

**IMPLEMENTATION OF NURSING PROCESS AT KANGUNDO AND KATHIANI
SUB COUNTIES REFERRAL HOSPITALS IN MACHAKOS COUNTY**

HELLEN MAKANDI KIARIE

**A RESEARCH THESIS SUBMITTED TO THE SCHOOL OF MEDICINE AND
HEALTH SCIENCES IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE AWARD OF DEGREE OF MASTER OF SCIENCE (NURSING
EDUCATION) AT KENYA METHODIST UNIVERSITY.**

OCTOBER, 2022

DECLARATION

I declare that this thesis is my original work and has not been presented at any other university.

Signature

Date.....

Hellen Makandi Kiarie

MSN-3-2098-1/2016

SUPERVISORS' APPROVAL

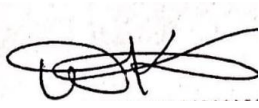
This thesis has been submitted for examination with our approval as university supervisors:

Signature

Date:.....

Dr. Agnes Kasusu Mutinda (PHD)
Lecturer, Department of Nursing,
Kenya Methodist University

Signature



Date, 19/08/2021

Dr. Winfred Kithinji (PHD)
Department of Education,
Kenya Methodist University.

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DEDICATION

I dedicate this work to my father, who has been my moral support.

I also dedicate this work to my supervisors, siblings, workmates, Tala deliverance church women fellowship, friends, and classmates for their advice and prayers.

Lastly, my daughter Trixie has been patient and understood my study schedule.

Lastly, I thank God for His provision, health, and strength.

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ABSTRACT

Introduction: In evidence-based practice includes the use of the nursing process in patient care. However, evidence shows that many nurses do not regularly use it for various reasons. The status of NP use and the associated factors in Machakos sub-county hospitals remain unknown. The researcher set out to assess the performance of the nursing process by nurses in Kangundo and Kathiani sub-county hospitals in Machakos County and the factors influencing its implementation.

Methodology: An Analytical cross-sectional study involving 79 nurses and two key informants from each hospital at Kathiani and Kangundo Level four hospitals was done. The participants were randomly selected from departments. A self-administered questionnaire and Key informant interviews were done. SPSS IBM Version23 was used to analyze quantitative data. All tests were significant at a 95% confidence level. Figures, tables, and narratives are used to present the findings. Qualitative data was presented in pros.

Results: Sixty-three percent of the nurses (n=45) had drafted a NP a week before the study, while 35.7% (n=25) had not. Less than half of the nurses (47%,n=41) had developed care plans, but 35.7% (n=25) did implement them. Most nurses who drafted care plans ended up using them in patient care (Fisher's Exact Test $P=0.000$). The factors that (influenced NP use include significantly supervisory support ($P=0.007$), availability of resources ($p=0.010$), and the feeling that care plans are time wasters ((LR=8.717, $df=2$, $p=0.013$). Younger nurses were said to be more conversant with the nursing process but reluctant to employ it. The county government of Machakos needs to employ more nurses to meet the standard nurse-to-patient. **Implications:** The facility management needs to ensure the availability of NP material resources, ensure the continuation of continuous nursing education, workshops, and seminars, and motivation for nurses.

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ABBREVIATIONS AND ACRONYMS

BScN	Bachelor of Science in Nursing
EBP	Evidenced-Based Practice
EN	Enrolled Nurse
KEMU	Kenya Methodist University
KI	Key informant
MOH	Ministry of Health
NANDA	North American Nurses Diagnosis Association
NCP	Nursing care process
NP	Nursing Process
NSM	Nursing Services manager
SPSS	Scientific Package for Social Sciences
QHC	Quality Health Care
QNC	Quality Nursing Care

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

The essential concepts of critical thinking, client-centered care, goal-oriented activities, evidence-based practice (EDP) guidelines, and nursing intuition are all used in a nursing process, which is a systematic approach to care. The foundation for compassionate, quality-based treatment depends on integrating holistic and scientific postulates (Toney-Butler & Thayer, 2022). To prevent or resolve difficult circumstances, the nursing process model entails analyzing, planning, executing, and evaluating patient conditions (Benedet et al., 2018).

