what the nurse puts down in the patient records. These factors formed the probing questions in the interview to understand which factors affect the nursing reporting in the 24-hour report.

Chapter Summary

The chapter provided information on theoretical, empirical and conceptual literature in relation to the utilization of the nursing process in the 24-hour nursing reports. The Nursing Process and the NREM informed the development of the conceptual framework to guide the study. The Nursing process guided the concept of the content of the 24-hour nursing reports while the NREM informed the factors that influence nursing documentation. Findings from empirical review indicates limited studies published on the 24-

hour nursing reports. Although nurses are mandated to utilized the nursing process in the delivery of nursing care and document as such, evidence from literature gives a clear indication of the poor documentation of various stages of the nursing process.

Various reasons were given which ranges from issues with nursing staff, such as the knowledge base of nurses, attitude and perception; situations within the work-environment such as staffing, workload, availability of logistics, motivation from superiors

CHAPTER THREE

RESEARCH METHODS

Introduction

The study sought to explore the application of the nursing process in 24-hour nursing reports and identify factors that influence nursing documentation at the Effia Nkwanta Regional Hospital in the Western Region of Ghana. This chapter describes the research methodology under the following headings: the research design, population, sample and sampling procedures, research instrument, and data collection procedure, and the data analysis.

Research Design

According to Yin (2009), research design is the logical sequence that links empirical data to the initial research questions of a study and, ultimately, to its conclusions. There is therefore the need to situate the current study within the context of the most appropriate design to employ. Polit et al. (2010) opine that a research design is an overall plan or framework adopted by a researcher to address a specific research problem. The above researcher's perspective about research design connotes that research design is the blueprint or the over guidelines to accomplish a research work. Different research designs exist, however, the design selected for a particular study depends on the aims and objectives of the study. In this regard, I employed the descriptive qualitative design which is based on the naturalistic approach of inquiry (Bradshaw, Atkinson & Doody, 2017). The naturalistic approach seeks to understand a phenomenon through the perspective of those experiencing it. Sandlowski, (2010) believes that this approach of inquiry aims

to describe and seek an understanding of human experiences and events that are not adequately understood. Research has shown that the qualitative descriptive approach has gained popularity in nursing and midwifery research lately (Polit et al., 2010). It is also applicable to health environment research because it provides answers to questions about "how people feel about a particular space, what reasons they have for using features of the space, who is using a particular service or function of a space and the factors that facilitate or hinder its use (Colourafi & Bronwynne, 2016)

The descriptive qualitative approach has been used in nursing-related studies all over the world. The approach was employed in assessing enrollment programs (Hawkins, 2016), nurses role and responsibilities in intensive care units (Mackle & Nelson, 2018), Transfer of Care events (Wilbanks, Geisz-Everson, Clayton and Boust, 2018), an invitation of patients to participate in clinical research (French & Stavropoulou, 2016), child's pain management (Amponsah, Kyei, Agyemang, Boakye, Kyei-Dompim, Ahoto & Oduro, 2020) and pain, agitation and delirium management (Tsang, Ross, Miller, Maximous, Yung, Marshall, Camargo, Fleming, & Law, 2019)

Colourafi et al. (2016) stated that qualitative descriptions are especially amenable to health environment research because it provides factual responses to questions about how people feel about a particular space, what reasons they have for using features of the space, who is using particular services or functions of space, and the factors that facilitate or hinder use. To this end, since the objective of this study is to explore the use of the nursing process in nursing reports and identify factors that influence nursing documentation it became imperative to use this approach to help elicit the information needed.

The qualitative description gives a focused summary and understanding of health-related experiences including the contextual cultural factors that shape the experiences of the participants (Willis, Sullivan-Bolyai, Knafl & Cohen, 2016). This was vital in understanding how the content of 24 hour report reflects the nursing process and which factors had contributed to it. Unlike other traditional qualitative methodologies that provide a strict blueprint for the research, the descriptive qualitative approach is flexible and provided the opportunity to combine various research methods in other to arrive at a comprehensive answer to the questions regarding the phenomenon under study.

Research Setting

The site for this study was Sekondi and the setting was the Effia Nkwanta Regional Hospital. The Effia Nkwanta Reginal Hospital is a government-owned facility managed by the Ghana Health Service. The hospital is situated about 500metres from the sea and shares borders with the Adiembra community to the north, Poasi road to the south, Essaman to the east and West African Mills II to the west. It covers an area of 202 hectares.

The Effia Nkwanta Regional Hospital serves as the main referral point for hospitals within the Western Region and operates a 24-hour service for both inpatients and outpatients. It has about six (6) main departments which include the Medical department, Surgical departments, Paediatric, Obstetrics and Gynaecology unit and Accident and Emergency which provide in-patient services. There are two medical wards (female and male) and two surgical (female and male), which were the site for this study. The total bed capacity of the hospital is about 330. The nursing staff is made up of 141 registered

nurses, 128 auxiliary nurses, with an average of six (6) registered nurses in each ward. Although the majority of the nurses in the hospital are general nurses, the facility has specialty nurses in areas such as accident and emergency, paediatrics ophthalmic, dental and the cases commonly reported to the facility are malaria, typhoid, vaso-occlusive crisis in sickle cell disease, hypertension, and Diabetes mellitus. Common surgical conditions managed include peritonitis, hernia, fractures. Documentation in the facility is paper-based in all departments.

The Effia Nkwanta Regional Hospital was chosen for this study because, as a tertiary health facility and an institution that offers practical training for a variety of health staff such as health service administrators, student nurses, medical housemen, pharmacy, laboratory and radiology interns, there is the need to exhibit the highest standard of knowledge, practice and professionalism and meet the standard for medical and nursing practice.

Study Population

The study involved two sets of population. The first was the 24-hour nursing reports written for new admissions at the medical and surgical wards at the Effia Nkwanta Hospital. The second consisted of all Registered General Nurses (RGN) working at the medical and surgical wards at Effia Nkwanta Regional Hospital in Sekondi, Western Region of Ghana.

The 24-hour nursing reports are written on new admissions as well as critically ill patients on the ward. The reports of patients who are admitted during the day are usually written by the afternoon staff and completed by the night nurse. However, the reports for any patient admitted before midnight for each day will be written by the night nurse. The reports serve as an

information source for the outgoing nurses and a reference point for the incoming nurse during hand over. The nursing reports selected for this study were the reports written for new admissions. This was done because for the new case, the nurse will have to conduct a comprehensive assessment of the patient, diagnose, plan the care, implement the nursing actions and evaluate to ensure the effectiveness of the nursing care rendered. Again, reports without both the day and night reports were also excluded as these would not provide a complete 24hour nursing report.

The nursing staff of the Effia Nkwanta Regional Hospital is made up of 141 registered nurses of various ranks, 128 auxiliary nurses (ENRH nursing Directorate, 2019). However, on average, there are about six (6) registered nurses on each ward. The registered nurses discharge their duties on the various wards of the hospital (male and female medical and surgical wards; paediatric ward, orthopaedic ward) as well as the other units of the hospital with the assistance of the auxiliary staff. As indicated earlier, the study was limited to only register general nurses (RGN) of the Effia Nkwanta Regional Hospital. The registered nurses were selected because they are mandated by the nurse and midwifery council of Ghana to use the nursing process in the implementation of care and document every nursing action performed.

Sample and Sampling Procedure for 24-hour Nursing Reports

As the researcher wanted to assess the utilization of the nursing process in the 24-hour nursing reports and identify possible factors that influence such documentation. .A total of Thirty-nine (39) nursing reports for newly admitted patients were purposively selected for the 24-hour nursing report. Ten (10) reports were selected from each of the wards except for the

male surgical ward where nine (9) reports were selected because the reports for new admissions for the selected month that met the inclusion criteria were not up to ten as at the time of data collection. The decision on the sample size of the study was based on the sample size used for similar studies (Muller-Staub, Odenbriet, Lavin & Achterberg, 2007; Stewarts, Doody, Bailey & Moran, 2017).

The researcher went through the 24-hour nursing report books of each of the selected wards. All written reports for April 2019 in each of the report books were selected. The researcher went through the selected reports again to identify those that have both the day and night reports.

Inclusion criteria for 24-hour reports

The nursing reports reviewed should meet two criteria: (a) be written on a new patient, (b) have both day and night reports. The reports for new admissions were chosen because new patients are in the critical stage of their illness and as such require nursing care to help meet their health needs.

Exclusion Criteria for 24- hour Reports

Reports for patients who do not have a complete 24-hour report, that is those without the day and night reports for a particular day were excluded. Reports written for old patients in the ward were also excluded. The reports selected were written in April 2019.

Sample and Sampling Procedure for Interviews

Nine (9) registered general nurses working on the male and female medical and surgical wards of the Effia Nkwanta Regional Hospital were purposively recruited for the study. The researcher visited the selected wards to identify a shift in charges who write the reports for their shift. Shift in

charges who were present on the various wards during the period of data collection and met the inclusion criteria were selected for the study. Participants who voluntarily agree to partake in the study after receiving detailed information on the study were selected to partake in the study. A total of nine (9) registered general nurses participated in the study. Two nurses were purposively selected from each of the wards except for the female surgical ward where three nurses who meet the inclusion criteria were met and voluntarily agreed to partake in the study.

Inclusion Criteria for interviews

The inclusion criteria for the interview were that the participant must be a registered general nurse and have worked for at least two years on the ward. In addition to that, the participant must be a shift in charge who writes the 24hour nursing reports.

Exclusion Criteria for interviews

All other registered general nurses working on other departments apart from the male and female medical and surgical wards were excluded from the study. Registered nurses who do not write the 24-hour nursing reports were excluded from the study. Rotation nurses as well as auxiliary nurses were also not included. Midwives were also excluded from the study

Research Instrument

The researcher employed two instruments to collect data for the study. These were a semi-structured interview guides for the interview with nurses and a data extraction sheet for the document review.

The Interview Guide

A semi-structured interview guide designed by the researcher was used to collect data from nurses. All questions were open-ended and they were designed based on the research questions. The semi-structured interview guide consisted of two demographically oriented questions, nine open-ended main questions and seven sub-questions. Section one which was the introductory part of the guide solicited for information on the demographics of the participants of the study including their rank, years of experience and highest academic qualification. Section two had questions to answer how the nursing process is applied to the report writing. Section three answers questions on what individual and work factors affect nursing documentation. The final section elicited information on how work-environment situations impact on the content of nursing documentation.

The interviews were conducted at the nurse's room of each of the wards. Before the interview, participants were provided with information on the research (Appendix E). Participants who voluntarily agree to participate in the study were after which they were given a consent form to sign. A total of nine (9) interviews were conducted with time ranging from 15 – 20minutes for each session. All interviews were face-face interactions.

Data Extraction sheet for the Document review

A data extraction sheet designed by the researcher was used to extract data from the 24-hour nursing report (Appendix A). The data extraction sheet was designed based on an extensive review of the literature. The data extraction sheet contained key variables that guided what the nursing report should contain. The main themes on the data extraction sheet comprised of the

steps in the nursing process, the specific items under each step, and quotations from the report as well as a column for comment by the researcher. The data extraction sheet had six (6) sections with 12 items. The sections had the researcher generated identity for the report. The second section had information on the first stage of the nursing process which is the assessment and comprised of four () items. This was followed by diagnosing, which as the second stage of the nursing process and contained three items. Next was the planning stage which had two items. Fourthly, the implementation stage that had only one item and finally the evaluation stage with one item as well.

Pre-test

The data extraction sheet and the interview guide were pretested at the male and female wards of the Takoradi hospital in March 2019. Three (3) Registered nurses were interviewed and four (4) 24-hour nursing reports were reviewed. No changes were made on the data extraction sheet. However, the interview guide was modified because some of the questions were not eliciting the response necessary to answer the research questions and others were not relevant to any of the research questions. .

Trustworthiness/ Rigor

Criteria for the establishment of trustworthiness in qualitative research outlined by Lincoln and Guba as stated by Polite et al. (2010) include credibility, transferability, dependability and confirmability. Credibility refers to how well the data and analysis process addresses the intended focus (Polite et al. 2010). Credibility establishes whether findings are representative of the information obtained from the participant's original data and interpretations are participants' original views (Graneheim & Lundman, 2004). The

techniques employed to ensure credibility include prolong engagement and persistent observation, member checking and triangulation.

Prolong engagement refers to the researchers spending sufficient time in data collection activities to enhance familiarization with participants and their setting and create an opportunity for clarification of misinformation (Polite & Beck, 2010). The researcher having this in mind engaged each participant in the study for at least 15 – 20 minutes. This ensured familiarization and allowed participants to express their opinions on the various questions asked. Clarification was sorted were needed to give the researcher a clear and deeper understanding of participants' views on the phenomenon. The researcher also read through every 24 hours of the nursing report severally to help understand the content better to be able to analyse it.

The written document was sent to the supervisors with a nursing background for review from time to time. Decisions on methodology and analysis were usually discussed with supervisors and conclusions made on the most appropriate method to use.

Another technique used in qualitative studies to ensure credibility is member checking. To member check, the researcher asked further questions during the interview and allowed participants to clarify ideas and ensure the accuracy of their response. This helped to ensure that the information obtained and interpretations arrived by the researcher is representative of the participant's views of the phenomenon under discussion.

Method triangulation was employed in this study to ensure credibility. Two data sets were collected to answer the same research question. The researcher matched the findings from each of the data set during analysis to

ensure agreements or otherwise in the study findings. This ensured that all aspects of the phenomenon are examined to obtain a more complete picture of the situation under study.

Transferability refers to the degree to which the research can be transferred to other contexts or populations (Polite and Beck, 2010). Due to the qualitative descriptive design, the findings from this study are not generalisable. However, the findings may be applied to a population with similar characteristics and context. The researcher, therefore, gave detailed descriptions of the participants recruited for the study and the records that were reviewed. With the research findings written in detail to provide detailed information on the content of nursing documentation with regards to the nursing process and which factors within the work-environment and the nurse qualities that improve documentation. This could provide useful information in making decisions related to the improvement of nursing documentation

Dependability ensures that the research findings are consistent and could be repeated (Polit & Beck, 2010). To ensure consistency in the procedure of data collection across participants, data collection was done by one researcher. The researcher with the help of the semi-structured interview guide asked the participants the same questions in the same sequence. Again, the same data extraction sheet was used to extract data from the report books and the analysis was done by the same researcher (Colourafi & Bronwynne, 2016). Again, the semi-structured interview guide and the data extraction sheets were pretested and modifications made before the actual collection of data. This enabled the researcher to refine the structure and technique of interview before collecting data. To ensure that the findings were

representatives of the observations made from the nursing reports and the nurses' perspective on nursing documentation, the researcher used quotes from the participants in interpretation of the data to minimize biases and ensure that the experiences are shared in the words of participants.

Confirmability reflects the objectivity of the findings and establishes whether the researcher has been biased during the study. To ensure confirmability in the study, the researcher provided a detailed description of the procedures taken to collect data and steps taken to analyses the data collected. This will enable others to follow the same steps to repeat the process followed.

Recruitment and Training of field Assistant

A field assistant was recruited and trained to assist with the collection of data from the 24-hour nursing reports. The assistant was given sufficient background knowledge about the study including the aims and specific objectives. She was taken through what the research was about and taught which reports met the criteria and must be selected from the reports. The importance of copying the reports word to word without omissions or additions was stressed.

Data Collection Procedure

Data collection was carried out personally with the assistance of trained field assistants. The data collection was conducted in two phases; the data from the nursing reports were collected from 3rd to 6th May 2019. The researcher then went back from 5th to 8th June 2019 to conduct the interviews in the nurses changing rooms of the various wards used.

To begin the data collection, an introductory letter was requested and obtained through the Head of School of Nursing, the University of Cape Coast to the dean of the Department of Health and Allied sciences (see Appendix H). This letter was then presented at the administration of the Effia Nkwanta Regional Hospital and forwarded to the Director of the hospital to seek permission and approval for the study. Upon the receipt of the introductory letter by the participating hospital and the appropriate time and days are given, I went to the hospital to collect the data.

Data Collection for 24-hour Nursing Reports

A total of thirty-nine (39) reports were obtained from the 24-hour hour nursing reports of the 4 wards selected for the study. For the extraction of the data from the report book, the researcher visited the respective wards on the weekend when the wards are calm. At each of the wards, the researcher picked the report book and looked out for the reports for April. All reports written on newly admitted patients were noted. The researcher then went through the reports and selected the first ten reports that were complete, that is had both the day and night reports making a complete 24hour report on the patient. Reports that had only the day reports without night reports were omitted. With the help of the field assistants, the selected reports were copied and typed. The researcher went through each of the typed reports and compared it to the one in the report book to ensure there are no differences in the copy the researcher has.

Data Collection for Interviews

The first sheet on the interview guide provided information on the research topic and the objectives of the study. The next sheet clarified the

ethical issues surrounding confidentiality and anonymity and provided contact information for participants if they have questions. A cover information sheet explaining what the study was about, why it was important, how findings will be used and why participants were selected was given to the participants to read through. The information sheet further clarified ethical issues surrounding confidentiality, anonymity and provided contact information for participants if they have questions.

Participants who agreed to participate in the study were engaged in an interview session that lasted for 15 to 20 minutes at the nurses' room of the respective wards. Each interview was recorded using a recorder after participants have been provided with adequate information on the study and they have voluntarily agreed to participate. All interviews were face-to-face interactions. A researcher begins with the main questions in the interview guide. Sub questions were asked only if a participant's response to the initial question did not cover certain topics of interest to the researcher. All respondents were asked identical questions in the same sequence but the interviewer probes further for details where necessary. The interviews were conducted in English only. This process continued on all the selected wards until no new information (data redundancy) was being obtained from the participants (Bowen, 2013). Two extra interviews were conducted to be sure there was no new information to be obtained. The main challenge experienced during data collection had to do waiting for a long period at the ward for the nurses to be less busy before they can be interviewed.

Ethical Considerations

The researcher obtained an ethical clearance to undertake the study from the Institutional Review Board (IRB) of the University of Cape Coast (UCCIRB/CHAS/2019/1) (Appendix G). An introductory letter from the school of nursing and the ethical clearance letter was sent to the administration of the Effia Nkwanta Regional Hospital to sort for permission to collect data at the facility. After permission has been granted by the administration, copies of the ethical clearance and the introductory letters were sent to the various wards where the data was to be collected.

On the wards, a shift in charges who write reports were contacted. Information on what the research is about, the objectives, possible risk and benefit, confidentiality anonymity among others were explained to each participant. Nurses who met the inclusion criteria and voluntarily agreed to participate were interviewed.

Confidentiality and anonymity were assured. Participants were not required to provide their names and the personal details on the reports that were selected from the review were also omitted. Permission was obtained from the medical director of the Effia Nkwanta Regional Hospital to review the 24-hour nursing reports. No informed consent was therefore obtained from the respective patients. The audio recordings and the documents that were selected for the review have been kept in a folder on the researcher's personal computer with a password.

Data Analysis

A qualitative content analysis was used to analyse the data obtained from the 24-hour nursing report and the interviews. Content analysis is a

technique used in management, health and social science to analyse verbal and written materials (Hall, 2006). In content analysis, codes are used to identify patterns that enable the researcher to gain insight. Content analysis has been traditionally a quantitative approach (quantitative content analysis) describing mainly using frequencies and numbers. The qualitative approach to content analysis is recommended when there is a need to assess the quality aspects of data to bring out a deeper meaning of the data obtained (Mayring, 2014). Qualitative content analysis is defined as "a research method for the subjective interpretation of the text data through the systematic classification process of coding and identifying themes or patterns (Hsieh & Shannon, 2005). The qualitative content analysis does not only consider the numerical value of a particular work in the text but considers the clarification of a large amount of text into categories with similar meaning (Hsieh et al. 2005; Mayring, 2014). Hsieh et al., (2005) further indicated that in using qualitative content analysis the focus is on the characteristics of language as communication and the focus is on the content or contextual meaning of the text being analysed. The approach has been applied in a variety of data and to various depths of interpretation in nursing and education (Graneheim & Lundman, 2004).

Various approaches to content analysis have been proposed. For example, Elo and Kyngäs, (2008) proposed a three-phase approach to content analysis: preparation, organization and reporting of results (Elo et al., 2008). The preparation phase consists of collecting suitable data for content analysis, making sense of the data, and selecting the unit of analysis. The organization phase in the inductive approach includes open coding, creating categories, and abstraction (Elo et al., 2008). In deductive content analysis, the organization

phase involves categorization matrix development, whereby all the data are reviewed for content and coded for correspondence to or exemplification of the identified categories (Elo et al.; Polit et al. 2010). The categorization matrix can be regarded as valid if the categories adequately represent the concepts, and from the viewpoint of validity, the categorization matrix accurately captures what was intended (Schreier, 2012). In the reporting phase, results are described by the content of the categories describing the phenomenon using a selected approach (either deductive or inductive).

Furthermore, Hsieh et al. (2015), described three approaches to qualitative content analysis: conventional, directed and summative. The conventional approach is appropriate when existing theory or literature on a phenomenon is limited and the aim is to describe a phenomenon. Directed content analysis is used where existing theory exists about a phenomenon and further description is required to validate conceptually the theory or a theoretical framework. Finally, the summative approach to content analysis identifies and quantifies content in a text and giving interpretations to understand the contextual use of such contents. Hsieh and Shannon explained that although all three approaches go through a similar process of analysis, there are differences with regards to how initial codes are developed. For the conventional approach, categories are developed from data during analysis, the direct approach uses existing theory to develop initial codes while in summative analysis, the text is approached in relation to the content and patterns leads to the interpretation of the contextual meaning of the content.

Mayring (2014), described qualitative content analysis as a mixed-method approach to data analysis which uses both quantitative and qualitative

approaches: the process of assigning categories to text is a qualitative step while assigning frequencies to the various categories is a quantitative process. According to Mayring, researchers using the qualitative content analysis, need to follow the rules guiding both qualitative and quantitative studies.

To analyse the content of the nursing reports, and the interviews, the steps in the qualitative content analysis described by Mayring (2014) was followed. This approach was chosen as it provides content analytical rules and steps for the whole process of analysis and for specific steps in the analysis which makes it easier to follow through. Mayring's process of qualitative content analysis begins with the definition of the material for analysis, followed by the direction of analysis, theoretical differentiation of sub-components, determination of techniques of analysis and establishment of a concrete procedural model, definition of content analytical units, rechecking the category system by applying it to theory and material, interpretation of the results in relation to the main problem and issue, and finally, application of content-analytical quality criteria. Figure 4 below illustrates the flow of the steps undertaken in the analysis of data for this study.

Table 1: Summary of Steps in Qualitative Content Analysis (Mayring, 2014)

Step	Activity	Mayring's recommendation	Application to the study
1	Definition of material	• Define the material • Analyse the circumstance of origin • Formal characteristics of the material	• Sampling 39 admission reports • Sampling 9 registered general nurses • Written by registered general nurses • Extracted from 24 hour nursing reports • Interviews of RGN on Medical/surgical wards • Handwritten reports typed by researcher • Audio recordings transcribed and typed
2	Direction of analysis	Intension of what researcher wants to find)	Identify; • components of the nursing process • factors influencing nursing documentation
3	Theoretical differentiation of subcomponents of the problem	• Description of theoretical orientation	• steps of nursing process for reports • steps of nursing process and factors influencing documentation from literature review
4	Determination of technique of analysis and establishment of a concrete procedural model	Researcher plans to: • Definition of category system, coding guidelines and anchoring examples • Running a trial coding and category allocation • Revision of codes and categories • Final work through the material • Tabular presentation of findings and writing narratives.	Researcher plans to: • Identify category system based on nursing process • Code a few documents using the coded definition and anchoring examples a s guide • Revision of codes • Code entire reports and transcribed interview • Presents results

Table 1 Continued

5	Definition of content analytical units procedural model	• Identify materials to be assigned to specific categories	• Highlights text in reports that could be allocated to subcategory • Highlight statements in the interviews that fits specific categories
6	Analytical step taken by means of category system	• Mixed (Deductive and inductive) coding	• Deductive / Inductive qualitative content analysis of reports and transcribed interviews.
7	Re-checking the category system by applying it to theory and material.	Read, highlight and allocate text to predestined codes	• Coding 3 reports and 2 transcribed interviews first, assigning categories, then all 39 reports and 9 interviews
8	Interpretation of the results in relation to the main problem and issue	Tabular presentation of the reports and a written narrative	• Results presented in frequencies and percentages • Written narrative of the findings with quotes from reports and interviews
9	Application of content analytical quality criteria	• Reapplication of codes to material (stability) • Team coding	• Recoding of all documents • Codes reviewed by supervisors

Definition of the Materials

Mayring (2014) proposed analysis of the base material right from the beginning of the analysis. The three activities proposed here include (a) determining the material, (b) analysis of the circumstance of origin and (c) formal characteristics of the material.

a. Determining the material

Determining the material means defining the materials on which the analysis is to be conducted. In other words, it involves selecting a sample from a large volume of material using a specific model of sampling (Mayring, 2014). With regard to this analysis, the researcher purposively selected 39 admission reports of patients who reported to the various medical and surgical units of the Effia Nkwanta Regional Hospital. These reports were selected for the analysis because they were the first reports written on the patient on their first encounter with the wards and as such, it is expected to give detailed information on the patients' health status and the nursing actions that were implemented to solve the problems of the patient. The patients on which the reports were written on were diagnosed with various medical and surgical conditions including hypertension, diabetes, and fracture, and comprised of 22 males and 17 females who fall within the ages of 2 to 80 years.

With respect to the interviews, nine Registered General nurses who are shift in-charges and write on reports were selected and interviewed. The selected nurses had at least a diploma in nursing. They were made up of 3 senior staff nurses, 3 nursing officers and 3 senior staff nurses and their years of experience ranged from 2 to 14 years.

b. Analysis of the circumstance of origin

To further define the material for analysis, it is necessary to analyse the situation of origin. Mayring describes the situation of origin as from where, from whom and under what condition the material originated (Mayring, 2014). The reports to be analysed were written by Registered nurses with at least two years of working experience in the ward. The nursing reports are usually written by the afternoon staff and it is completed by the night staff at midnight. The patients whose reports were selected were between the ages of 2 and 80 years and had various diagnoses which include fractures, hernia, hypertension, diabetes among others. The reports were extracted from the twenty-four-hour nursing report books of the various medical and surgical wards of the Effia Nkwanta Regional Hospital.

Participants were registered general nurses working on medical-surgical wards. Participation in the interview was voluntary. Interviews were conducted by the researcher at the nurses' room on each of the wards selected for the study. The questions were open-ended and participants could respond freely.

c. Formal characteristics of the material

The final activity performed under the definition of the material is a description of the formal characteristics of the material (Mayring, 2014). This includes defining the form in which the material exists. The reports were already in a handwritten form. The researcher typed all the selected reports word to word. Words and punctuations were copied as they were and the researcher ensured that the reports were not altered during the typing.

The interviews were conducted in English and tape-recorded. The recorded interviews were transcribed verbatim in typed form by the researcher. Pauses and other nonverbal aspects as the interview were noted and captured in the transcript to maintain its originality.

Direction of Analysis

When the base material is described, there is a need to determine the line of analysis (Mayring, 2014). The line of analysis simply put is the researcher's intention of what he/she wants to find out from a particular document (Mayring). With regard to this study, the reports were written to provide comprehensive information on the patient's condition and nursing activities carried out to ensure the full recovery of the patient. The reports serve a communication tool that communicates each nurse patient-interaction to other nurses and healthcare workers. The review was conducted to determine how well the reports reflect the nursing process, which is the framework acceptable by nursing regulatory bodies for use in the delivery of nursing care to help solve the problems of the patient. The direction of analysis was therefore to use the reports to identify patient information in the 24-hour nursing reports, that indicate assessment, diagnosis, planning, implementation and evaluation data, and to determine how they are represented in the nursing reports.

Again, the interviews were conducted to determine how the nursing reports reflect the nursing process and identify nurse personal characteristics and work-environment situations that influence nursing documentation. The direction of analysis for the interviews was to identify statements made by participants that correspond to the various stages of the nursing process, nurse

knowledge and attitude as well as staffing, time factor and availability of materials which could influence the documentation practice of nurses.

Theoretical Differentiation of Sub-Components of the Problem

The process of identifying the direction of analysis is followed by a description of the concept of theoretical orientation. The theoretical orientation according to Mayring involves the tapping of the experiences of other subjects in the same field in order to obtain prior knowledge of the subjects under study (Mayring, 2014). This, therefore, requires the researcher to precisely define the focus of analysis in advance in relation to the context of current research on the topic and as a rule, divide into sub-issues.

The material reviewed contains a written report on patients' health condition on the day they were admitted to the ward. It is recommended that nursing documentation are made sequentially and must provide complete information on the entire range of activities undertaken by the nurse to ensure recovery, including documentation of the decisions made during care (Abdul-Wahab & Elsayed, 2014; Bernaman et al. 2010; Harkreader, et al 2007). As nurses are mandated to use the nursing process in the delivery of care (NMC, 2017), it is as well reasonable that nurses document according to the nursing process so documentation would reflect the exact nursing actions taken. To this end, there is a need to ascertain whether the nursing reports reflect the steps in the nursing process. Specifically, the study sort to identify the components of the nursing process and whether they are followed systematically in the reports.

For the interviews, the researcher sought the views of participants to ascertain what information goes into their report writing and the factors that

influence the quality of documentation. In addition to the nursing process model that was used by the researcher, a literature search was conducted to know what other researchers have reported on the factors that influence nursing documentation. This was necessary to establish whether the factors identified in this study are similar to what has been reported earlier in other studies.

Determination of Techniques of Analysis and Establishment of a Concrete Procedural Model

The mixed qualitative content analysis (Mayring, 2014) was applied in analysing the two data sets. A structuring or deductive qualitative content analysis (Mayring) was employed for the analysis of the content of the 24-hour nursing reports. This began with determining the structural dimensions from the theory or problem, which in this case was the components of the nursing process. Each component was then broken down to obtain a corresponding subcategory based on the information on the nursing process obtained from the literature. Each category and subcategories were defined, coding guidelines formulated and anchoring examples given (Appendix C). The categories, subcategories, anchoring examples and coding rules were then applied to extracted text from the reports to ascertain its applicability to the material (Mayring). To do this, the text was first to read and highlighted and then assigned to the various subcategories using the different colour coding. The highlighted text was then copied from the reports and pasted in the data extraction book designed by the researcher (Appendix D). The researcher finally worked through the entire material. Subcategory total and frequencies were represented in a table (Table 3) and a narrative written.

For the transcribed interviews, the mixed qualitative content analysis approach was employed by the researcher. Mayring recommends a definition of categories in priorities to serve as a criterion to determine the relevant material from the text. With reference to this, the researcher first determined issues that will be relevant to the study based on the research questions and the theoretical review. The researcher first read through the transcribed interviews line by line. The ideas or statements in the data were represented with terms or short sentences which characterise the material as closely as possible (category label). The researcher continued to work through about three of the materials to assign all the responses to the categories formulated. Statements that were identified were first checked if they fit into the already formulated categories and if not, new categories were formulated. At a point, no new categories were formed and the researcher ensures there were no overlapping categories. The researcher reads through the transcribed data line by line to check if statements occur that are related to the category definitions (subcategories). The researcher went through the categories created again to be sure they are not overlapping. The researcher then worked through the entire transcribed data and assigned the various statements to their appropriate categories using the category definitions. The subcategories identified were then grouped to form the main categories.

Definition of Content Analytical Units

The content analytical units are the segments in the material that will be assigned to specific categories (Mayring, 2014) and can be referred to as the basic unit of text to be classified during content analysis." For the reports, the content analytical units were the phrases and sentences or text in the

reports that provide specific information that could be assigned to any one of the components of the nursing process. The researcher identified subcategories that fit the main categories based on the information obtained from the literature review. Statements within the reports that represents any of the subcategories were highlighted.

The content analytical units in the transcribed interviews were statements made by participants that met the definition for any of the categories for the nursing process and the factors that influence nursing documentation. To do this, the researcher identified sub-categories under each of the main components of the nursing process, the nurse characteristics as well as the work-environment situation indicated in the literature review. Statements made by the nurses that match the definition for each of the subcategories were highlighted.

The main categories and the corresponding subcategories identified are presented in table 2 below.

Table 2: Categories and Subcategories for data analysis

Categories	Subcategories
Assessment	1. Patient particulars
	2. Nursing health history
	3. Health history
	4. Findings from physical examination
Diagnosis	1. Statement of patient's strength
	2. Statement of patient problems
	3. A clearly stated nursing diagnosis
Planning	1. Goals or desired outcomes
	2. Stated nursing strategies/ order
Implementation	1. Actual nursing care rendered
Evaluation	1. Statement of evaluation related to the stated outcome/goal
Nurse related factors	1. Nurses knowledge
	2. Attitude
Work-environment related factors	1. Staffing
	2. Time factor
	3. Materials for documenting

Analytical steps taken by means of category system: mixed (deductive and inductive category formation)

With regards to this analysis, a structuring content analysis or deductive categorisation were used. According to Mayring, the process of categorisation here starts with determining the fundamental structuring dimensions, which must come from the problem statement or theory. The categories are defined to determine which text component belongs to a given category, examples of each category are stated to illustrate the characteristics of each category and coding rules are formulated to prevent ambiguous

assignment to a particular category. The categories and subcategories were developed prior to using the components of the nursing process and the various nursing actions are undertaken under each component formed the subcategories as illustrated in table 2. Others formulated during the inductive coding of the content of the report and the interviews (Hsieh et al. 2005; Mayring, 2014). Each category and subcategory was defined based on the definitions from the literature. Anchoring examples and the coding rules were as well defined (Appendix C). This provided the codebook necessary for the analysis of the data. This is recommended to ensure consistency in the coding and categorisation process (Zhang & Wildemuth, 2009).

Rechecking the Category System by Applying It to Theory and Material

Mayring proposes reading through the material first to highlight all text that on the first impression appears to represent a concept under study. This is then followed with the allocation of the highlighted text to the predestined codes also referred to as the subcategories (Brengtsson, 2016). Codes may be created inductively or deductively (Brengtsso, 2016; Hsieh et al. 2005; Mayring, 2014).

To analyse the data, the researcher selected three of the nursing reports and started with deductive coding. The researcher worked through the reports line by line to locate statements in the reports that represent the subcategories as shown in Table 2 above which also represents the components of the nursing process. This was done with the aid of the colour coding property in Microsoft word using the definition of categories and subcategories, and anchoring examples as a guide (Appendix D). After analysing the three reports, some aspects of the reports were still not captured. These data were

then read by the researcher and codes were created inductively for those aspects of the data that were not allocated during the deductive coding. This led to a revision of the codebook to include the newly identifies subcategories and the final codes book showing the complete list of categories and subcategories applied to the data was obtained.

After coding the entire data, the codes, categories and subcategories were again reviewed in relation to the data book to ensure consistency. The researcher went through the entire reports and transcribed interviews again, referring to the codebook again to ensure all category allocation made were consistent.

The researcher also read through two of the transcribed interviews line by line to identify statements made by nurses that represent any of the subcategories for the analysis as stated in table 1. After analysing the two interviews. The text assigned to each category was rechecked using the category definitions and the anchoring examples as a guide to ensure they appropriate. Extra

Interpretation of the Results In Relation to the Main Problem and Issue

The nominal category system was used to assign the text to their corresponding categories. A nominal or qualitative category system consists of a list of independent categories (Mayring, 2014). In the case of the analysis of the 24-hour nursing reports, the categories that were used were assessment, diagnosis, planning, implementation and evaluation, which corresponds to the steps of the nursing process. The frequencies for each of the categories were determined and percentages were calculated as shown in table 3 the researcher went further to give a narrative summary for each of the categories and

subcategories using specific responses given by the participants as exampled in each case.

Similarly, narratives for the transcribed interviews were analysed using the components of the nursing process as well as the nurse characteristics and work-environment situation which influences the quality of nursing documentation. The narratives were therefore written using these categories and their corresponding subcategories as the headings.

Application of Content-Analytical Quality Criteria

Mayring (2014) advocates the application of content analytical criteria to the content analysis process to assess the trustworthiness of the process (Mayring, 2014). To ensure stability, Mayring, (2014) encourages applying the coding system to the material again to ensure if the coding rules applied had been stable during the analysis. To ensure stability, the researcher after coding the whole document coded the whole document again without using the previous coding. The results from the two codings were then compared and no major difference was observed.

Human coders are prone to fatigue, subjectivity, and changing understandings of the codes over time, and it is therefore often advised to use a team of coders (Zhang & Wildemuth, 2009). Given the nature and scope of this project, a team of coders was not feasible. However, the researcher coded all the data and it was reviewed by a supervisor. To further minimize the disadvantages of having only one coder, the coding process took place over about a week, with further reviews a couple of weeks later, and regular consultations of the codebook. The researcher also employed ideas from the "constant comparison" method as described by Kolb (2012) of comparing

newly coded text segments with other text segments that had previously been assigned the same code, in order to determine whether they reflect the same concept or instead require a new code. This was done to ensure validity and consistency with the coding process.

Triangulation of Results

Introduction

The credibility and validity of every research are essential to its transferability. Triangulation is used to establish the credibility and validity of a study and to increase confidence in the study findings (Guion, 2002; Heale & Forbes, 2013). Triangulation in research refers to the use of more than one approach to answering a research question (Heale et al.). Triangulation enables examination of the similarities and discrepancies in the research topic and ensures completeness and confirmation of research findings as weakness in one method may be complemented by the strength in the other. Despite all the benefits mentioned, triangulation poses challenges such as additional time required to triangulate; conflicts between investigators, theories, or methods; difficulty to interpret when data does not converge clearly among others (UNAIDS, 2010).

Four (4) types of triangulation are discussed in the literature (Farmer et al, 2006; Guion, 2002; Heale et al. 2013). Data triangulation involves the use of different data sources – two types of reports or respondent groups. Investigator triangulation uses several different investigators to evaluate the same phenomenon. Here, the investigators use the same method and the findings from each investigator will be compared (Guion). Where findings from the different investigators arrive at the same conclusion, then

validity has been established. However, if the conclusion varies substantially, further studies are needed to establish the truth (Guion). Theory triangulation used multiple professional perspectives to interpret a single set of data. Different professionals from different backgrounds may be employed. Finally, Methodological triangulation uses multiple qualitative or quantitative methods or data collection methods to study a phenomenon. Methodological triangulation may be across methods (qualitative and quantitative) or within a method (two approaches from quantitative only or qualitative only).

The primary objective of triangulation is to explore convergence, complementarity and dissonance and helps improve the validity and credibility of the study (Heale et al., 2013). The validity of research results is enhanced if the different methodological approaches lead to convergent findings of the same phenomenon (Heale et al.). Complementarity highlights multiple dimensions of the phenomenon and increases the level of understanding (Heale et al., 2013). This is achieved by the use of various approaches that forms a more complete picture of the issue under study (Farmers el al, 2006). Dissonance or divergence is when the contradictory result is obtained by two or more approaches that increase the understanding of the phenomenon.

Giving the complexities in nursing documentation and the nursing process as a whole, it is reasonable to assume that combining methods in this study will provide a more comprehensive assessment of the nursing documentation in relation to the nursing process (Farmers et al, 2006). Triangulation can lead to a more elaboration and enrichment of the study findings as it provides more details and multidimensional understanding of health issues (Farmers et al.) and increases the credibility of the study by

improving both internal consistency and transferability (Guion, 2002; UNAIDs, 2010). In this study, method triangulation was employed to help ensure complementarity and test for convergence and dissonance in the data sets (Farmers et al, 2006). Method triangulation has the potential to expose unique differences or meaningful information that may have remained uncovered with the use of only one data collection approach, hence its application in this study.

Data Management

Research Data Management is the care and maintenance of the data that is produced during the course of a research cycle. It is an integral part of the research process and helps to ensure that your data is properly organized, described, preserved, and shared. Managing your data well is one of the best ways ensure standardization, reproducibility, and the ability to disseminate your research to other interested parties as well as save you time in the long run. All documents and data collected from participants were key and locked in safe place since I assured the participants of confidentiality of data gathered.