Several nations have implemented nursing care plans worldwide to improve the overall quality of care. The introduction of the nursing process in the United States of America contributed significantly to a 28% reduction in mortality (Benedet et al., 2018). Toney-Butler and Thayer (2022) established that only 46% of nurses in the United States knew what the nursing process meant, with the majority (67%) of the information coming from colleague nurses. Engaging in clinical and professional practice activities in Canada and America is imperative to advance nursing knowledge (Sutton, 2013). A survey in Canada revealed that 78% of the nurses at work in government-funded health institutions had nursing care plans for every patient (Benedet et al., 2018). Similarly, Happell (2013) observed that 68% continue to practice their tradition while nurses support the nursing process. Brown (2012), in their research on the nursing process, noted that the nurses scored poorly on skills and knowledge and fairly on attitudes towards this critical tool.

The nursing process has been implemented in the majority of African countries. These countries are committed to enhancing the standard of care by motivating their personnel to adopt practices supported by scientific evidence. However, they meet resistance and

difficulty in putting the plan into action. Research conducted in Amhara(Alemu & Kebede, 2020) found that the inability to employ the nursing process in patient care was caused by a combination of factors, including a lack of awareness of the nursing process, a lack of administrative support, and the job that nurses do.

Even though it is a required element of the nursing curriculum in Kenya, the nursing process is still not widely used in the country. According to Mwangi et al. (2019), the quality of nursing care offered in Kenya's public hospitals is negatively impacted when this essential nursing care tool is not utilized. According to the findings of a research that was conducted at the Narok County Hospital, some of the nursing variables that affect the integration of the nursing process include the levels of nurse education, the amount of relevant work experience, the nurses' perceptions, and the workload (Lekenit, et al.,2020). Lekenit et al. (2020) found that understaffing, a lack of appropriate assistance, a lack of supervision, and a lack of motivation were vital institutional issues impacting the execution of the nursing process.

1.2 Statement of the problem.

The nursing process is a methodical approach that identifies, treats, and prevents present and potential health issues from enhancing health and well-being (Thuvaraka et al., 2018). It offers rules to follow so that clinical reasoning may be done in an organized fashion (Gazari et al.,2021). In addition, when it is completely implemented, it has the potential to initiate the production of knowledge that may inform practice. For nurses working in clinical settings to recognize the impact of evidence-based practice on patient outcomes, they must use nursing care plans and other tools consistently. The nursing process is being implemented in a variety of nations throughout the world to enhance the standard of care provided.

On the other hand, because the conditions in each location are unique, a sizeable proportion of nurses do not consistently apply this process when taking care of their patients (Baraki et al. 2017). Despite being a required element of nursing education in Kenya, the nursing process implementation has remained relatively low. If these critical nursing care tools are not utilized, the level of care delivered in Kenya's public hospitals will suffer. A casual look at the files revealed that only 33.1% of Machakos Level 5 Hospital nurses were actively implementing the nursing process by creating care plans, showing that nursing process implementation is low in the hospital. A 2018 internal audit report conducted by the office of the nursing services manager at Kangundo hospital discovered that 98% of the patient files lacked a nursing care plan. As a result, the purpose of this study was to evaluate the nursing care plan execution and the factors associated with it at the level IV hospitals in Kathiani and Kangundo, in Machakos County.

1.3 Research Objectives

1.3.1 Broad Objective

The study aimed to assess the implementation of nursing processes at Kangundo and Kathiani sub-county referral hospitals in Machakos County.

1.3.2 Specific Objectives

- i. To investigate the nurse-related variables that influence how the Nursing Process is carried out in the Kangundo and Kathiani Sub County Referral Hospitals in Machakos County, Kenya.
- ii. To investigate the attitude-related traits of nurses that affect the use of the nursing process in Kangundo and Kathiani Sub County Referral Hospitals in Machakos County.
- iii. Determine the institutional determinants that impact how nurses at Kangundo and Kathiani Sub County Referral Hospitals employ the Nursing Process.

1.4 Research Questions

- i. What nurse-related factors influence the implementation of the Nursing Process by nurses at Kangundo and Kathiani Sub County Referral Hospitals in Machakos County?
- ii. What attitudinal factors influence how Kathiani and Kangundo sub-county hospital nurses use the nursing process?
- iii. Which institutional aspects impact how nurses at Kangundo and Kathiani Sub County Referral Hospitals apply the Nursing Process?

1.5 Operational Definition Of Terms

Disposition: This refers to an attitude, either negative or positive.

Enrolled Nurse: A nurse holding a certificate in nursing

Factors: These conditions will make the nursing process more difficult or easier to carry out, depending on how they are handled.

Implementation of Utilization: This is the process of implementing a plan. This study is putting into practice and documentation all the activities envisioned in the nursing care plan.

Nurse: A person who has been granted a license to practice as an enrolled nurse or midwife by the Nursing Council of Kenya.