Chapter Summary

This chapter presented the methodological issues considered in the study. The study employed a qualitative approach, specifically, the qualitative descriptive design. Document review of 39 nursing reports from 4 wards of the Effia Nkwanta Regional Hospital as well as 9 nurses was purposely selected for the study. Data was collected using a data extraction sheet developed by the researcher and a semi-structured interview guide.

Qualitative content analysis was used to analyse both the data obtained from the reports and the interviews conducted.

CHAPTER FOUR

RESULTS AND DISCUSSION

Introduction

This chapter presents the findings generated from the data gathered from the 24hour nursing reports and interviews of nurses on exploring the quality of nursing documentation at Effia Nkwanta Regional Hospital, Western Region of Ghana. A semi-structured interview guide and a data extraction sheet were used to collect the data. Data was analysed using qualitative content analysis. The analysis was done taking into consideration the research objectives and field notes that were taken. Data from the interview and the document review were triangulated. With regards to the coded data, the analysis was done under the following themes:

- 24-hour nursing reports reflection on nursing process
- Nurse characteristics/factors influencing documentation
- Impact of work-environment on nursing documentation

The analysis is presented in two parts. First the analysis of the data obtained from 24-hour nursing reports; second analysis of data from the interview.

Analysis of Nursing Reports

How nursing reports reflect the nursing process

The nursing report was analysed to ascertain how they reflect the nursing process. The first item was the nursing assessment. This included all information that dealt with findings from physical examination, nursing observations and history. The second item was the nursing diagnosis and included the patient's strength, the problems identified as well as the stated

nursing diagnosis. This is followed by planning which consists of setting objectives and identifying nursing orders to meet the objective. The fourth step in implementation and that is the actual nursing care rendered and the patient's response to the care. Then finally the evaluation.

Characteristics of the Reports

A brief description of the reports is given in order to have an overview of the reports that were reviewed. The reports that were reviewed were obtained from medical and surgical wards. They were written for patients with diverse conditions which included friction burns secondary to RTA, diabetic foot ulcer, diabetes, deep lacerations, hypertension, Para umbilical hernia, fracture, breast Cyst, pneumonia, CVA, hyperglycemia, intestinal obstruction, Vaso Occlusive crisis, gastroenteritis, appendicitis. The age range of the patients fell between 2 and 80years however, most of the reports were written on adult patients. The patients reported to the units through the Out Patient Department or the Emergency Department of the hospital.

The reports were all written by registered nurses in the ward who have a least a diploma in nursing and more than two years of working experience after graduation from basis nursing programme.

In general, the data revealed that the nursing reports do not follow the nursing process systematically, however, the various components of the nursing process were identified at various sections of the reports. Table 2 provides a visual depiction of the overall results of the qualitative content analysis (Bengtsson, 2016), and the narratives with the quotations that follow the table give further explanation to the content of the information in Table 2.

Table 3: Summary of results for Nursing Reports and the Nursing Process

Report	ASSESSING			DIAGNOSING		
	Patient Particulars	History	Physical Examination	Patient Strength	Patient Problem	Nursing Diagnoses
1	X	X	X	0	X	0
2	X	X	X	0	X	0
3	X	X	X	0	X	0
4	X	X	X	0	X	0
5	X	X	X	0	X	0
6	X	X	X	0	X	0
7	X	X	X	0	X	0
8	X	X	X	0	X	0
9	X	X	X	0	X	0
10	X	X	X	0	X	0
11	X	X	X	0	X	0
12	X	X	X	0	X	0
13	X	X	X	0	X	0
14	X	X	X	0	X	0
15	X	X	X	0	X	0
16	X	X	X	0	X	0
17	X	0	X	0	X	0
18	X	X	X	0	X	0
19	X	X	X	X	X	0
20	X	X	X	0	X	0
21	X	X	X	0	X	0
22	X	X	X	0	X	0
23	X	X	X	0	X	0
24	X	X	X	0	X	0
25	X	X	X	0	X	0
26	X	X	X	0	X	0
27	X	X	X	0	X	0
28	X	X	X	0	X	0
29	X	X	X	0	X	0
30	X	X	X	0	X	0
31	X	X	X	0	X	0
32	X	X	X	0	X	0
33	X	X	X	0	X	0
34	X	X	X	X	X	0
35	X	0	X	0	X	0
36	X	X	X	0	X	0
37	X	X	X	0	X	0
38	X	X	X	0	X	0
39	X	X	X	0	X	0
TOTAL	39	39	39	2	39	0
%	100	95	100	4	100	0

Table 4: Summary of results for Nursing Reports and the Nursing Process Continued

REPORT	PLANNING		IMPLEMENTING	EVALUATING
	Objective & Outcome Criteria	Nursing Strategies/Orders	Intervention	Evaluation
1	0	X	X	X
2	0	X	X	X
3	0	X	X	X
4	0	X	X	X
5	0	0	X	X
6	0	X	X	X
7	0	0	X	X
8	0	0	X	X
9	0	X	X	X
10	0	X	X	X
11	0	X	X	X
12	0	0	X	X
13	0	0	X	X
14	0	0	X	X
15	0	X	X	X
16	0	0	X	X
17	0	0	X	X
18	0	0	X	X
19	0	0	X	X
20	0	0	X	X
21	0	X	X	X
22	0	0	X	X
23	0	0	X	X
24	0	0	X	X
25	0	0	X	X
26	0	X	X	X
27	0	0	X	X
28	0	0	X	X
29	0	0	X	X
30	0	0	X	X
31	0	0	X	X
32	0	0	X	X
33	0	0	X	0
34	0	0	X	X
35	0	0	X	X
36	0	0	X	X
37	0	0	X	X
38	0	0	X	0
39	0	0	X	X
TOTAL	0	11	39	37
%	0	28	100	95

X indicates the presence of the theme in the report
O indicates the absence of the theme in the report

Source: field data (2019)

How the Nursing Reports Reflect the Nursing Process

This section answers the research question "How nursing reports do reflect the nursing process?" The question guided the qualitative analysis of the 24-hour nursing reports written by registered nurses at the Effia Nkwanta Regional Hospital. A deductive approach was employed and five (5) main themes that correspond to the steps of the phases of the nursing process were used. Each theme has at least a subtheme. The themes, subthemes as well as the coding are illustrated in Table 2.

Assessment

Patient particulars

Patient particulars that gave basic information on the patient's identity were captured in all 39 reports reviewed. These include the patient's biographic data such as name, age, sex and the medical diagnosis of the patient.

Nursing Health History

A total of 37 out of a total of 39 representing (95%) of the reports captured information on the history of the patients. The review of the records showed that nurses recorded history in the form of chief complaints made by the patient, present medical history and past medical history of the patient. Concerning the patient's chief complaints, most of the reports recorded as a list of signs and symptoms presented by the patient. For instance, Report **15** recorded that "*She came with the complaint of bitter taste, chills and anorexia"*. However, in ten (10) of the reports reviewed, the nurses recorded how long the signs and symptoms have been present. For example in report 20, the nurse recorded: *"Patient lodged complaint of chest pain, joint pain and*

general body pains which started 3days ago" (**R 20**). In nine (9) of the reports, the history went further to explain steps taken by the patient and family to help resolve the problem before reporting to the hospital. For instance, this was captured as follows in **Report 16**:

> "*On admission, the patient presented a history of uneasiness and breathlessness which started on Monday and was sent to a clinic for treatment and was given some medications which made her feel better. Later in the afternoon, the symptoms became worse and went to Holy Child Clinic where she was referred to the facility for further management."*.

The history of the present medical condition was recorded in thirteen (13) of the report reviewed in the form of what led to the current state of the health of the patient. This example was documented in report 15;

> *"Mother gave the history that child was sleeping on the floor this dawn when a center table made of glass hit his left head injuring the left ear accompanied with severe bleeding which was arrested and ceased after a while"* (**Report 15**)

Another example from **reports 5** stated*:*

> *"Mother gave the history that child was sleeping on the floor this dawn when a center table made of glass hit his left head injuring the left ear accompanied with severe bleeding which was arrested and ceased after a while*".

The past medical history of the patients was recorded by the nurses in nine (9) of the reports reviewed. The nurses recorded the chronic conditions of the patient as well as the routine medications. On the chronic condition of the

patient, the nurses record the past diagnosis of the patient. For example, in report 10, it was captured as follows;

> "*…. Patient is a known DM who has defaulted medication for the past 6 years. …*" (**Report 10**)

Five (5) of the report, the nurses indicated the patients were on some routine drugs that help to manage their chronic conditions, specifically diabetes mellitus and hypertension. Out of the five reports that stated this, the specific drugs were recorded in only one of the reports. Report 19 exemplifies it as follows:

> "Patient *is an elderly woman, known Dm and HPT on medication (Tab Amlodipin, Tab Bendro and Tab metformin …"*

Findings from Physical Examination

Physical examination finding was present in all the 39 reports reviewed. The physical examination findings captured in all the reports were mainly the physical appearance of the patient on admission and vital signs.

With regards to the physical appearance, nurses recorded mainly the level of independence and state of the patient's condition on the day of admission. Regarding the level of independence, the reports showed that the nurses recorded whether the patient was ambulatory, on a stretcher or wheelchair, and who accompanied them. For example, **Report 8** indicated: "*Patient brought on a stretcher accompanied by an orderly and relatives*".

On the state of the patients, other reports indicated the condition of the patient on arrival to the ward such as the presence of visible signs such as level of consciousness, jaundice, and weakness. "*Patient was admitted to the ward through OPD at 11:50 am by Dr. Sam in an ambulant state…, on account of*

fatigue when walking, fully conscious and not pale and no obvious respiratory distress during observation" (**R 28**). Report (31) exemplifies the consciousness level of the patient on admission. *"Client was admitted into the ward through the accident and emergency department… in a fully conscious state"* (**Report 31**)

The most occurring vital signs recorded in the reports were temperature, pulse, respiration and blood pressure. This was present in all 39 reports. For example, *"Vital signs on admission include the following: T - 35.0^{o}C, P - 130bpm, R - 20cpm and BP - 110/70."* **(R 9).** Quite a substantial number (20 out of 39) recorded the oxygen saturation of patients in the reports. For example "*Vital signs checked and recorded as Temp-36.^{o}C, Pulse-100bpm, Resp-16cpm, BP-230/160mmHg, SPO$_2$-99%*". (**Report 26**). In addition to that, the nurses recorded the Random Blood Sugar values for some patients in nine (9) of the reports.

Diagnosis

In this regard the researcher was interested in the report which captured issues that emerged through diagnosis and how the nurses on the ward recorded it. In view of this the researcher analysed the report under three subthemes;

Statement of patients' strength

Statements that showed patients state or condition on arrival to the hospital showed by the 39 reports that were reviewed indicated that the majority of the nurses did not document this information more often. Thirty-seven (37) out of 39 reports that were reviewed which representing about 94% did not show the strength patients had that could help the nurse in solving the

patient's problems. The two reports that documented the strength of the patient touched on the patient's ability to take in food and medications and the physical appearance of the patient. For example, in report 19, the nurse recorded "*Patient can tolerate oral medications and food…*" (**Report 19**) With regards to the appearance of the patient, report 34 exemplifies as "*…patient looks well and fully conscious…*" (**Report 34**)

Statement of patients' problems

Statements pertaining to the patients' problem that they brought to the hospital, and how it was documented by the nurses was of interest to the researcher. To this end, the 39 nursing documents reviewed indicated that most (31 out of the 39) report captured the patients' problem representing 79% of the documents reviewed. The problems recorded in the reports were mainly those to do with the physical illness. No report stated psychosocial problems. It mainly concerns the signs and symptoms presented by the patient. For instance, **Report 2** indicated that: *.... patient look ill, a little pale and wound dressed with a bandage.* **Report 28** narrated that; *Patient ... on account of fever and pain at the right lower back.* Another report stated "Patient *... he started experiencing severe lower abdominal pain which radiates from the right foci to the right inguinal region*" (**R34**).

Statement of a nursing diagnosis

The results indicated that nurses rarely stated nursing diagnoses specific to the problems identified in the nursing reports. Nurses did not document nursing diagnosis in any of the 39 reports reviewed. However, the nurses recorded the medical diagnosis of the patients in all 39 reports. This was usually stated at the beginning of the report. Some were the confirmed

diagnosis of the patient, others reported the confirmed as well as yet to be confirmed diagnosis. Besides, other nurses went further to indicate the possible cause of the current diagnosis as stated by the physician and medical diagnosis that had been ruled out.

For example, in report 5, the nurse recorded the confirmed diagnosis of the patient as, Report 5 "*Diagnosis: Deep laceration at the left ear*".

Report 21 "*Diagnosis: Hypotension?? Cause Alcohol Withdrawal Sepsis*??

For example, in report 22, the nurse recorded the possible cause of the severe anaemia "*Diagnosis: Severe Anaemia? Upper GI Bleeding* 2^o *to bleeding Peptic ulcer*" (**Report 22**). Report 1 "*Diagnosis: Friction burns* 2^o *to RTA*".

In some other reports, the nurses indicated the diagnosis that had been ruled out as exemplified in report 24; "*Diagnosis: Gastroenteritis* $^R/_O$ *Malaria"* (**Report 24**)

Planning

The researcher further examined the nursing documents to ascertain how planning was done with regards to records of patients. That is the researcher was interested in data that represents a plan of action that could be followed by the nurses when caring for the patients. Planning in this regard is about measures the nurse intends to put in place to help deal with the patient's problems. This includes setting objectives and devising or mapping up strategies to help the nurses execute their services to the clients (Patients). The researcher, therefore, analysed the reports under these subthemes:

Goals or desired outcomes

This is where the nurses set the target or objective of what they intend to achieve or what nurses expect from their patients. In this regard, the

evidence from the report that was reviewed showed that almost all the reports did not capture the desired outcomes or goals of the care being given to the patients.

Stated nursing strategies/ interventions

This pertains to the strategies that nurses use in caring for the patients they attend to. In this regard, records from the report that were reviewed indicated varying information that was captured by the nurses. A few of the reports (10 out of 39) of the reports reviewed indicated strategies as to how to carry out the care. However, nine (9) of the plans were stated as treatment objectives prescribed by physicians. Only one (1) report documented a nurse initiated plan of action was located. A nurse-initiated nursing strategy is recorded in report 15 "…*Put on sliding scale when RBS < 13.0mmol/L. To monitor BP 1 hourly and to inform the doctor on duty* (**R15**).

All the other reports recorded strategies that were initiated by the physician. For example, **Report 11** captured that: *To prop patient up in bed and put on* INO_2 *via nasal prongs at 61/min. to monitor TPR 4 hourly and* SPO_2. Another report had it that a patient had to be prepared for hernia the next morning. For instance, **Report 6** has it as… *prepare for hernia repair tomorrow*. The nurse however developed her strategy from this stating that the *Patient is to be prepared pre-operatively for surgery tomorrow.*

Implementing

Actual care rendered

To this end, the researcher was interested in reviewing the actual service or care that the nurse on duty rendered to the patient and how well it was documented. From the review, the most occurring nursing actions

recorded by nurses in the report were administration of prescribed medication, the orientation of patient to the ward and its environment, maintenance of personal hygiene and ensuring patient comfort in bed. These were recorded in all 39 reports reviewed. Below are excerpts from the reports or documents that were reviewed. **Report 1** indicated that: *Child was made comfortable in bed… Mother and child reassured and oriented toward and its protocol…. Prescribed treatment served and personal hygiene assisted to maintain.* Another document had it that: *Patient received into a comfortable bed… The patient reassured of a gradual recovery…Due to treatment served and personal hygiene maintained* (**R6**). Also, some reports captured other interventions such as taking samples for laboratory investigations and the administration of oxygen. For instance, **Report 15** has it that**:** *She was received and made comfortable on the bed and reassured of good nursing care. …Patient being managed on Albetes, stat doses of all prescribed medications administered. Sample taking to the laboratory awaiting for results. …medication served. Vital signs checked and recorded.* Not all, **Report 37** captured that*: received unto a warm bed …Oxygen was set up immediately and the patient reassured … made comfortable and reassured. Personal hygiene maintained and due to medication administered.*

Patient's response to care

In this regard, the researcher was interested in examining the report to ascertain the records if the nurses documented the responses of the patient after the care was given to the patients. Below are excerpts from the nursing documents reviewed. **Report 2** has it as: *Patient is doing well on her medication.* **Report 4** captured it as: *The patient had a sound sleep and did not*

complain about this mane. Another report also reiterated that there was no reaction to be observed. For instance, a report had it as… *No reaction observed yet during transfusion. Blood transfusion completed successfully at 4:55 pm without any adverse reaction. The patient slept soundly throughout the night and lodged no major complaints* (**R12**). Report 17 also added that: *According to the patient, diarrhea and vomiting have reduced after the administration of IV fluids.* **Report 39** indicated that: *Patient slept well throughout the night without any complaint.*

In summary, the implementation stage of the nursing process was captured in all reports reviewed. However, the information captured was mainly routine nursing care such as serving of medication and maintenance of personal hygiene. Problem specific nursing care was not identified in the reports.

Evaluation

Evaluation statements in the report were statements that gave the condition of the patient such as "patient condition is ill"; the condition is fair. Unanimously, the 39 documents reviewed indicated that the nurses captured the evaluation aspect of the nursing process. The evaluation stated was not targeting any specific objective. For instance, **Report 35** indicated that: *Post-op condition satisfactory, general condition fair.* **Report 26** captured it as *Condition is fair, Condition is fairly ill.* Another report has it as: **Report 15** indicated that**:** *Condition is stable, Condition is fairly ill.* In conclusion, it could be said that the evaluation process was captured in the reports but not technically as it should in relation to the expected outcomes and goals set.

Analysis of the Interviews

Biographic information of participants

A total of nine (9) registered nurses were interviewed. All nine participants were females and have worked for a minimum of 2 years and a maximum of fourteen years after a basic nursing qualification. The interviewees were made up of three Senior Staff nurses (SSN), three Nursing Officers (NO), and three Senior Nursing Officers (SNO). Five were working on a medical ward and four were working on a surgical ward in the hospital. The least academic qualification of the participants was a Diploma in nursing and the highest qualification was a Bachelor of Science (BSc) in nursing.

Table 5: Sociodemographic characteristics of participants

Participant	1	2	3	4	5	6	7	8	9
Gender	F	F	F	F	F	F	F	F	F
Rank	NO	SNO	SNO	SNO	SSN	SNN	SSN	NO	NO
Years of experience	2	7	14	13	6	4	5	13	8
Academic qualification	BSC	BSC	DIP	DIP	DIP	DIP	DIP	DIP	DIP

Source: field data (2019)

Analysis of Main Findings

This section presents the findings of the key research questions guiding the study. The results have been presented in major themes and sub-themes emerging from the coded data as well as the research questions.

Nursing Process Reflection in Nursing Reports

In this regard, the researcher was interested in knowing how nursing documentation reflected the nursing process. The researcher enquired from the participants how they wrote reports on the patient's condition. The responses given by the participants were analysed to identify which aspects of the nursing process the nurses spoke about in their response and whether nurses follow the stages of the nursing process systematically when writing the 24hour nursing reports.

Assessment

Patient particulars

The majority (6 respondents out of 9) of the respondents did not speak about the patient's particulars. A few (3) of the nurses that spoke about patient's particulars mentioned mainly the patients' identification information such as name, age, bed number and diagnosis. Two (2) of the respondents stated that before they begin with the report for each patient they indicated the name, bed number and diagnosis of the patient. For example, a participant said that *". … So if you're writing the report you start with the diagnosis, the patient's name, the bed number, and then if the patient is a new patient you write".* (**Participant 1**). Another respondent stated that the date and time of admission are captured in the report. This is exemplified in the statement she made, *"When a patient comes, the date of admission, time, the complains are included"* (**participant 4).**

Health history

The health history indicated by the participants mainly included the health problems in the form of the signs and symptoms presented by the

patient. A few respondents (4) made mention of reporting on the patients' complaints during report writing. For example, a participant stated that "*We don't use the care plan fully on the ward so what we do is in the morning we do a chat rounds, the patient might complain of maybe headache …"* **(P 3)**

Findings from physical examination

Physical examination findings include observations made on the patient, findings from palpation, percussion, etc. findings from the interviews indicated that two (2) out of the nine (9) participants gave responses that indicated recording physical examination findings in their 24-hour nursing reports. The response given was mainly observational data which included what the nurse saw about the patient. Observational data that were indicated by the respondents included the patient's level of activity and other physical characteristics of the patient. One (1) of the participants spoke on the patient's level of dependence and activity at the time of admission. This included whether the patient walked in or came in a wheelchair and whether the patient was conscious or unconscious at the time of admission. For example, this was said by the participant;

> "*First of all we start with admission note, how the patient came into the ward, maybe the patient walked, maybe the patient came in a wheelchair so you write all those things ……. if the patient is conscious or semiconscious you write all those things*." **(P 1)**.

One (1) participant spoke on the physical characteristics component which included visible attributes such as dressings on the wound, soaked dressings, etc. For example, a participant indicated that;

"…*maybe through your observation you see that maybe the patient's wound is discharging or the dressing is socked …*" **(P 3)**.

The remaining seven (7) participants did not give any observational data as well as other physical examination findings in their response to how they write the nursing reports.

Diagnosis

Statement of strength

None of the respondents stated that the patient's strength was captured in the report.

Statement of past problems

None of the nine (9) respondents mentioned that the past problems were captured

Statement of present problems

From the response given by participants, recording the present problems of the patients are limited in the records. No participant stated recording the patient's problems in the reports.

Statement of nursing diagnosis

All nine respondents did not mention that they state the specific nursing diagnosis based on the patients identified problems when writing the report. However, one respondent stated emphatically that the nursing diagnosis is not captured when writing the report.

It depends on what I'm writing on. We don't specifically write the diagnosis and all that ….

(**P7**).

Despite not stating the nursing diagnosis, a few (2) of the respondents mentioned that they include the medical diagnosis of the patient when writing the report. For example, **participant 9** said, "*You write on the diagnosis …*"

Planning

Planning in nursing care according to the nursing process include setting goals and objectives to be achieved at the end of the care and identifying nursing strategies to be adopted to meet the set goals. Participants in the study hardly made comments related to this aspect of care when asked to describe how they write their nursing reports. The majority (6) of the respondents did not make statements with regards to nurse initiated plans in their report writing.

Nevertheless, a nurse indicated that she plans for the care of the patient when she reports on duty. This was what she said "…we a plan for the care …" (**P3**)

Two (2) respondents however made comments with regards to the plan of action outlined by the doctor and not nursing initiated. This is exemplified in the statements made by these respondents

> "*…The plan, what the doctor wrote to be done for the patient for instance medication and other things like pass catheter, NG tube, etc…"* (**P 8**).

Another participant also said, *"… what the doctor writes for the patient…"* (**P 9**).

Goal or desired outcome

Responses related to goals and desired outcome was almost missing in the responses of the participant. Only one (1) participant made a comment that could be classified as a goal.

"The care that we render to patient is being recorded based on the duration stated in care example you say patient will be relieved of pain within 24 hours ....." **(P 5).** The other eight (8) participants did not mention writing the desired goals in their report.

Nursing strategies or interventions

Respondents hardly spoke about outlining a list of nursing activities to be implemented to help solve the client's problems prior to implementation. Nursing strategies or orders were missing in almost all the responses given by the nurses. One participant however stated she plans her nursing intervention before implementation and documentation. She stated that;

> *"... so I will plan that you dress the wound for the patient and after that, you document that may be the wound had been dressed and then the outcome, the observations you make during the dressing."*
>
> **(P 3)**

Implementation

Actual care rendered

The majority (7) out of nine (9) participants mentioned that they capture the care rendered to the patient when writing the reports. The nursing care that was mentioned by the nurses was mainly the administration of medication and other nursing procedure such as a passing catheter. For example, a participant had this to say;

> "*So maybe if the patient is put on medication, we capture it in our reports as well as what we do for the patient.*
>
> *You write on the diagnosis, the medication as well as what we do for the patient on the ward, the medication we administer, if we*

do a procedure we also document it or write it in the report," (**P 9**).

".. and then we include the care that is given for the patient and the plan for the day and whatever is carried out for the patient we include that."(**P 4**)

"For me for instance I normally add what I did for the patient. For instance, the doctor writes I should pass a urethral catheter, after doing that I include that in my report." (**P 8**)

Another participant elaborated on how she manages a diabetic patient until the blood glucose levels drop to the normal range. She stated that;

"... if the RBS is 33.1 you run 1litere of normal saline within 30mins fast. After the 30mins you check the RBS again if it's still high you give 1litre and 20 units of insulin or maybe 10 units and monitor till it gets to the normal range 13.0 then you start with the sliding scale. And then you write the medication the patient is on in the report, if labs and all those things, and the orientation. After the admission, if the person has medication you serve and that one too you document…" (**P 1**)

Evaluation

Out of the nine (9) nurses interviewed on how they write the nursing reports, only one nurse indicated she documents her evaluation of the patient's condition. She said *"... when it's been achieved you document patients pain has been relieved by analgesics verbalizing by client pain has been relieved"* (**P 5**). All the eight (8) other respondents did not mention writing their evaluations made on the patient in the report.

The findings from the interviews indicated the most recorded stage of the nursing process was the implementation stage. This was indicated by 77.7% of the participants. The least recorded stage was the planning (11.1%), evaluation (11.1%) and the diagnosing (0%) stage.

To assess how the 24hour nursing reports reflect the nursing process, a document review was conducted and nurses were also interviewed on how they write their nursing reports. This was done in order for the researcher to observe the content of the reports at first hand to identify which components of the nursing process was present and how they were captured in the reports. The interviews were conducted to allow the authors of the report to describe how they write their reports. This allowed the researcher to compare the findings from the two data sources in order to strengthen the results of the study. The results for each subtheme of the first research question are presented side by side.

Triangulation of Results

The triangulation protocol involved two qualitative data sets – document review and interviews. The process of triangulation as described by Farmer et al (2006) was used to interpret and integrate key findings from the document review and the interviews to assess how nursing reports reflect the nursing process. The process proceeded in four steps (convergence coding, formation of themes, coding, reporting). First, a convergence coding scheme was developed as shown in Table 6.

Table 6: Convergence coding scheme for triangulation protocol (based on Farmer et al, 2006)

Coding label	Convergence coding
Agreement	All two data set has more than 50% or less than 50% of the sample gave same findings
Partial agreement	One data sets has more than 50%, and the other has less than 50%
Disagreement	100% in one and 0% in the other

The findings from the analysis of the document review and the interviews were then reviewed to identify the themes (the stages of the nursing process) and subthemes and outlined as a single list. Cross tabulation of the findings from each of the methods of data collection was done against the themes and subthemes. The themes and subthemes formed the convergence coding matrix used to identify the agreements and disagreements between the two data sets. The percentage and frequencies of each subtheme was tabulated against each method of the data collection (Table 4). Thirdly, coding of the various subthemes was undertaken to ascertain agreements and otherwise of the findings from the two data sets using the convergence coding scheme developed earlier as shown in Table 6.

Table 7: Overview of the triangulation of key findings from document review and interviews

Themes and Subthemes	Frequencies/ percentages		Converging codes		
	Document Review	Interviews	Agree	Partially Agree	Disagree
Assessment					
Patient particulars	39/100%	3/33.3%		X	
History	37/94.9%	4/44.4%		X	
Physical examination	39/100%	2/22.2%		X	
Diagnosis					
Patient strength	2/5.1%	0/00%	X		
Patient problem	31/79.5%	4/44.4%		X	
Formulated nursing diagnosis	0/00%	0/00%	X		
Medical diagnosis	39/100%	2/22.2%		X	
Planning					
Objectives and outcome criteria	0/00%	1/11.1%	X		
Nursing orders	10/25.6%	3/33.3%	X		
Implementation					
Nursing interventions	39/100%	7/77.7%	X		
Evaluation					
Evaluation statement	39/100%	1/11.1%		X	
TOTAL			5	6	

Source: Field data (2019)

Finally, the findings from the triangulation were reported and further discussion of each theme was written with respect to themes with convergence, partial convergence and complete dissonance.

Key findings from the triangulation process

A total of twelve (11) subthemes were outlined for the triangulation process. Agreement (agree and partial agree) was established in all eleven (11) of the subthemes indicating a higher convergence in a higher number of the subthemes assessed. Total agreement was established in five (5) subthemes

(patient strength; nursing diagnosis; objectives and outcome criteria; nursing orders; implementation). The other six (6) subthemes recorded partial agreement (Patient particulars; History; Physical examination; patient problems; medical diagnosis; evaluation). There was no dissonance in any of the subthemes triangulated.

Full agreement

The subtheme with full agreements were five and they were five. These were patient's strength, nursing diagnosis, objectives and outcome criteria, nursing orders and nursing interventions. Out of the five (5) subthemes that had the full convergence, four of them were subthemes that were almost missing in the records and were not mentioned in the interviews at all. These were the patient's strength, nursing diagnosis, objective and outcome criteria and the nursing orders. Patient's strength and the nursing diagnosis are subthemes for the diagnosing stage of the nursing process and the other two are for the planning stage. The other one was the nursing intervention which had the highest frequencies for both the document review (100%) and the interview (7out of 9: 77.7%).

Results from document review and interviews gave converging views on the documentation of the patient's strength in the 24-hours reports. Both the document reviewed and the interview results suggested nurses do not capture the strength of the patients in the reports. While the document review reported 37 out of 39 did not record the patient's strength, interview results also suggest that nurses do not report on the patient's strength.

Similarly, results from both document review and interviews suggest nursing diagnoses are not documented in the reports. A full agreement was

obtained with this subtheme. All 39 reports reviewed did not have any nursing diagnosis and one participant stated emphatically that nursing diagnosis are not documented in the reports. During the interviews, none of the participants mentioned recording the nursing diagnosis in the reports. Conversely, the medical diagnosis was recorded in all 39 reports reviewed and two (2) respondents stated they record the medical diagnosis of their patients in the report.

Also, a full agreement was obtained with the subtheme objective and outcome criteria under the theme planning. Document review results and interview results both suggest less documentation of objectives and outcome criteria in the reports written by nurses. There were no objective and outcome criteria in the reports during the document review and only one nurse mentioned recording the objective of the patient care.

Additionally, a full agreement was obtained with the nursing orders subtheme under the planning phase of the nursing process. Both interview and document review results suggest nurse's rarely document on their planned nursing interventions to help solve patient's problems. However, both suggested doctors initiated a plan of care are recorded by nurses. While the document reviewed identifies 10 reports with nursing orders with one initiated by the nurse, the interview results also had 3 nurses stating they document nursing orders with one being nurse initiated.

The implementation phase of the nursing process recorded the highest frequency for both the document review and the interview. A full agreement was obtained between both methods with regards to implementation. While all reports reviewed recorded nursing interventions performed by the nurse to

solve the patient's problems, close to 78% of the nurses interviewed also mentioned recording the care given to the patients in their reports. However, in both cases, the interventions recorded was more of the routine nursing care which were not specific to the patient's condition.

Partial agreement

Partial agreement (complementarity) was observed in 6 of the subthemes compared. These were patient particulars, history, physical examination, patient's problems, evaluation and medical diagnosis. Three of these subthemes were assessment data (patient particulars, observation, and history).

Results of the document review suggest that nurse's record patient's particulars which was mainly the name, age, gender and diagnosis of the patient. The patient's particulars or identification data was present in all the 39 reports reviewed. However, the interview result indicates patient's particulars are rarely documented as 3 out of 9 participants made mention of recording patient particulars in their response. Also, in the interviews, the commonly mentioned particulars named, age, patents bed number and diagnosis.

Again, document review findings indicted nurses captured some physical examination components which form part of the assessment stage of the nursing process. In the report writing, they were captured in the form of observational data such as the patient's level of activity such as ambulant, conscious, and weak and vital signs. The most frequently recorded physical examination findings in the reports was vital signs which included the temperature, pulse, respiration and blood pressure measurements. This was present in all 39 reports reviewed during the study.

This was present in all 39 reports reviewed. However, interview reports suggested the contrary, as 2 out of 9 nurses mention recording how the patient came into the ward and their health status at the time of admission. No participant interviewed made mention of recording vital signs.

Approximately 95% of the document reviewed the recorded history of the patients. These were presented in the form of physical signs and symptoms presented by the patient. No psychosocial history was present in the reports. In the interviews, close to 45% of the respondents mentioned that they record the health problems of their patients in the reports. This partially agrees with the findings from the document review.

Similarly, a partial agreement was obtained on the subtheme patient's problems. While approximately 80% of documents recorded the patients' problems, close to 45% of the participants in the interview indicted they record the patient's problems in their reports. The problems identified in the document review were mainly physical signs and symptoms presented by the patients. Interview results also gave a similar finding with 44.4% of respondents reporting they capture patient's complaints.

Again, document review results suggested some form of evaluation statements are present in the reports although it doesn't meet the criteria for an evaluation statement as described in the nursing process. However, results from the interviews suggest no evaluation statements are documented. A partial agreement was therefore obtained with the subtheme evaluation statement.

Dissonance/ Disagreement

There was no disagreement in any of the subthemes triangulated. All subthemes either totally or partially agreed.

The results from the triangulation of the findings from the two data sources converged in most cases giving similar findings. There was agreement (fully and partial agree) in all 11 subthemes examine. The two data sets agree in five of the subthemes and partially in 6 subthemes. Generally, findings from both data sets indicated less documentation of the nursing process stages in the 24 hour nursing reports. Although the records indicate documentation of some nursing activities, they were not systematically arranged in the repots to follow the stages of the nursing process and the acceptable terminologies for the recording of specific stages were omitted in the reports.

Factors Influencing Nursing Documentation

To this end, the researcher was interested in finding out from nurses what factors could influence the nursing documentation as they attend to patients at the in-patient units. Specifically, the researcher was interested in the nurses' level of knowledge with regards to nursing documentation, their attitude towards nursing documentation, and finally, situations within the work-environment that could influence documentation.

Nurse related factors

Knowledge

To elicit nurses' knowledge of nursing documentation, the researcher asked the participants their understanding of nursing documentation and how they ensure quality documentation. The majority of the participants explained that nursing documentation has to do with writing down everything the nurse

does for the patient to serve as evidence for the care rendered. Others gave the view that it serves as a legal backing in medicolegal issues and it's also necessary for continuity of care. Among the nine (9) nurses that were interviewed, six (6) indicated that nursing documentation provides evidence for the care rendered. For instance, participant 1 stated that "*We have to document everything, every procedure, every step for report sake. Maybe the patient is stable in bed within 15mins the patient's condition can change so everything that we see on the patient we have to document"*

Another participant said that,

> *"Nursing documentation is about procedures or whatever you do for your patient, you put it down in writing, that will serve as evidence for anybody to see what went on or what you've done for the patient."* (**P9**)

Another participant gave a similar view stating that;

> *"Nursing documentation is a process whereby the nurse document or put down all that she has done for the patient including assessment and then the analysis that you made through the assessment and then other medical team their input, you as a nurse you have to also document it"*. (**P 3**)
>
> *"Nursing documentation is a way of stating down what has been done for the patient during your working period. For instance, when you do wound dressing you have to state that, then you write the stat of the wound. Whether it is discharging, dry"* (**P 8**)

Another participant also indicated it served as a legal backing in cases of medicolegal issues. This is exemplified in a statement made by a participant

> *"… The nursing documentation is also a form of document which cover up legally that is whatever you do for the patient you document them so that in any instance since it's documented you know how to defend yourself...* (**P2**)

Two (2) participants, indicated it is necessary for continuity of care as it provides evidence of the care rendered in order for the other staff to know where to continue from. To illustrate this, a participant said;

> *"It also serves as a means of continuity of care for the other nurses in the different shifts to know what you did to continue with the care that you are giving to that particular patient"* **(P2).**
>
> *"Nursing documentation is what you've done for the patient and writing it down so that whoever comes in or when you close from your shift somebody can also take it and continue with the care of the patient."*(**P 6**)

Participants also gave their views on what makes documentation quality and what they do to ensure their documentation is of quality. With regards to what makes a documentation quality, a nurse went indicated that nursing documentation should have a date, time, what was done, and the one who recorded. She stated that "*nursing documentation should have a date, the time and the actual action taken by the nurse and the nurse who wrote the report and then maybe if whatever you did was beyond you, the person you spoke to or whoever you called* (**P 3).** The majority (5) of the respondent however reported that quality documentation contains everything that was done for the patient. For instance, a participant said this; "*A quality nursing documentation*

means you've documented everything that you did for the patient, everything you say about the patient and everything the patient says" (**P 2**)

Participant 6 also said, "*Starting from the patient's diagnosis, then nursing the patient from the day of admission, throughout the admission till the time that you close, the care that you give to your patient, you document it and evaluate it*".

When asked what they do you ensure their records are of quality, some nurses said they probe further, others said they go through the charts periodically to know what has been documented, document immediately after a procedure and document exactly what happened.

Two (2) nurses reported that to ensure their documentation is of quality, they ask further questions from the patients to verify what has been written already and to identify any omitted information. For example, respondent 8 had this to say;

> *"When I come for the afternoon shift and maybe the admission came in the morning, the nurse's notes have been written already but for the report to be quality, I have to probe further and ask the patient for the history. Maybe some things were missing out from the nurses' note that I can add to make it quality.* (**P8**)

A nurse also indicated that her ward goes through the charts periodically to check whether the nursing actions that have been taken have been recorded as they should.

> *"For my ward, we have done something like criteria that we look on, we do monitoring, once a while we take the chart and we go through and see. For example, if you finish with wound dressing, I*

expect that it should be documented but sometimes it escapes us so you remind the junior staff. Sometimes during handing over you say you have done this, you have given transfusion so we look on the chart if you have charted it, if you have documented it in the nurses note so if you have not, there and then you document it so handing over and taking up also serve as a means of monitoring and ensuring that we do documentation. (**P3**)

One nurse also said she ensures she documents exactly what happened to make her documentation quality. This was her statement; "*It should be achievable; it should be realistic. If you've written a patient can walk with assistance and a third party comes in, the patient is still lying in bed, the patient cannot walk, then it's not realistic. If you say a patient can walk with assistance, yes, when somebody comes, the patient can walk with assistance.*" (**P 6)**

It could be deduced from the views of the participants that they had a fair knowledge of what nursing documentation is about, even though the participants did not give detail explanation of what constitutes nursing documentation, nevertheless, it is in line with the definition given by the experts and recognized bodies in the field of nursing as a profession. Again, the participants demonstrated the application of their knowledge into practice by putting in place measures to ensure their records are of quality.

Perception and attitudes

With regards to the participants' perception of nursing documentation, the researcher asked the participants how necessary was nursing documentation. From their point of view or perspective, how do they value

nursing documentation? Participants gave various views on this issue. Among them were; it is necessary for continuity of care, serves as a means of communication and as a legal document in medicolegal issues.

Again, the participant added that it serves as a reference for the immediate nurse who takes over the care for that patient whose records have been taken

> *If you come on duty and you weren't able to tell your colleagues all that was done for the patient if our colleagues take the bedside of the patient and read through, or the nurses note and read through, maybe you served this drug but you didn't document it, reading the nurses notes will tell your colleague that you served this drug but you weren't able to document it* (**P1**).

A nurse could not withhold her view but added that the documentation is necessary because it serves as a legal document that could be used to defend the nurse in case of any unexpected happening at the ward and the hospital in general.

> *It's very necessary because the documentation is the only legal document that we the nurses we have. We don't have the folder like the doctors do have so if we don't document it means that when there is any legal action we will not get anything to defend what we did for the patient* (**P3**).

To support this, a nurse narrated an incidence that occurred while she was on duty:

> *It's very necessary, for instance, if you come on duty, like yesterday I came on duty and patient's oxygen got finished so I had to call the oxygen man, I called severally he didn't pick, so that*

one I have to document, that "oxygen man called but not yet in". So in such a situation, I have to document so that in case anything happens, what you've written will save you (**P1**).

The participant further added that for continuity of services rendered to patients, nursing documentation is very necessary for her view.

…and it also helps with the continuity of care so that we would be able to know that maybe we were able to bath the patient in the morning so maybe the wound we couldn't do it so that the afternoon shift will also continue (**P3**).

Participant 5 also added that: *It's very important because this documentation is going to give a guideline or give information to the next person that comes and gives a clue to whatever procedure being done for the patient so that you'll know how to continue with the care.*

In the same vein, **Participant 7** said from her point of view, nursing documentation is necessary for continuity of care as said by previous participants.

Very very necessary. As I said its continuity of care so you should give enough information to the next person who is coming to care for the patient so that the person will know what has been done and what should be done for the patient. And also if there is any problem, it can be solved immediately so that patient can recover from her illness (**P7**).

It may be concluded from the responses that, participants perceived nursing documentation as necessary and therefore placed a premium on it. Some of the participants outlined that the document was necessary because of

legal issues that could arise from the care given to the patients. It could serve as a reference point for the continuity of the care rendered to the patients who visit the hospital.

Impact of Work-environment on Nursing Documentation

The researcher was interested in knowing how the work-environment, that is the hospital in which the nurses provide service, and how it impacts or affects the nursing documentation process. Participants mentioned challenges that are within the working environment that affected the documentation of patients' records.

Staff Strength and Workload

Unanimously, all the participants complained about staffing being a big challenge to proper documentation of patient's records in the hospital. Most participants indicated that it prevents them from recording the care they render to the patients. For example

> "*The workload, looking at the patients on the ward and the nurses, the ratio may be 2:10, 2:20 it's too much so maybe catering for about 7 patients, different nursing care has to be done then after that you have to come and document all, which you cannot come and document everything so sometimes the workload is too much so we cannot document everything* (**P6**).

A nurse also corroborated what previous participants had said with regards to limited staff strength being a challenge to nursing documentation in the hospital. *Sometimes I'll serve medication, I'll document in the treatment sheet but not on the nurses' note. It comes about as a result of the shortage of staff* (**P1**).

She went further to give instances where she was unable to record her nursing activities and had to be called at the end of her shift for clarification.

> *"Sometimes we are two, at times you'll be the only person on duty. For instance, I came on duty with a student nurse and then when it was 6:30 the student started complaining, sister please I'm staying afar so I have to go. So after doing the vitals, she left, I was the only one on duty.*
>
> *So some I serve medication but I wasn't able to document it, so I'll be in the house and hey will call me, that this person when I came, the medication is not there and I will say that sorry oo, I served but I wasn't able to document it. It happens a lot"* **(P1**)

In explaining an instance where she was not able to document her nursing action, participant 6 had this to say:

> *Maybe you have a patient who is seriously ill, a bed bath has to be done, and feeding of a patient, the patient has to go for theater, gown patient so it's a whole lot you have to do one procedure, document do one procedure document. Maybe by the time you finish time for theatre has passed, so you have to take your time then do all procedures and sit and write it one by one but maybe you'll mistakenly forget what you've done then at the end of the day you cannot document it.*

Some participants also added that to the above assertion which points to limited staff strength in the hospital. For instance, **Participant 4** said: *…because we have a shortage of staff, whilst carrying out a procedure or caring for a patient, if something else comes up you usually forget.*

Another participant reiterated that the workload had increased as a result of limited staff in the hospital and this affects documentation of patients' records.

> *The workload is a big challenge because the staff strength is very limited and it affects documentation because for instance two or three people on a 30-bed capacity ward, you need to do procedures on patients and right after that you have to document. Here is the case where you are thinking of those in patients, having additional patients coming in, those from theatre coming in to become stressed up* (**P5**).

All participants expressed concern about a mismatch in workload and staff strength and indicated that it prevents them to document nursing activities as they wish to.

Inadequate materials

Almost all the participants interviewed said that the inadequate supply of materials for documentation hindered the documentation of patients' information in the hospital. The materials that were stated by the participants include the 4hourly temperature charts, fluid charts, the nurses' note, pens, nursing care plan and prescription forms. Three (3) participants indicated that there is usually a shortage of nurses' note forms, another 3 also mentioned unavailability of pens, temperature charts, care plans, prescription forms and fluid charts were stated by one participant each.

For example, this was supported by a statement made by one of the participants:

> *"…there has been many instances where you don't even have nurses notes, whereby maybe you have to use the back of a*

paper to do your documentation apart from that even prescription you would not get the exact document of the exact that you have to use, we always find our way out (**P 2**)

To support this, another participant said;

"…even temperature chart we were not having so we have to go and do photocopy and black and white so you can imagine. Nurses notes we have to as well go and make photocopies sometimes even they will not place it well, when it comes it has shifted on the sheet and it doesn't make it look nice. As for pens, it's usually a challenge. Sometimes by the time you realize your pen has vanished so by the time you go and look for a pen you have even forgotten what you wanted to write" (**P3**).

To confirm what had been already reiterated by previous interviewees, **Participant 5** added that:...*the materials for documentation like the nurses note, sometimes we run short of them and due to such things some might not document because the materials are not there.*

Participant 4 also added that the slow pace supply of pens and books for the documentation of patients' records affected nursing documentation in the hospital.

Normally the pens and papers sometimes we are short especially the pens and then the papers when it comes to the intake and output chart and the nursing care plan sometimes we are short and we have to get A4 sheets to run copies at the general office of the administration. Sometimes you get there and the photocopier has

run down and you have to use your own money and if you don't have any money to use then you can't have it (**P4**).

Participant 6 also said: *at times we run out of stationaries. At times they don't even supply pens and other things so it also one way or the other affects documentation.*

Attitude of other staff and patients

The attitude of patients and other staff towards nursing documentation was also identified as a major challenge. For example, a participant stated this;

"*Your patients don't understand why you sit down and even some of the medical team, when they come and your documenting they think that when I come the nurses were at the table. But you have to sit and write too. ..... So I don't know how the other medical team will be able to understand because when a doctor comes to review a patient, he will have time to write and that one, no one sees anything wrong with it but when someone comes and the nurse is even writing a report it's a problem when I went the nurses were even sitting down meanwhile what you've done you have to document it. So if we get the other team members understanding our role and then we don't only go to the bedside to give care, we have to also write. You know we are supposed to do the care plan".* (**P 3**)

In summary, it could be said that limited staff strength, increase workload and inadequate supply of stationaries were the major challenges to nursing documentation as said by the participants. This further goes to suggest the challenges that the hospital is confronted with. Again, when materials are not

readily available to document records of patients, it could affect the quality of healthcare services rendered to the clients who visit the hospital.

Discussion of Results/ Key Findings

This study explored the quality of nursing documentation at Effia Nkwanta Regional Hospital. The discussion is organized and presented around the research questions. Interpretation and evaluation of the major findings were done with reference to the theoretical and empirical evidence in the area of nursing process documentation in records and factors that influence nursing documentation.

Research Question 1: How does nurses' report reflect the nursing process?

This research question was answered by collecting data using the document review and interviews. The findings from the two approaches of data collection were triangulated to identify convergence, complementarity and dissonance. The discussion for the research question, therefore, was done in relation to the areas of convergence, complementarity and divergence.

Applying triangulation to the twelve (12) subthemes, findings showed near perfect agreement (full or partial agreement) between the two methods of data collection. Eleven (11) out of the twelve (12) subthemes representing approximately 92% fully or partially agreed with regards to their finding obtained from the document review and the interview. A disagreement occurred in only one of the findings, that is, physical assessment where all 39 reports reviewed recorded some physical assessment findings but nurses interviewed did not give any response in relation to this aspect of the nursing process.

Generally, the findings from this study suggest that nurses do not use the nursing process in documenting patient care and nursing reports do not reflect the systematic approach of the nursing process. This is evident by the omission of most components of the nursing process and the inadequacy of some of the components captured. This finding is consistent with the findings of Omonigho, (2015) who also found no documentation done according to the nursing process in her study conducted in Nigeria to assess the knowledge and use of the nursing process for documentation. This finding means that the systematic and logical flow of information that could have been evident in the nursing reports if the nursing process is used is missing. Chalebi, (2007) recommends a detailed and systematic recording of all phases of the nursing process. The records reviewed and the response from the interviews revealed the omission of various components of the nursing process and fragments of the components dispersed in various parts of the report.

Subthemes with Converging results/ Full agreement

The triangulation revealed agreement in the findings of the two data sets (document review and the interviews) indicating the validity of the method and the reliability of the results obtained from this study. Full agreements or convergence was established in five of the subthemes examined. These were the patient's strength, nursing diagnosis, objectives and outcome criteria, nursing orders and nursing interventions. Findings from the two data sets recorded low or no recording of these four subthemes (patient's strength, diagnosis, objectives, and nursing orders). The fifth subtheme (nursing intervention) recorded the highest frequency. All 39 reports recorded their

nursing interventions and 7 out of 9 nurses interviewed indicated they record their nursing actions.

The diagnosing stage, which is the outcome of the analysis conducted by the nurse on the assessment data was poorly reported by nurses in this study. The diagnosis phase is an intellectual process that requires critical thinking skills, scientific knowledge, social skills to interpret the assessment data to identify strength and problems (Bernaman et al., 2010; Chabeli, 2007; Haapoja, 2014) and provides the basis for giving individualized care (Chabeli, 2007). The documentation of the diagnosis stage of the nursing process, therefore, makes it possible to document nurses' professional clinical judgment (Yearous, 2011). The diagnosis stage of the nursing process comprises the identification of patient's strengths, problems and a statement of a nursing diagnosis. Two of these parameters (patient strength and statement of a nursing diagnosis) were poorly documented in the reports. This means that nurses are not sufficiently documenting their clinical judgments made from the analysis of the patient's assessment data.

The triangulation showed a converging view of the patient's strength in both data sets. The majority (94.8%) of records had no documentation of the patient's strength and interview findings indicated no nurse documents the patient's strength. This indicates poor documentation of the patient's strength in the reports. Thus for each problem identified, the corresponding strength needed to solve the problem must be identified. However, in this study, the patient's strengths identified in the reports were not specific to any problem. They covered the patient's ability to take in medications and food and the level of consciousness of the patient. The identification of patient strength is a

crucial factor in the management of the patient's condition as it contributes to the resources the nurse employs to help the patient meet his/her needs. The nurses must thus place a greater focus on bringing forth and supporting the patient's strength in their care. Engaging patient's strengths in care help to ensure patients' participation and enhance the patient's self-worth as a member of the healthcare team (Gottlieb, 2014; Ringdal, Chaboyer, Ulin, Bucknall & Oxelmark, 2017). The unavailability of the patient's strength in the reports may imply nurses in the study were more problem-centered and gave less attention to the capabilities of the patients that may be employed to help deal with their problems. According to Gottlieb, (2014), the identification and use of the patient's strength are vital to care delivery as it helps to empower, and improve the self-efficacy of the patient, and enables the patient to assume greater control over their healing and health (Gottlieb). It is, therefore, necessary for nurses to assess the strength of their patients to identify patient's resources, competencies and skills that could be employed during the care process to enhance the recovery of patients and their families and facilitate patient-centered care (Gottlieb; Ringdal, et al.). The identified capabilities, skills and resources need to be communicated to other members of the healthcare team through accurate documentation.

This study again revealed all 39 reports reviewed had no evidence of stated nursing diagnosis in the report even though all the reports captured the patient's problems. The nursing diagnosis that forms the basis for the formulation of nursing goals and the selection of appropriate and individualized nursing interventions were not documented in the records. This may have a negative effect on the subsequent phases of the nursing process as

the effectiveness and adequacy of the subsequent phases depend on the data obtained from the earlier stages.

This study did not sort the reasons for this occurrence, however, earlier studies in the application of the nursing diagnosis in practice reported that some nurses find it challenging formulating the nursing diagnosis (Haapoja, 2014; Lusardi, 2012) and nurses in this study might not be exempted. The findings from this study are in line with the findings from Mbithi, et al. (2018) who revealed only 4% of participants fully formulated Nursing diagnosis and 71.5% did not formulate a nursing diagnosis. It also confirms that the application of nursing diagnosis is low as reported by Kamberi, (2018). The findings from this study and earlier studies, therefore, indicate poor documentation of the diagnosis phase of the nursing process. This, therefore, implies that the analytical conclusions drawn from the nursing assessments are not communicated to nurses and other health professionals.

Despite being unable to record nursing diagnosis, all 39 reports reviewed recorded the medical diagnosis of the patients and two nurses interviewed made mention that they record the diagnosis of their patients in the report. This is also very necessary as it gives the direction to the care activities to be initiated and implemented for the patient. However, the importance of the nursing diagnosis cannot be underestimated in the care of patients. Medical diagnosis dwells on the pathophysiology of the disease condition and the homeostasis changes but not the individual patient (Carpenito, 2013). It, therefore, does not pay much attention to individual differences since the focus is on the condition and not the individual. The nursing diagnosis on the other hand is based on the response of the patient to

medical diagnosis and the nurse has the autonomy to take action about it. Nursing diagnosis is needed in all client's care situations to clarify patients care needs and direct the plan of care and the actual care rendered. The medical diagnosis is therefore not sufficient to describe the nursing care needed by individual patients as patients with the same medical diagnosis may have different nursing care needs. The nursing diagnosis is thus needed in all patient care situations to ensure individualized care and the subsequent documentation of such in the records as evidence.

Subsequently, the inappropriate documentation of the diagnosis phase affected the documentation of the planning phase as well. From the triangulation, a full agreement was established in the two subthemes of the planning phase of the nursing process. Findings from the study revealed poor documentation of the planning phase of the nursing process. Both the objective and outcome criteria as well as the nursing orders were almost absent in the reports. This could be the ripple effect of the absence of a nursing diagnosis in the reports.

The document review result and interview results both suggest less documentation of objectives and outcome criteria in the reports. This is much expected as objective and outcome criteria are much dependent on the nursing diagnosis (Yearous, 2011). As the nursing diagnosis provides the foundation on which a nurse selects the appropriate nursing outcomes and interventions associated with that diagnosis (Yearous) and as such, the absence of a nursing diagnosis may subsequently lead to the absence of an objective and outcome criteria. The objectives and outcome criteria are nursing goals formulated after the diagnosis and are necessary for the selection of appropriate nursing

activities to be implemented to solve the patient's problems. It also serves as a yardstick for the measurement of the effectiveness of the nursing care implemented later in the process of the care.

Mbithi et al (2018) in their study to assess the utilization of the nursing process among five facilities reported a 7% formulated objective, however in 72% of records, outcome criteria were not stated. This aligned with the findings by Mwangi et al. (2019) who recorded 64% of records without goals. Consequently, the recording of nursing orders in the reports was also affected. Findings from the study showed 11 out of the 39 reports stated some sort of nursing strategy/order. However, these were repetitions of the physician's plan of action for the patient and included mainly the medication list as well as preparation for surgery. The others were mainly dependent on nursing activities such as the passing of catheter and nasogastric tubes. This was confirmed in the interview as respondents stated they write in the reports what the doctor has written to be done for the patient.

This finding from the two subthemes indicates poor documentation of the planning phase of the nursing process. From the theory of the nursing process, planning is done to determine nursing goals and identify nursing strategies or actions that could be employed to achieve the goal (Harkreader et al, 2007). The lack of a goal and specific nursing strategies might indicate that nurses caring for their patients use their discretion to determine what must be done for the patient or depend solely on the instructions given by the physician. The goals and nursing orders serve as a guide for the nurse's action during the implementation phase and later as criteria in evaluating patients' progress (Chabeli, 2007). Its absence is likely to bring inconsistencies in the

care of the patient and turn affect the quality of patient care. The findings from this study could be an indication that nurses concentrate more on their dependent roles and implement measures outlined by physicians rather than executing their independent role as healthcare team members.

Contrary to the earlier discussions on the components of the nursing process, the implementation phase of the nursing process was sufficiently captured in the nursing reports. A review of documents suggests nurses document their implemented nursing activities in the reports. All 39 reports reviewed recorded the care rendered to the patients. Similarly, results from the interviews also supported this finding as the majority (7 out of 9) of the respondents indicated they record their care rendered to the patient. This finding aligned with a retrospective study conducted by Semachew, (2018) in three hospitals in Northwest Ethiopia to assess the use of the nursing process in the hospitals. The study found that nursing intervention was present in about half of the documents reviewed. Contrarily, other studies reported low documentation of the implementation phase of the nursing process (Mbithi et al., 2018; Mwangi et al., 2019; Ojowole et al. 2017). Mbithi et al. found that about 72% of records had no intervention data. Ojowole et al. also gave similar findings stating that intervention data was documented in about 15% - 23% of patients' records. Still, in support of these empirical findings, Mwangi et al. (2019) added that 64% of records did not have interventions recorded. This may be attributed to the fact that the facilities in which these studies were conducted were known to have high patient populations which may lead to an increased workload and less documentation of nursing actions. However, the respondents for the studies were mostly diploma and degree holders.

Although interventions were recorded in most of the reports and most participants indicated they record their nursing interventions in the reports, most of the interventions identified were routine nursing care that was not specific to any particular problem. This implies the nursing interventions were not individualized and may not be specific to the patient's problems as the patients had a different diagnosis and their healthcare needs may as well differ. The most occurring intervention was the administration of mediation. Others that were present include orientation of patients toward the environment and ensuring patients' comfort in bed. Maintenance of personal hygiene was mostly recorded by the night nurse.

Subthemes with Partially Agreed

The partial agreement means that less than 50% of the findings for one of the methods and more than 50% for the other. The triangulation process revealed partial agreement in six (6) of the subthemes. These were patient's particulars, observations, health history, patient problems, medical diagnosis and evaluation. Three of these elements (patient particulars, observation and history) were assessment data. The other three were subthemes for diagnosis and evaluation.

Both interview and document review results indicated patients' particulars such as age, gender, bed number and diagnosis were captured in the reports. History was present in 94.8% of the document and 44.4% of nurses interviewed indicated recording patient's history in the form of signs and symptoms. All 39 reports recorded some sort of observation data while two nurses indicated they record the observation data in their reports. This shows some sort of assessment data was being recorded by the nurses in the reports.

Patient particulars are needed for safe identification of the patient during care delivery. Patient identification errors can disrupt care and borders on the safety of the patient (Williams & McCauley, 2016). Safety measures are critical to the delivery of nursing care. Chalebi, (2007) recommends the collection of patient's identification data as part of the nursing assessment. This information is used to verify the patient's identity before the administration of any nursing care. This is done to identify the right patient for the right care and to avoid errors in nursing care. Failure to correctly identify and match patient information to their intended care is a serious risk to patient's safety and the health organization as well (Williams & McCauley, 2016). As recommended by the ECRI, the patient must be identified and matched to prescribed medication, investigation, or nursing action prior to commencement (Williams & McCauley, 2016). From the reviewed records, the patient's identification data were present in all the reports although some reports did not have the gender of the patient. This may be because all the wards used for the study were single-gender wards and as such once a patient is found in a Ward he /she falls within a particular gender. However, it was still prudent that all the records state the gender of the patients in the report.

Another subtheme that established a partial agreement in the triangulation process was on the observational data. Again, document review and interview findings indicated nurses captured observational data in their report writing in the form of a patient's level of activity at the time of admissions such as ambulant, wheelchair or stretcher and the patient's condition such as conscious, and weak. Others recorded in the reports were who accompanied the patient to the ward and the presence of physical signs

such as jaundice and respiratory distress, soaked dressings on the wound. This was present in all 39 reports reviewed. However, interview reports suggested the contrary, as 7 out of 9 nurses did not mention recording their observations made on the patient. Observations are important assessment data that gives objective findings of the patient's condition. As such, its performance and documentation in the nursing reports must be of concern to the nurse.

The triangulation revealed a partial agreement for the patient's history in the record. Findings from the document review indicated that approximately 95% of the records had patient history while the interview gave 44.4%. Contrary to these findings, Akhu-Zaheya et al. (2017) recorded poor documentation of a patient's history. Good history taking is paramount in describing a differential diagnosis as it provides detailed information on the complaints of the patients. Health history is made up of chief complaints, present and past medical history, family history, medication history, current lifestyle, and psychosocial status (Lloyd & Craig, 2007). The document review indicated some nurses record the past and present medical history of their patients. Present medical history was present in 13 (33.3%) of the reviewed reports. They mainly described episodes or incidence that led to the current condition of the patient or gave chronological accounts of the problem prompting the patient to seek care. Past medical history was present in 9 (23%) of the reports. These were mainly the patient's chronic condition and routine medications that the patients were already on before admission. Interview results did not state past and present history. Again, both interviews and the document review did not report on the family history, psychosocial and lifestyle history of the patients. However, reviewed reports and interview

findings stated the patient's complaints which were mainly the signs and symptoms presented by the patient on admission. For the document review, some went further to tell how long the problem has lasted in line with recommendations that the principal symptoms should be well characterised with location, quality, timing, onset, duration and frequency, etc.

Generally, the findings from the study indicate an appreciable amount of assessment data was recorded in the reports. This finding differs from the findings of other studies conducted earlier in other countries. Mbithi, et al. (2018) and Akhu-Zaheya et al. (2017) who reported poor documentation of assessment data. Mwangi, (2019), stated the majority of files lack patient assessment and a complete assessment data was found in only one report.

Despite all the shortfalls in the documentation of the assessment phase of the nursing process, the findings from this study indicate an appreciable amount of assessment data recorded by the nurses. The findings however are consistent with the demand by the Joint Commission International Accreditation Standards for Hospitals (2017), that all healthcare providers must perform an initial assessment of the patient which consists of history and physical examination and document as such (Berman et al., 2010). A comprehensive patient assessment and the subsequent documentation of such, is necessary if quality nursing care will be given.

This finding is a plus to nursing documentation as it indicates how assessment data is valued by the nurses. It implies that nurses put in efforts to collect data on the patient when they arrive on the wards. This is an important nursing action as the success of all the other stages in the nursing process

depends on the effectiveness of the assessment stage and it is key to the provision of quality nursing care to the patient.

On the other hand, the findings indicated patient's problems were recorded by all the reports and a substantial number (44.4%) of nurses interviewed indicated they report on the patient's problems when writing their reports. However, the problems stated were mainly the chief complaints of the patient and it is made up of the physical signs and symptoms with no psychosocial problems. The identification of the patient's problems is a component of the diagnosis phase of the nursing process. Identifying the patient's problem, therefore, is the result of the analytical process conducted on the assessment data obtained. The findings from this study found that nurses were much concerned with the present history of the patients and did not consider the psychosocial as well as the lifestyle history of the patients. This may be why the problems identified were all physical problems. A comprehensive history taking and assessment need to be encouraged to enable the identification of problems and enhance holistic care.

An important aspect of nursing care is the possibility to evaluate whether implemented nursing interventions have had any effect on a patient's problem. The absence of properly state evaluations relate to specific nursing problems to a large extent creates a gap in nursing care as there is no documented evidence of the effectiveness of specific nursing interventions in solving specific patient problems. Document review results suggested some form of evaluation statements are present in the reports although it doesn't meet the criteria for an evaluation statement as described in the nursing process. However, results from the interviews suggest a few nurses evaluate

their care and document. Similar findings were reported in earlier studies conducted in other countries (Ojowole et al. 2017; Mbithi, et al., 2018; Mwangi, et al., 2019) who recorded low recording of the evaluation phase of the nursing process. Ojowole et al. found that 15.9% to 20.8% of records with evaluation statements. Similarly, Mbithi et al. revealed that only 2% of records had an evaluation and 87% did not document evaluation statements at all. Finally, Mwangi et al. (2019) recorded 12% documentation of complete evaluations and stated whether goals were met or not.

From the 39 reports reviewed, there were statements identified that could be termed as evaluation. However, these statements mainly expressed the general condition of the patient such as “patient is fairly ill”, “condition is fair”. These statements were not specific to any goals and gave a general idea concerning the health status of the patient. This may be as a result of the non-documentation of goals in the records. Comparing these evaluation statements to the expected, these evaluation statements are poorly stated as they do not meet the statement of evaluation as described by the nursing process. According to the nursing process theory, evaluation statements determine clients' progress towards achievements of goals and are specific to a particular goal (Chabeli, 2007; Harkreader et al, 2007; Bernaman et al., 2010).

Subtheme with Dissonance or Disagreement

The triangulation process recorded a dissonance or disagreement in one of the subthemes. The subtheme physical examination findings were present in the reports but were not mentioned in the interview. Findings from document review show physical examination findings mainly in the forms of vital signs recordings were significantly present in all 39 reports reviewed. In contrast,

interview results showed physical examination findings are not recorded by the nurses in the reports. Physical examination findings are results of examinations conducted through inspection, palpation, percussion and auscultation performed by the nurse to determine which body system is linked to the problem the patient is experiencing (Haapoja, 2014). Physical examination findings are objective data that is usually required to authenticate the data obtained from subjective sources such as history which might not give a complete picture of the patient's health status as it can be influenced by the patient's feelings.

The only physical examination findings present in the reports were values for vital signs. The vital signs recordings that were present in all the reports reviewed were temperature, pulse, respiration and blood pressure. Oxygen saturation was added in 20 of the reports, and Random Blood Sugar (RBS) values were recorded in 9 of the reports. Although the study did not examine why the nurses were checking only vital signs, the possible causes may be the unavailability of the necessary items required to perform the full nursing assessment or the lack of skill required to perform the assessment. For a new patient being admitted into the ward, a complete physical examination is important to determine the patient's current state of health to serve as a baseline so subsequent examinations could be compared to assess for improvement and otherwise in the patient's condition. The unavailability of such assessment findings in the records may hinder the effective communication of patient's information to other members of the healthcare team as the staff who were not around during the patient's admission may not

have any data to compare their findings to ascertain improvement or otherwise in the care rendered to the patients.

Form the discussion, the conclusion is that, the 24-hour nursing report does not have any documented structure that guides the nurse when writing. Because there is no outline of what should be included and what should not, it makes it difficult for the nurse to determine what to include. Perhaps, they may depend on their experience and their judgment to include what they think is necessary, thereby missing the very nursing aspect of the patient care that is very important to the nursing documentation. As argued by Johnson 2011, to obtain standardized nursing documentation, there is the need for the NMC to adopt an international nursing documentation standard that is the nursing process approach to help improve the content of documentation in Ghana.

Research Question 2: What nursing characteristics influence nursing documentation?

Knowledge of nurses on documentation

Findings from the interviews indicate all participants had a fair knowledge of what nursing documentation is and what needs to be documented in the patient record. They also described how knowledge is used in ensuring quality documentation. These findings are consistent with the findings by Adualem et al. (2019) who revealed 54.6% had good knowledge of documentation and 85% know they should document according to guidelines.

In support of these findings, Suhita, et al. (2017) found 53.8% of participants with sufficient knowledge in the documentation. However, their study went further to report that, there is no significant influence between

knowledge and implementation of nursing documentation. In support of this, Afolayan et al. (2013) posit knowledge of participants on the nursing process had no significant relationship with its application. Contrary to the findings of this study, Aseratie et al. (2014), reported otherwise, indicating that, participants in their study had a low level of knowledge on documentation.

Although this study did not directly study the impact of nurses' knowledge on documentation, the response from participants on how they ensure quality documentation indicated that their knowledge is being applied in the documentation of nursing care. This finding is supported by the Nurse Role Effectiveness Model (NREM) and the conceptual framework of this study which indicates the structural component and influencing factors respectively affect the process component in the NREM and the content of nursing documentation in the conceptual framework for this study.

Attitude and perception of nurses on documentation

The attitude and perception of the nurses on nursing documentation were found to be positive as almost all participants indicated it is necessary and placed a premium on it. They indicated it was needed for continuity of care and serves as legal backing. In agreement with the findings of this study, Andualem et al (2019) found 53.5% of respondents strongly agree on the equal importance of nursing documentation as many other documentations. To further support this, Petkovsek-Grorin and Skela-Savic, (2015) stated nurses perceive documentation as an important part of their work and believe it enhances quality and continuity of care, transparency and patient safety. The findings from this study were also supported by the study conducted by Nakate et al. (2015). Their findings indicated respondents strongly agree that

nursing documentation was meaningful and necessary for legal protection and priority for nursing.

The findings from this study could be attributed to the fact that the nurses have at least a diploma in nursing and as such have gone through lessons on nursing documentation and how important it is to the practice and the safety of patients. They, therefore, see it as an important component of their profession. To support these findings, Petkovsek-Grorin et al. (2015) stated nurses with at least a college degree attributed more importance to documentation compared to those with secondary education.

Research Question 3: How does work-environment situations impact on the content of nursing documentation?

The main activities from the work-environment identified in the study to influence nursing documentation were workload and staff strength and materials for documentation. Findings from the interview conducted to identify influencing factors of nursing documentation revealed that all the participants expressed concerns with the mismatch of staff strength and workload and how it affects their ability to document effectively. Several other findings from the empirical review supported these findings (Aseratie et al. 2014; Kebede et al, 2017; Mutshatshi, et al. 2018; Nakate, et al. 2015; Shihundla, et al 2016).

Nakate et al. (2015) agreed with the findings from this study stating that lack of time to document due to excessive workload prevent documentation of nursing activities. Similarly, participants in the study by Mutshatshi et al. (2018), gave an increased number of patient admission as an important reason for not recording. To further support these findings, Aseratie

et al. (2014) revealed nurses do not record because of a mismatch in unit workload and staffing.

The prime objective of every nurse is to provide efficient and effective nursing care to patients to enable them attain or maintain good health. This must be followed with accurate documentation of the same. In the face of increasing workload and time constraints, this is not done as the nurses might have a lot of patients to attend to and see the documentation as a secondary duty so concentrates on the direct care of the patient rather than documentation.

Adding on to the earlier findings in affirmation to the findings from this study, Suhita et al. (2017), found significant influence between work stress and implementation of care documentation. Also supporting the study findings was Shihundla, et al. (2016), stating workload contributes strongly to incomplete and illegible documentation. They went further to state that participants find it difficult to cope with the increased workload associated with documenting patient information on the multiple records that are utilized. In this study, the omission of most aspects of the nursing care in the reports may be attributed to the results of increased workload as the assessment of their knowledge on documentation indicated that most nurses understand they would have to document all their nursing actions and know how important documentation is to their work and that of other staff involved in the care of the patients. Having much work to be done by a few can lead to failure to do what is expected.

Almost all participants in the study identified inadequate supply of materials such as pens and forms for documentation as a challenge. Similar to

these findings Andualem et al (2019) said inadequate sheets were reported by 25.5% of the respondents. In support of this, another study revealed records of six (6) hospitals were poor as a result of inadequate provision of recording materials. (Mutshatshi et al. 2018)

Chapter Summary

The chapter presented the results of the study and the discussion of findings in relation to theoretical, empirical and conceptual literature in relation to nursing documentation and its influencing factors. The discussion of the findings was done in line with the research questions that the study sort to answer. A total of 39 reports were reviewed and 9 registered nurses were interviewed. The nurses interviewed were all females who have worked for a minimum of two years in the ward. Their educational qualifications were diploma and first degree. The reports reviewed were from medical and surgical wards and were written on patients with varied diagnoses. The ages of the patients fell within 2 to 80 years. All the reports were the admission reports written on the first day the patient was admitted to the ward and captured both the day and night reports.

The finding indicated that although the nurse does not follow the nursing process strictly when writing the reports, the various components of the nursing process was found in the report. Assessment data and intervention data were the most represented in the reports. Statements of nursing diagnosis, as well as objective and outcome criteria, were not found in any of the documents. However, all reports gave the physicians plan of action, which was mainly the list of drugs.

The findings also revealed all participants had a fair knowledge of documentation and the knowledge was applied in ensuring documentation was of quality. Supporting this finding in the study by Suhita et al. (2017). They reported 53.8% of respondents to have sufficient knowledge of documentation.

Again, the participants had a positive attitude towards nursing documentation and recognize it as an important activity needed to ensure continuity of care serve as a legal backing in medicolegal issues and ensure patients' safety. This finding was in line with the finding by Andualem et al (2019) who reported 53% of respondents strongly agreed on the equal importance of nursing documentation many other forms of documentation. To further strengthen this, another study reported respondents strongly agree that nursing documentation was meaningful and necessary for legal Nakate, et al (2015).

The most flagged influence on nursing documentation reported by the respondents was the issue of workload and staff strength. All participants unanimously stated workload and staffing as a major challenge contributing to nursing documentation. The findings concurred with the findings from Nakate et al (2015) who found a lack of time to document due to excessive workload prevents documentation of nursing activities.

Almost all participants also commented on the insufficient supply of materials for documenting such as pens, forms for nurses' notes and temperature charts. These findings were in agreement with the findings by Andualem et al (2019) and Mutshatshi et al (2018) who reported 25.5% of

respondents reported inadequate supply of sheets and poor records to exist in a hospital because of inadequate provision of materials.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

This chapter gives a summary of the research questions, key findings and conclusion from the analysis of data. It also provides information on the recommendations for further research.

Summary of the Study

The study sought to assess how the 24 hour nursing reports reflects the nursing process at the Effia Nkwata Regional Hospital in the Western Region of Ghana and find out which factors influence nursing documentation. It was expected that the study provides empirical evidence to the current state of nursing documentation and provide information on which factors have contributed to the state of nursing documentation. The study, therefore, outlined three main research questions to be answered. The results are presented and discussed in relation to the research questions.

To answer the research questions, 39 nursing reports from the male and female medical and surgical wards of the hospital were reviewed and 9 registered nurses were interviewed using an interview guide. A purposive sample was used to select 39 reports of patients who have spent at least 24 hours on the ward and 9 shift in-charges who write nursing reports for the interview.

Qualitative content analysis was used to analyse data from the nursing reports and transcribed interviews. The reports selected were all the first admission reports written on the patient and had a varied diagnosis. All nurses

interview were females with a minimum of two years of working experience in the ward and a basic qualification of diploma in nursing.

Key Findings

1. The study showed that nursing reports does not reflect the nursing process. The finding indicates that there is limited use of the nursing process in the documentation of patient care and nursing reports does not reflect the nursing process. However, the various components of the nursing process were evident in the patient's reports with the exception of stated nursing diagnosis and an objective and outcome criteria which were missing from the reports. This could be attributed to the fact that the nursing process is not strictly implemented in the delivery of nursing care.
2. The finding of the study revealed that nurses had fair knowledge of nursing documentation and its importance and expressed a positive attitude towards documentation. All the nurses gave a concise definition of nursing documentation as well as what makes documentation quality and described how they ensure their documentation is of high quality. Although this is not reflected in the reports written, it is a good step towards the improvement of nursing documentation.
3. The study found that the work-environment situation impacted on the nursing documentation negatively. For instance, most participants expressed concerns about the staff-patient ratio and how it hinders them from documenting effectively. Concerns were also raised on the periodic shortage of materials for documentation such as the

temperature charts, pens and nurse's notes. However, efforts are always made by the nurse to deal with the challenges. Notwithstanding these challenges, the nurses always try to document as much information on their patients as they can.

Conclusions

The findings from the study revealed that most nurses have theoretical knowledge in nursing documentation but this is not evident in the documentation that is made indicating a theory-practice gap. Several reasons could be given to this including the staffing and workload and availability of materials for documentation.

Again, the nurses sampled for the interview saw nursing documentation as a necessary nursing action that is needed for continuity of care and provides evidence in litigation issues. In spite of this, the records reviewed were not comprehensive enough to provide full information on the patient's state of health and other nursing activities performed. Therefore, it would be difficult for the records to serve these purposes effectively.

Recommendations

Based on the findings of the study, the following recommendations are made for the attention of the following institutions and professionals.

Health Facilities

1. In view of the findings of the limited application of the nursing process in the documentation, the nurse manager should collaborate with the hospital management and the in-service training department of the hospital to organize workshops and in service training sessions on nursing documentation for the registered nurses of the hospital to

improve the quality of nursing documentation. Topics to be discussed may include the application of the nursing process inpatient care; documentation of the stages of the nursing process in patient records; application of the nursing process to documentation among others.

2. The hospital management should decide on a format for writing nursing reports and recording other patient's information such as the nursing process to bring uniformity in the style and structure of documentation and ensure adequate documentation of all nursing actions undertaken by the nurse.
3. The study also found a limited supply of materials as one of the factors that influence nursing documentation. The hospital management should, therefore, ensure the adequate and constant supply of materials such as pens and the various charts and forms for documenting so that the nurses will also have the needed materials available to document their care.
4. Record audits should be conducted by ward in-charges at frequent intervals to assess how the records reflect the nursing process and the nursing care rendered. This will help identify how the various stages of the nursing process are captured in the records. The findings should be communicated to nursing staff and necessary actions taken by the nurses to improve the content of documentation.
5. Another factor identified to influence documentation was an imbalance in the staff strength and the workload. Management should as such ensure adequate staffing for the wards so that there will be enough nurses to care for the patients and reduce the workload.

Nursing and Midwifery Council of Ghana

1. The nursing and Midwifery council should conduct similar studies in other health institutions to see if similar findings will be found so the necessary action can be taken to improve the general application of the nursing process in the documentation of patient care.
2. The content of the nursing process in the training curricula should also be made more practical to make its application in practice easier and convenient.

Clinical Nurses and Nurse Educators

1. Nurse educators should emphasize the use of the nursing process in documentation when teaching to motivate the students to apply it when recording.
2. Clinical nurses should document appropriately and demonstrate a positive attitude towards documentation in order to influence students and other junior staff to document appropriately.
3. Nurse Managers and unit in-charges should institute periodic audit of records – at least every 3-4 months as recommended by the WHO. This will help identify lapses in the records and give information on which aspects of documentation the nurses need assistance with so that training could be tailored to those areas.
4. Registered nurses and nurse educators should make a conscious effort to seek for continuous professional development to improve their knowledge and skills in nursing as well as nursing documentation.

Suggestions for Further Research

I suggest further studies be conducted in the following area:

1. Multicenter research be conducted to assess the quality of nursing documentation.
2. An observational study of the documentation practice of nurses at Effia Nkwanta.
3. An action or implementation research on the application of the nursing process in 24-hour reports in a model ward in the Effia Nkwanta Regional Hospital.

REFERENCES

Abdel-Wahab, E., & Elsayed, B. M. (2014). The Relationship between Qualities of Nursing Documentation System and Continuity of Patient Care in Medicine Hospital at Cairo University Hospital. *Medicine Journal, Cairo University*, *82*(1), 573-581.

Abraham, J., Kannampallil, T., Brenner, C., Lopez, K. D., Almoosa, K. F., Patel, B., & Patel, V. L. (2016). Characterizing the Structure and Content of Nurse Handoffs: A sequential Conversational Analysis Approach. *Journal of Biomedical informatics 59*(2016), 76-88.

Abraham, S. A., Berchie, G. O., Okantey, C. Amoah, V. M. K., & Agyei-Ayensu, K. (2017). *Documentation of Fluid Balance of Patients on Intravenous Therapy in a University Hospital in Ghana. Promoting Health in the Clinical Setting*. 44th Biennial Conference (Indiana, USA, 28th October – 1st November 2017).

Afolayan, A. J., Donald, B., Baldwin, D. M., Onasoga, O., & Babafeni, A. (2013). Evaluation of the utilization of the nursing process and patient outcomes in psychiatric Hospitals Rumuigbo, Port Harcourt, Nigeria. *Advances in Applied Science Research*, *4*(5), 34-43.

Akhu-Zaheya, L., Al-Maaitah, R., & Hani, B. S. (2017). Quality of nursing documentation: Paper based health records versus electronic-based health records. *Journal of Clinical Nursing*, *1*(12).

Alkouri, O. A., AlKhatib, A. J., & Kwafhah, M. (2016). Importance of Nursing Documentation: Review Study. *European Scientific Journal, 12*(3), 101-106.

American Nurses Association (2015). *Nursing: Scope and Standards of Practice* (3rd ed.). Silver Spring, Maryland: American Nurses Association: Retrieved from http://www.nursingworld.rg/Nursing-Scope-Standards.

American Nurses Association (2010). ANA's *Principles of Nursing Documentation, Guidance forRegistered Nurses*. Silver Spring, Maryland: American Nurses Association.

Amponsah, A. K., Kyei, E. F., Agyemang, J. B., Boakye, H. Kyei-Dompim, J., Ahoto, C. K., & Oduro, E. (2020). Nursing _Related Barriers to Children's Pain Management at Selected Hospitals in Ghana: A descriptive Qualitative Study. *Pain Research and Management.* Retrieved from https://doi.org/10.1155/2020/7125060 21/07/2020

Andualem, A., Asmamaw, T., Sintayehu, M., Liknaw, T., Edmealem, A., Bewuket, B., & Gedfew, M. (2019). Knowledge, attitude, practice and associated factors towards nursing care documentation among nurses in West Gojjam Zone public hospitals, Amhara Ethiopia, 2018. *Clinical Journal Nursing Care Practice, 3*(1), 1-13.

Aqoulah, A. A. E., Ismail, S., Juni, H. M., Shahar, K. H., & Tubaishat, A. (2018). A Systematic Review of Factors that Contribute to the Quality of Nursing Documentation. *The Social Sciences, 13*(9), 1441-1452.

Asamani, J. A., Amenorpe, F. D., Babanawo, F., & Ofei, A. M. A. (2014). Nursing documentation of Inpatient Care in Eastern Ghana. *British Journal of Nursing 23*(1), 48- 54.

Aseratie, M., Murugan, R., & Molla, M. (2014). Assessment of Factors Affecting Implementation of Nursing Process Among Nurses in Selected Governmental Hospitals, Addis Ababa, Ethiopia; Cross-Sectional Study. *Journal of Nursing Care, 3*(3), 1-8.

Aseratie, M., Murugan, R., & Molla, M. (2014). Assessment of factors affecting implementation of nursing Process among nurses in selected government Hospitals, Addis Ababa, Ethiopia; cross sectional study, *Journal of Nursing Care*, 3 (170).

Asmirajanti, M., Hamid, A. Y. S., & Hariyati, T. S. (2019). Nursing Care Activities Based on Documentation. *BMC Nursing, 1*(32), 1-5.

Assanga. A. P., & Isiaho, A. L. (2017). Nursing Documentation: A Survey of Haemodilysis Documentation Status at Kenyatta National Hospital's Renal Unit. *American Research Journal of Nursing, 3*(1), 1-9.

Azevedo, O. A. D., Guedes, É. D. S., Araújo, S. A. N., Maia, M. M., & Cruz, D. D. A. L. M. D. (2019). Documentation of the nursing process in public health institutions. *Revista da Escola de Enfermagem da USP, 53*.

Baena De Moraes Lopes, M. H., Higa, B., Oliveira, N. R., & Christoforo, F. F. M. (2010). Evaluation of the Nursing Process use at Brazilian

Teaching Hospital. International *Journal of Nursing Terminologies and Classifications, 21*(3).

Bengtsson, M. (2016). How to Plan and Perform Qualitative Study using Content Analysis. *Nursing Plus Open, 2*(2016), 8-14.

Bernaman, A., Snyder, S., Kosier, B., & Erb, L. G. (2010). Fundamentals of Nursing, Concepts, Process and Practice (8th Ed.) Upper saddle River: Pearson Prentice Hall.

Bradshaw, C. Atkinson, S., & Doody, O. (2017). Employing a qualitative description approach in health care research. *Global Qualitative Nursing Research., 4*(1), 1-8.

Blake-Mowatt, C., Lindo, J. L. M., & Bennett, J. (2013). Evaluation of registered Nureses' Knowledge and Practice of documentation at a Jamaican Hospital. *International Nursing Review, 60*(3), 328-334.

Bowen, G. A. (2013). Naturalistic Inquiry and the Saturation Concept: a research notes. *Sage Qualitative Research, 8*(1), 137-150.

Broderick, C. M. & Coffey, A. (2013). Person-centered Care in Nursing Documentation. *International Journal of Older People Nursing,*

Capek, J., Pascarella, J. & Wymard-Tomlinson, D. (2013). Effective communication at change of shift. Standardize the process to increase report efficiency and patient safety. *Nursing Critical Care 8*(5), 22 -24.

Carpenito, L. J. (2013). *Nursing Diagnosis Application in Clinical Practice* (14th Ed.). Wolters Philadelphia, USA: Kluwer Lippincott Williams and Wilkins.

Chabeli, M. (2007). Facilitating critical thinking within the nursing process framework: a literature review, Health *SA Gesondheid, 12*(4), 69-89.

Charalambous, L., & Goldberg, S. (2016). 'Gaps, mishaps and overlaps'. Nursing documentation: How does it affect care? *Journal of Research in Nursing*, *21*(8), 638-648.

Chaturvedi, S., Randive, B., Raven, J., Diwan, V., & De Costa, A. (2015). Assessment of the Quality of Clinical Documentation in India's JSY cash Transfer Program for Facility Births in Madhya Pradesh. *International Journal of Gynaecology and Obstetrics*, *132*(2016) 179-183.

Chelagat, D., Sum, T., Obel, M., Chebor, A., Kiptoo, R., & Bundotich-Mosol, P. (2013). Documentation: Historical Perspectives, Purpose, Benefits and Challenges as faced by Nurses. *International Journal of Humanities and Social Science*, *3*(16), 236-239.

Colourafi, K. J., & Evans, B. (2016). Qualitative description Methods in Health Science Research. *Health Environment Research and Design Journal, 9* (4), 16-25.

Cunningham, L., Kennedy, J., Nwolisa, F., Callard, L., & Wike, C. (2012). Patients not paperwork–Bureaucracy affecting nurses in the NHS. *NHS Institute for Innovation and Improvement, London. [Google Scholar]*.

Diali, A.G., Toulabi, T., Gholami, M., Tarrahi, M.J., & Khademi, M. (2016). Challenges of Nursing Documentation in Coronary Care Unit: a Qualitative Study of Nurses' Experiences. *Institute of Integrative Omics and Applied Biotechnology (IIOAB), 7*(8), 134-140.

Duclos-Miller, P. A. (2007). Managing documentation Risk: A guide for nurse managers (2nd. Ed.). Marblehead: USA. HCPro, Inc.

Duclos-Miller, P. A. (2016). Improving Nursing Documentation and Reducing Risk. Brentwood: USA. HCPro, Inc.

Elo, S. & Kynga, S. H. (2008). The qualitative content analysis process. *Journal of Advanced Nursing, 62*(1), 107-115.

Elo, S., Kääriäinen, M., Kanste, O., Pölkki, T., Utriainen, K., & Kyngäs, H. (2014). Qualitative content analysis: A focus on trustworthiness. *SAGE open, 4*(1).

Erlingsson, C., & Brysiewicz, P. (2017). A Hands-on Guide to doing Content Analysis. *African Journal of Emergency Medicine, 7*(3), 93-99.

Farmer, T., Robinson, K., Elliott, S. J., & Eyles, J. (2006). Developing and Implementing a Triangulation Protocol for Qualitative Health Research. *Qualitative Health Research 16*(3), 377-394.

Flick, U. (2013). Mapping the field. The Sage handbook of Qualitative data analysis.

French, C., & Stavropoulou, C. (2016). Specialist nurses' perception of inviting patients to participate in clinical research studies: a qualitative descriptive study of barriers and facilitators. *BMC Medical Research Methodology 16* (96), 1-12.

Ghasaby, M. M. (2012). Quality and Barriers against Nursing Documentation in Kashan Shahid Beheshti Hospital. *Modern Care Journal, 9*(4), 336-343.

Ghana health Service (2017). *The Patient Charter*. Accra, Ghana: Ghana Health Service.

Gomes, C. D., Cubas, R. M., Pleis, E. L., Shmeil, M., A. H., & Peluci, A. P. V. D. (2016). Terms used by nurses in the documentation of patient progress. *Revista Gaúcha de Enfermagem, 37*(1).

Gottlieb, L. N. (2014). Strength-base nursing. *American Journal of Nursing 14*(8), 24-32.

Graneheim, U. H. & Lundman, B. (2004). Qualitative content Analysis in Nursing Research: Concepts, Procedures and Measures to Achieve Trustworthiness. *Nurse Education Today*, *24*(1), 105-112.

Grant, C. & Osanloo, A. (2014). Understanding, Selecting, and Integrating a Theoretical Framework in Dissertation Research: Creating the Blueprint for your "House". *Administrative Issues Journal*, *4*(2), 17.

Guion, L. A. (2002). Triangulation: establishing the validity of qualitative studies. Institute of food and agricultural science. University of Florida.

Haapoja, A. (2014). The nursing process, a tool to enhance clinical care–a Theoretical Study.

Hall, N. D. (2006). Toward a new horizontal federalism: Interstate water management in the Great Lakes region. *U. Colo. L. Rev.*, *77*, 405.

Hancock, B., Windridge, K., & Ockleford, E. (2009). *An Introduction to Qualitative Research*. The National Institute for Health Research, Research Design Service. East Midlands.

Harkreader, H., Hogan, M. A., & Thobaben, M. (2007). *Fundamentals of Nursing. Caring and Clinical Judgement* (3rd ed.). Philadelphia: Sauders Elsevier.

Hawkins, E. J. (2016). Qualitative Descriptive Study of the Experiences of Nurse Educators in Developing and Implementing Concurrent Enrollment ADN – BSC Programs. (PHD Thesis). Nova Southeastern University.

Hayrinen, K., Lammintakanen, J., & Saranto, K. (2010). Evaluation of electronic nursing documentation – Nursing Process Model and standardized terminologies as key to visible and transparent nursing. *International Journal of Medical Informatics 79*(2010), 554-564.

Heale, R., & Forbes, D. (2013). Understanding triangulation in research. *Evidenced Base Nursing, 16*(4).

Hsieh, H., & Shannon, S. E. (2005). Three Approaches to Qualitative Content Analysis. *Qualitative Health Research, 15*(9), 1277-1288.

Inan, N. K., & Dinc, L. (2013). Evaluation of Nursing Documentation on Patient Hygienic Care. *International Journal of Nursing Practice, 19*(1), 81-87.

Instefjord, H. M., Aasekjaer, K., Espehavig, B., & Graverholt, B. (2014). Assessment of quality in psychiatric nursing documentation: a clinical audit. *BMC Nursing, 13*(32), 1-7.

Irvine, D., Sidani, S., & Hall, L. M. (1998). Linking Outcomes to Nurses' Role in Healthcare. *Nursing Economics, 16*(2), 58-87.

Jabareen, Y. (2009). Building a Conceptual Framework: Philosophy, Definitions, and Procedures. *International Journal of Qualitative Methods. 8(*4), 49-62.

Jefferies, D. Johnson, M. & Griffiths, R. (2010). A meta-study of quality nursing documentation. *International Journal of Nursing Practice, 16* (2), 112–124.

Johnson, B. B. (2011). Nursing documentation as a communication tool: (a case study from Ghana) (Master's thesis, Universitetet i Tromsø).

Joint Commission International Accreditation Standards for Hospitals including Standards for Academic Medical Center Hospitals (6th Ed.) https://www.jointcommissioninternational.org/-/media/jci/jci-documents/accreditation/hospital-and-amc/jci-standards-only_6th-ed-hospital.pdf

Jones, D., Lunney, M., Keenan, G., & Moorhead, A. S. (2011). Standardized nursing Languages, Essential for Nursing Workforce. *Annual Review of Nursing Research, 28*(1), 253-294.

Kamberi, F. (2018). Knowledge and Attitudes of Nurses toward the Use of Nursing Diagnosis in Clinical Practice. *Eastern-European Journal of Medical Humanities and Bioethics, 2*(2), 43-55.

Kamil, H., Rachmah, R., & Wardani, E. (2018). What is the problem with nursing documentation? Perspective of Indonesian nurses. *International Journal of Nursing Sciences, 9*(2018), 111-114.

Kebede, M., Endris, Y., & Zegeye, T. D. (2017). Nursing Care Documentation Practice: The Unfinished Task of Nursing Care in the University Gondar Hospital. *Informatics for Health and Social Care, 42*(3), 290-302.

Keris, M. (2014). *What are the Most Common Allegations Towards Nurses?* Retrieved from https://www.lorman.com/resources/what-are-the-most-common-allegations-towards-nurses14745

Kolb, S. M. (2012). Grounded Theory and the Constant Comparative Method: Valid Research Strategies for Educators. *Journal of Emerging Trends in Educational Research and Policy Studies, 3*(1), 83-86.

Krishna, R, & Khyati, G. V. (n.d). Nursing errors in documentation: a review. *RUAS-UAS JMC 3*(2), 15- 17.

Lamond, D. (2000) . The information content of the nurse change of shift report: A comparative study. *Journal of Advanced Nursing 31*(4), 794-804

Lindo, J., Stennett, R., Stephenson-Wilson, K., Barrett, A. K., Bunnaman, D., Anderson-Johnson, P., Waugh-Brown, V., & Wint, Y. (2016). An Audit of Nursing documentation at Three Public Hospitals in Jamaica. *Journal of Nursing Scholarships, 48*(5), 508-516.

Lloyd H, & Craig, S. (2007). A guide to taking a patient's history. *Nursing Standard. 22* (13), 42-48.

Lusardi P. (2012). So you want to change practice: recognizing practice issues and channeling those ideas. *Critical Care Nurse, 32*(2), 55-64.

Mackle, D., & Nelson, K. (2018). Research Nurses in New Zealand Intensive Care units: A qualitative Descriptive study. Australian

Australian Critical Care: Official. *Journal of the Confederation of Australian Critical Care Nurses, 32*(2), 148-154.

Mayring, P. (2014). Qualitative content analysis: theoretical foundation, basic procedures and software solution.

Mbithi, B., Mwenda, S. C., & Karonjo, J. (2018). Observed utilization of the nursing process among nurses in selected public health care facilities in Kenya. *International Journal of Nursing Science*, *8*(5), 77-82.

Miles, M.B., & Huberman, A. M. (1994). Qualitative Data Analysis. An expanded Source book (2nd ed.). Newbury Park, CA: Sage.

Mishra, S. B., & Alok, S. (2011). Handbook of research Methodology (a compendium for scholars and researchers). New Delhi, India: Education Publishing.

Muijs, D. (2004). Doing quantitative research in education with SPSS. London, United Kingdom, Sage Publications.

Müller-Staub M. (2009) Evaluation of the Implementation of Nursing Diagnosis, Interventions, and Outcomes. *International Journal of Nursing Terminologies and Classifications, 20*(1), 9-15.

Müller-Staub, M., Lavin, M. A., Needham, I., & Van Achterberg, T. (2006). Nursing diagnoses, interventions and outcomes - Application and impact on nursing practice: Systematic review. *Journal of Advanced Nursing, 56*(5), 514–531.

Muller-Staub, M., Odenbriet, M., Lavin, M., & Van Achterberg, T. (2007). Improved Quality of Nursing Documentation: Results of Nursing Diagnosis, Interventions, and Outcome Implementation Study. *International Journal of Nursing Terminologies and Classifications, 18*(1), 5-17.

Mutshatshi, T.E., Mothiba, T.M., Mamogobo, P.M., & Mbombi, M.O., (2018). Record-keeping: Challenges experienced by nurses in selected public hospitals', *Curationis 41*(1), 1-6.

Myrick, K., & Del Vecchio, P. (2016). Peer support services in the behavioral healthcare workforce: State of the field. *Psychiatric Rehabilitation Journal, 39*(3), 197.

Mwangi, C., Meng'anyi, L. W., & Mbugua, R. G. (2019). Utilization of Nursing Process among Nurses Working at a level 5 Hospital, Kenya. *International Journal of Nursing Science, 9* (1), 1-11.

Nakate, G., Dahl, D., Drake, K. B., & Petrucka, P. (2015). Knowledge and Attitudes of Select Ugandan Nurses towards Documentation of Patient Care. *African Journal of Nursing andMidwifery, 2*(1), 56-65.

Nakate, G.M., Dahl, D., Petrucka, P., Drake, K. & Dunlap, R. (2015). The Nursing Documentation Dilemma in Uganda: Neglected but Necessary. A Case Study at Mulago National Referral Hospital. *Open Journal of Nursing, 5*(12), 1063-1071.

Neergaard, A. M., Olesen, F., Anderson, S. R., & Sonndergard, J. (2009). Qualitative Description – the Poor Cousin of Health Research? BMC Medical Research Methodology 9(1), 52.

Nuryani, N., & Susanti, D., D. (2014). Relationship between nurse knowledge and completeness of nursing care documentation in RSUD dr. Soekardjo, Tasikmalaya City. *Indonesian Health Information Management Journal. Jakarta.*

O'Briem, J. A. & Cowman, S. (2013). An exploration of Nursing Documentation of Pressure Ulcer Care in an Acute Setting in Ireland. *Journal of Wound Care. 20*(5).

Ofi, B., & Sowunmi, O. (2012). Nursing documentation: Experience of the use of the nursing process model in selected hospitals in Ibadan, Oyo State, Nigeria. *International Journal of Nursing Practice, 18*(4), 354-362.

Omonigho, P. O. (2015). Public Health nurses Knowledge and use of Nursing process for documentation of care in southwest, Nigeria. *South American Journal of Nursing*, 1 (2), 1-8.

Ojewole, F.O., Samole, A. O. (2017). Evaluation of the nursing process utilization in a teaching hospital, Ogun State, Nigeria. *Journal of Nursing and Midwifery Science, 20*(4), 97-103.

Paans, W., Sermeus, W., Nieweg, M. B. R., & Van Der Schans, C. P. (2010). Development and psychometric testing of the D-Catch instrument, a measurement instrument for nursing documentation in hospitals. *Journal of Advanced Nursing*, *66*(6), 1388-1400.

Paans, W., Sermeus, W., Nieweg, M. B. R., & Van Der Schans, C. P. (2010). Prevalence of accurate nursing documentation in patients' records. *Journal of Advanced Nursing*, 2481-2489.

Perry, G. A., & Potter, P. A. (2006). *Clinical Nursing Skills Techniques* (6th Ed). St. Louis, Missouri: Mosby Inc.

Petkovšek-Gregorin, R. & Skela–Savič, B., (2015). Nurses' perceptions and attitudes towards documentation in nursing. *Health Care Review, 49*(2), 106–125.

Polit, D. F., & Beck, C. T. (2010). Essentials of Nursing Research: Methods, Appraisal and utilization (6th Ed.). Philadelphia, USA: Wolters Kluwer Health | Lippincott Williams & Wilkins.

Rajkoic, U., Kapun, M. M., Dinevski, D., Prijatelj, V. Zaletel, M. Sustersic, O. (2016). The status of Nursing Documentation in Slovenia: a Survey. *Journal of Medical System, 40*(9), 198.

Ringdal, M., Chaboyer, W., Ulin, K. Bucknall, T., & Oxelmark, L., (2017). Patient preferences for participation in patient care and safety activities in hospitals. *BMC Nursing* 16**,** (69). Sage (2016). www.us.sagepub.co/

Sandelowski, M. (2010). What's in a Name? Qualitative Description Revisited. *Research in Nursing and Health, 33*(1), 77-84.

Saranto, K., Kinnunen, U., Kivekas, E., Lappalainen, A., Liljamo, P., & Rajalahti, E. (2014). Impact of structuring nursing records: a systematic review. *Scandinavian Journal of Caring Science, 28* (1), 629 – 664.

Schreier, M. (2012). Ways of doing Qualitative Content Analysis: Disentangling Terms and Terminologies. *Forum Qualitative Social Research 15*(1).

Scotland, J. (2012). Exploring the philosophical underpinnings of research: relating ontology and epistemology to the methodology and methods of the scientific, interpretive, and critical research paradigms. *English Language Teaching, 5*(9), 9-16.

Scruth, E. A. (2014). Quality Nursing Documentation in the Medical record. *Clinical Nurse Specialist CNS 28(*6), 312 – 314.

Semachew, A. (2018). Implementation of nursing process in clinical settings: the case of three governmental hospitals in Ethiopia, 2017. *BMC Research Notes, 11*(1), 173.

Setz, V. S., & D' Innocenzo, M. (2009). Evaluation of the Quality of Nursing Documentation through review of patient's medical records. *Acta Paul Enferm, 22*(3), 313-317.

Shihundla, R.C., Lebese, R.T., & Maputle, M.S., (2016). Effects of increased nurses workload on quality documentation of patient information at selected Primary Health Care facilities in Vhembe District, Limpopo Province', *Curationis*, *39*(1), 1-8.

Stewart, K., Doody, O., Bailey, M., & Moran, S. (2017). Improving the quality of nursing documentation in a palliative care setting: a quality improvement initiative. *International Journal of Palliative Nursing, 23*(12), 577-585.

Stonehouse, D. P. (2017). Understanding the Nursing Process. *USIR* Retrieved from http://usir.salford.ac.uk/46573/

Suhita, M., Sutrisno, J., & Dewi, K. P. (2017). Factors Influencing Nurses Implementing Documentation at Muhammadiyah Hospital, Kedri City. *Health Notions, 1*(4), 301 -307.

Suter, J. W. (2003). *Documentation Basics: A Guide to Planning and Managing Documentation Projects*. New York, USA: New York State Achieves.

Taiye, B. H. (2015). Knowledge and practice of Documentation among Nurses in Ahmadu Bello University Teaching Hospital (Abuth) Zaria, Kaduna State. *Journal of Nursing and Health Sciences, 4*(6), 1-6.

Tchiakpe, P. M., Ankomah-Lomotey, S., Kobia-Acquah, E. Slocombe, F., Nkansah, K. E., Djeagbo T. P., & Nkansa-Kyerematen, I. (2018). The Ghanaian Patient's Charter: Patient Awareness, and Implementation in Selected Public Ophthalmic Health Institutions in Ghana. *EC Ophthalmology, 9*(8), 594-601.

Tuinman, A., De Greef, M. H. G., Krijnen, W. P., Paans, W., & Roodbol, P. F. (2017). Accuracy of documentation in the Nursing Care Plan in Long-term Institutional Care. *Geriatric Nursing 38*(6), 578-583.

Thorodden, A., Sigurjónsdóttir, G., Ehnfors, M., & Ehrenberg, A. (2013). Accuracy, completeness and comprehensiveness of information on pressure ulcers recorded in the patient record. *Scandinavian Journal of Caring Sciences*, *27*(1), 84-91.

Tsang, J. L. Y., Ross, K., Miller, F., Maximous, R., Yung, P., Marshall, c., Camargo, M., Fleming, D., & Law, M. (2019). Qualitative Descriptive study to Explore Nurses Perception and Experience on Pain, Agitation and Delirium Management in a Community Intensive Care Unit. *BMJ Open 2019* (9), 1-9.

Tuinmman, A., de Greef, M. H. G., Krijnen, W. P., Paans, W., & Roodbol, P. F. (2017). Accuracy of documentation in the Nursing Care Plan in Long-term Institutional Care. *Geriatric Nursing 38*(6), 578-583.

United States Agency for International Development [USAID] Monitoring and evaluation Fundamentals (2010). *An introduction to triangulation*. Retrieved from https://www.unaids.org/sites/default/files/sub_landing /files/10_4-Intro-to-triangulation MEF.pdf

Von Krogh, G., & Naden, D. (2008). Implementation of Documentation Model Comprising Nursing Terminologies –Theoretical and Methodological Issues. *Journal of Nursing Management, 16*(3), 275-283.

Wang, Q., Wang, Z., Awasthi, M. K., Jiang, Y., Li, R., Ren, X., ... & Zhang, Z. (2016). Evaluation of medical stone amendment for the reduction of nitrogen loss and bioavailability of heavy metals during pig manure composting. *Bioresource Technology*, *220*, 297-304.

Wilbank, B. A., Geisz-Everson, M., Clayton, B. A., & Boust, R. R. (2018). Transfer of Care in Perioperative Settings: a Descriptive Qualitative Study. *American Association of Nurse Anesthetists Journal*, *86*(5), 401-407.

Willis, D. G., Sullivan-Bolyai, S., Knafl, K., & Cohen, M. Z. (2016). Distinguishing Features and Similarities between Descriptive Phenomenological and Qualitative Description Research. *Western Journal of Nursing Research*, *38*(9), 1185-1204.

Williams, P. A., & McCauley, V. (2016, December). Always connected: The security challenges of the healthcare Internet of Things. In *2016 IEEE 3rd World Forum on Internet of Things (WF-IoT)* (pp. 30-35). IEEE.

World Health Organisation (2003). *Improving Data Quality: A guide for Developing Countries*. Philippine: World Health Organisation.

Yarney, L. Buabeng, T. Baidoo, D., & Bawole, J. N. (2016). Operationalisation of the Ghanaian Patients' Charter in a Peri-urban Public Hospital: Voices of Healthcare Workers and Patients. *International Journal of Health Policy and Management*, *5*(9), 525-533.

Yearous, S. K. G. (2011). School nursing documentation: Knowledge, attitude and barriers to using standardized nursing language and current practices. IOWA Research Online. Retrieved https://ir.uiowa.edu/etd/3411.

Yin, R. K. (2009). Case Study Research: Design and Methods (4th Ed.). Thousand Oaks, CA: Sage.

Yocum, R. F. (2002). Documenting for quality patient care. *Nursing Management, 32*(8), 58-63.

Zhang, Y., & Wildemuth, B. M. (2009). Qualitative Analysis of Content. In B. Wildemuth (Ed.), *Applications of Social Research Methods to Questions in Information and Library Science (pp. 308-319). Westport, CT: Libraries Unlimited*

APPENDICES

APPENDIX A

DATA EXTRACTION SHEET FOR NURSING REPORTS

Report ID:……..…….. Ward: ……..

Date: …….. …….. Reviewer: ……..

CATEGORY	SUBCATEGORY	YES	NO	QUOTATION	COMMITMENT
ASSESSMENT	*a. Observation*				
	b. Nursing health history				
	c. Findings from physical examination				
DIAGNOSIS	*a. Statement of patients strength*				
	b. Statement of patients problems				
	c. A clearly stated nursing diagnosis				
PLANNING	*a. Goals or desired outcomes*				
	b. Stated nursing strategies/ interventions				
IMPLEMENTING	***NURS REP***				
	a. Actual care rendered				
	b. Patient's response to care				
EVALUATION	***NURS REP 1***				
	A documented statement of evaluation related to the stated outcome/goal				

APPENDIX B

INTERVIEW GUIDE FOR NURSES

UNIVERSITY OF CAPE COAST

COLLEGE OF HEALTH AND ALLIED SCIENCES

SCHOOL OF NURSING

ASSESSING THE UTILISATION OF NURSING PROCESS IN THE 24 HOUR NURSING REPORTS

I'm grateful for your time and interests in this study. This interview schedule is designed to seek views and perceptions concerning the quality of nursing documentation. You are being invited to respond to some questions in order to know your views on the issues. The study is purely for academic purposes and that all the information that you provide will be confidential. For more information and details about the study, ***please contact Asantewaa Amma Menya, (+2330244711998, princessmenya@yahoo.com)***

INTERVIEW GUIDE FOR NURSES

INTRODUCTION

1. What is your rank?
2. How long have you worked on the ward?
3. What is your basic qualification?

HOW NURSING REPORTS REFLECTS THE NURSING PROCESS

4. Describe how you write your reports on your patient's condition
5. What informs this style of documentation?

NURSE CHARACTERISTICS THAT INFLUENCE NURSING DOCUMENTATION

6. What is your understanding of nursing documentation?
7. Do you face any challenges with regards to how to document?
8. What is your understanding of quality nursing documentation?
   a. What makes a quality nursing documentation in your opinion?
   b. How do you ensure that nursing documentation is of high quality?
9. How necessary is it, to document what you do as a nurse when you are on duty?

WORK-ENVIRONMENT SITUATION

10. What factors within the work-environment can affect your documentation? Probe further to understand how the factors affect documentation
    a. In what ways do these factors affect your documentation?
    b. Describe instances where you were not able to document your nursing actions?
    c. How does the ward activities affect what you documentation? / In what way does ward activities affect your documentation.
    d. What can you say about the materials for documenting?

e. Which other situations at the workplace affect your documentation

f. Generally, how satisfied are you with the documentation done by nurses?

g. What do you think can be done to improve the quality of nursing documentation?

h. What other concerns or information would you want to share with regards to nursing documentation?

Thank you for your time

APPENDIX C

CODEBOOK FOR ANALYSING NURSING REPORTS

CATEGORIES	SUB CATEGORY	DEFINITION	CODES	EXAMPLE
ASSESSMENT				
	• Patient particulars	Information on the identity of the patient	• Age • Gender • Diagnosis • Time of admission • Admitting physician	• 54years • Female • Hypertension • 1:30pm • Dr. Edor
	• Nursing health history		• Includes patient's chief complaints / reason for visit (in clients own words) • Present history When symptom started, location, duration etc • Past history • Family history • How patient entered the ward.	• Severe abdominal pain started two days ago • Patient complains of difficulty in breathing • Knocked down by a vehicle • A known diabetic patient • Mother is a known asthmatic • Patient came in on a stretcher in the company of a student nurse
	• Findings from physical examination	What was obtained through inspection, auscultation, palpation and percussion	• Other observable signs	• Looked pale and ill • Has bandage on left leg • Has catheter in situ

			• Vital signs	• Temperature 36.5, pulse 76, resp. 18 • dry skin, • diminished breath sounds
DIAGNOSING				
	• Statement of patients strength	• Patients capabilities that will be necessary to solve the health problem	• Patients strength specific to a problem	• Patient can sit up in bed • Has a normal weight for height and age • Has no allergies
	• Patients health problems	• Identified health problems	• Identified health problems stated in nurses words	Patient has temperature of 38.4 Patient complains of pain at the lower abdomen
	• A clearly stated nursing diagnosis	• Statement that describes deviation from health, presence of risk factors	• NANDA nursing diagnosis	Ineffective airway clearance related to accumulated mucous obstructing the airway
PLANNING				
	• Goals or desired outcomes	• Observable clients response the nurse hopes to achieve by implementing the interventions	• Nursing goals related to identified health problems	Restore effective breathing Relieve patients pain
	• Stated nursing strategies/ order	Specific actions to be undertaken by the nurse to solve patient's problem	Planned nursing actions initiated by the nurse	Elevate the head end of the bed Encourage patient to take in copious fluids Serve prescribed medications

	• Physicians plan of action	Activities written by the doctor to be done	• A plan of activities indicated by the physician to be undertaken to solve the patients problems List of drugs	Observe NPO To undergo surgery tomorrow Alternate day wound dressing Check RBS twice daily
IMPLEMENTATION	• Actual nursing care rendered	Actions that the nurse performs to achieve clients goals	• Comfort measures • Positioning • Nutrition • Medication • Personal hygiene	Patient made comfortable in bed Patient placed in high fowlers position to facilitate breathing Meals served Personal hygiene maintained
	• Patient's response to care			• Doing well on medication • Slept soundly • No complaints
EVALUATION	• Statement of evaluation related to the stated outcome/goal	A statement that describes client's progress towards the achievement of the set outcomes/goals	• Patient response that indicates progress towards achievement of goals or otherwise.	• Goal fully met as patient has a clear airway on lung auscultation. • Goal partially met as patient's temperature has reduced from 38.4 to 37.7

APPENDIX D

SAMPLE OF DATA EXTRACTION FROM THE NURSING REPORTS

Report ID:…….. …….. Ward : ……..

Date: …….. …….. Reviewer: ……..

CATEGORY	SUBCATEGORY	YES	NO	QUOTATION	COMMEMENT
ASSESSMENT	***NURS REP 1***				
	a. Observation	X		• Child came to the ward ambulant at 2:30pm in a conscious state.	
	b. Nursing health history	X		• According to his mother, child was well until yesterday when he was playing outside along the road and he was knocked down by a moving vehicle.	
	c. Findings from physical examination	X		• Child sustained in multiple injuries. • vital signs checked and recorded as T - 36.6^{o}C, P - 118bpm, R - 28cpm • Vital signs checked and recorded	
DIAGNOSIS	***NURS REP1***				
	• *Statement of patients strength*		X		
	•	X		Child sustained in multiple injuries	
	• *Statement of patients problems*		X		
	• *A clearly stated nursing diagnosis*		X		
PLANNING	***NURS REP 1***				

	c. Goals or desired outcomes		X	
	Stated nursing strategies/ interventions	X		To dress the wound as burns
IMPLEMENTING	***NURS REP 1***			
	d. Actual care rendered	X		• Child was made comfortable in bed • Mother and child reassured and oriented to ward and it's protocol. • Prescribed treatment served and personal hygiene assisted to maintain.
			X	• Due treatment served and personal hygiene maintained. Patient reassured of general recovery
	e. Patient's response to care			
EVALUATION	***NURS REP 1***			
	A documented statement of evaluation related to the stated outcome/goal	X		• Condition is fair. • Condition is fair.

APPENDIX E

INFORMATION ABOUT RESEARCH TO PARTICIPANTS

UNIVERSITY OF CAPE COAST

INFORMATION ABOUT RESEARCH TO PARTICIPANT

Research Title: Exploring the Quality of Nursing Documentation at Effia Nkwanta Regional Hospital

Principal Investigator: Asanteewaa Amma Menya

Address: School of Nursing and Midwifery, College of Health and Allied Sciences, University of Cape Coast, University Post Office, Cape Coast, Ghana.

Email: princessmenya@yahoo.com Telephone: 024 4711 998

General Information about Research

I am undertaking this research in partial fulfilment for the award of a master's degree certificate in nursing. This research seeks to assess the quality of nursing documentation in Effia Nkwanta Regional Hospital. The focus of the study is to assess how the nursing reports reflect the nursing process, explore nurse characteristics that influence nursing documentation and identify work situation characteristics that influence the quality of nursing documentation. The researcher will engage you for a period of about an hour during which you will be interviewed on issues relating to nursing documentation at the hospital. The interview will be recorded.

Procedures

To find answers to some of these questions, we invite you to take part in this research project. If you accept, you will be required to participate in an interview with Asantewaa Amma Menya.

You are being invited to take part in this interview because of your experience as a registered nurse can contribute much to this research.

You may be required to answer questions in relation to your knowledge on nursing documentation, workload on the ward, staffing and materials for documentation and how these factors impact on the quality of nursing documentation.

If you do not wish to answer any of the questions posed during the interview, you may say so and the interviewer will move on to the next question. The interview will take place in the hospital (at the nurses room), and no one else but the interviewer will be present. The information recorded is considered confidential, and no one else except Asantewaa Amma Menya will have access to the information documented during your interview.

The expected duration of the interview is about 30 – 45 minutes. This interview will be recorded which will be stored for a minimum of five years under lock and key accessible only to the principal investigator.

Possible Risks and Discomforts

There is no anticipated risk associated with participation in this research. However, your time will be required to answer some questions during the interview.

Possible Benefits

This study is anticipated to analyse nursing reports to assess how they reflect the nursing process. Again, it will provide information on the factors related to the nurse and within the work-environment that influence the quality of nursing documentation. This will help to identify omissions in the nursing records that could make the quality of the rendered to our patient questionable so that

necessary action could be taken to improve the documentation practice of nurses and improve patient care. Again, the study will elicit for information on the factors that influence nursing documentation so as to device appropriate strategies to be put in place to improve the quality of the records in order to make the records dependable in providing patient information to the healthcare team for the delivery of quality care to the patients.

Confidentiality

As part of measures to ensure confidentiality of the information you provide, your names will be omitted however, codes will be used for each of the interviews e.g nurse 1 for the first person who will be interviewed. You will not be named in any report. Please note that, for the purpose of the research, some staff and students of the University of Cape Coast may sometimes look at the research records. The interview will take place in a place convenient for you, preferably the nurses' room. No one else except the interviewer will be present and the interview will be recorded. The interview will be stored on an external hard drive with a password. All soft copies of the transcripts of the interview and other data relating to the research will be kept in a folder on the principal investigator's personal computer with a password. The data will be saved for a minimum of five years

Compensation

You will not be provided any payment for participation. Participation is voluntary, however, a soft drink, water and pastries will be given to all nurses who participate after the interview session.

Voluntary Participation and Right to Leave the Research

Participation in this study is strictly voluntarily. You must accept to take part in the study before you can be recruited. Also if you accept to take part, you can choose to withdraw at any time during the study without any penalty.

Funding of the Research: the research is being funded personally.

Your rights as a Participant: This research has been reviewed and approved by the Institutional Review Board of University of Cape Coast (UCCIRB). If you have any questions about your rights as a research participant you can contact the Administrator at the IRB Office between the hours of 8:00 am and 4:30 p.m. through the phones lines 0558093143/0508878309/0244207814 or email address: irb@ucc.edu.gh.

Contacts for Additional Information

In case you need further explanation with regards to this research, you can contact the following people:

Asantewaa Amma Menya 0244711998

Dr. Andrew Adjei Druye 0503187902

IRB UCC - 0558093143/0508878309/0244207814

APPENDIX F

PARTICIPANT INFORMED CONSENT FORM

VOLUNTEER/ PARTICIPANT AGREEMENT

The above document describing the benefits, risks and procedures for the research title "***Exploring the Quality of nursing documentation at Effia Nkwanta Regional Hospital"*** has been read and explained to me. I have been given an opportunity to have any questions about the research answered to my satisfaction. I agree to participate as a volunteer.

_____ _____

Date Name and signature or mark of volunteer

If volunteers cannot read the form themselves, a witness must sign here:

I was present while the benefits, risks and procedures were read to the volunteer. All questions were answered and the volunteer has agreed to take part in the research.

_____ _____

Date Name and signature of witness

I certify that the nature and purpose, the potential benefits, and possible risks associated with participating in this research have been explained to the above individual.

_____ _____

Date Name Signature of Person Who Obtained Consent

APPENDIX G

UCC-IRB ETHICAL CLEARANCE LETTER

UNIVERSITY OF CAPE COAST

INSTITUTIONAL REVIEW BOARD SECRETARIAT

TEL: 0558093143 / 0508578309/ 0244207814
E-MAIL: irb@ucc.edu.gh
C/O Directorate of Research, Innovation and Consultancy

OUR REF: UCC/IRB/A/2016/323
YOUR REF:
OMB NO: 0990-0279
IORG #: IORG0009096

21ST MARCH, 2019

Ms. Asantewaa Amma Menya
School of Nursing and Midwifery
University of Cape Coast

Dear Ms. Menya ,

ETHICAL CLEARANCE – ID: (UCCIRB/CHAS/2019/01)

The University of Cape Coast Institutional Review Board (UCCIRB) has granted **Provisional Approval** for the implementation of your research protocol titled **Exploring the quality of Nursing Documentation in Effia Nkwanta Regional Hospital.** This approval requires that you submit periodic review of the protocol to the Board and a final full review to the UCCIRB on completion of the research. The UCCIRB may observe or cause to be observed procedures and records of the research during and after implementation.

Please note that any modification of the project must be submitted to the UCCIRB for review and approval before its implementation.

You are also required to report all serious adverse events related to this study to the UCCIRB within seven days verbally and fourteen days in writing.

Always quote the protocol identification number in all future correspondence with us in relation to this protocol.

Yours faithfully,

Samuel Asiedu Owusu, PhD
UCCIRB Administrator

ADMINISTRATOR
ITUTIONAL REVIEW BOARD
NIVERSITY OF CAPE COAST
Date: 21/03/19

APPENDIX H

LETTER OF APPROVAL FROM EFFIA NKWANTA REGIONAL HOSPITAL

UNIVERSITY OF CAPE COAST
COLLEGE OF HEALTH AND ALLIED SCIENCES
SCHOOL OF NURSING AND MIDWIFERY
DEAN'S OFFICE

Telephone: 233-3321 [illegible]
Telegrams & Cables: University Cape Coast
Email: [illegible]

UNIVERSITY POST OFFICE
CAPE COAST, GHANA.

Our Ref: SNM/R/2/Vol.2/140

Your Ref:

27th March, 2019.

RECEIVED 28 MAR

.....

.....

.....

.....

Dear Sir/Madam,

LETTER OF INTRODUCTION: MS ASANTEWAA AMMA MENYA

The above named person is a level 850 student of the School of Nursing and Midwifery, University of Cape Coast with ID number SN/MNS/17/0001.

As part of the school's requirement for graduation, she has to do a research and present a report on it. She intends to collect data from the Effia Nkwanta Regional Hospital for her research topic: **"Exploring The Quality Of Nursing Documentation."**

We would be very grateful if you could accord her any assistance she may require from you to enable her collect her data successfully.

Thank you.

Yours faithfully,

John Linscell Yen
FACULTY OFFICER
SCHOOL OF NURSING AND MIDWIFERY
UNIVERSITY OF CAPE COAST
CAPE COAST

DDNS/Clinical Care Coord

Approval given for use of hospital premises for research work.
Pls circulate to involved units

26/4/19.