Nursing care plan: This is the documentation of the nursing process. It prescribes the type of nursing care an individual, family, or community may require.

Nursing process: It is a sequence of processes that the nurse goes through in order to plan and provide nursing care, and these phases are as follows: assessment, diagnosis, planning, implementation, and evaluation.

Policy: This refers to general decisions, plans, and actions written down and shared that help to hold nurses accountable for following the proper nursing process steps when caring for the patient.

Sub-County Referral Hospital: This level IV hospital acts as a referral hospital in the respective sub-county, offering curative, preventive, and rehabilitative services.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

Modern nursing practice is founded on science and research. EBP is essential when carrying out professional judgments. At the clinics, the NP assists the nurse in making proper clinical decisions and critical thinking. The caregiver must investigate and identify the issue, assess the available options, and finally choose the best alternative (Lotfi et al., 2021). Nursing entails reviewing, planning, executing, and evaluating patient conditions (Benedet et al., 2018). The nursing process is an organized method of delivering high-quality, client-centered care. Additionally, when completely implemented, it can start the process of knowledge being created to guide practice.

2.2 Theoretical Framework

Two theories inform the care: Ida Jean Orlando's Deliberative Nursing Process theory and planned behavior theory. Jean Orlando in her attempt to understand the purpose of nursing, Orlando concluded that nurses help patients meet their unmet needs (Toney-Butler & Thayer, 2022). In this theory, patients' verbal and nonverbal cues require vigilant and regular assessment to identify priority needs, which subsequently guide nurses' interventions. These needs keep changing, and the nurse has to keep reassessing the patient for emerging needs of an individual. Jean Orlando goes further to give steps on how nurses are supposed to deal with individual patient needs. Her nursing process approach entails reviewing, planning, putting into practice, and assessing patient circumstances to prevent or resolve difficult situations (Benedet et al., 2018).

However, planned action uses a person's attitude and viewpoint as well as their perception of control over the action and the subjective standards of society to sway their behavioral intention, which will ultimately result in the behavior (Godin & Kok, 1996). This theory

assisted the researcher in examining how nurses behaved in response to perceived circumstances influencing or encouraging the application of the nursing process at the two sub-county hospitals. Let's say a nurse has a bad attitude and feels powerless to change the nursing plan; as a result, they are less inclined to carry it out. Consider the possibility that the nursing process implementation effort is not supported by the hospital management or the other nurses they work with. In that instance, the nurses' goal to carry out the nursing process through the action would be harmed. The intention and effort of a nurse to apply the nursing process might be positively or adversely impacted by their attitude and perceived behavioral control. The planned behavior theory was used in this study to help the researcher better understand how factors such as professional training, years of experience, a positive or negative attitude, workload, staffing, training, the availability of resources, supervision, and staff motivation positively or negatively affect the implementation of the nursing process.

2.4 Nurses related factor influencing the implementation of the Nursing Process

2.4.1 Level of qualification

According to Semachew (2018), nurses' execution of nursing processes is greatly influenced by their level of qualification. Nurses with diplomas used the nursing process less frequently than those with bachelor's degrees. Lack of confidence and experience was the primary factor noted. In a research conducted in southwest Ethiopia, Adaro and Mengistu (2020) found that compared to nurses with bachelor's degree certificates, nurses with diploma certificates in their training were less likely to use nursing care plans. The primary cause was the feeling of inferiority and lack of information about the NP among certificate nurses. Sibanda and Scafide (2018) 's research demonstrated that the degree of a nurse's education was crucial in fostering professional value awareness and integration into practice. According to the study, nurses with a BSCN or above had a better comprehension of and ability to apply professional principles than nurses with less formal education.

According to a survey conducted in Rwanda, the degree of education of nurses affected the utilization of nursing care plans in patient care (Umutesi, 2017). Implementation of the nursing process is hampered by a lack of knowledge and abilities resulting from poor credentials. The lower cadre of nurses fears that they would suffer due to improperly applying the nursing procedure. The study suggested that nurses with various backgrounds receive training in the nursing process and how to apply it to patient management. By attending to their demands, nurses with certificate degrees should be comfortable.

In contrast to nurses with more years of experience, a different study found that newly certified nurses with experience of less than an experience of between 5 and 10 years were more likely to adopt the nursing process (Mbithi et al., 2018). Most nurses with more than ten years of experience were not using it.

2.4.2 Disposition towards implementation of Nursing Care Plan

Isika (2018) found that nurses who had a favorable attitude about the NP were more likely to use it than nurses who had a negative attitude. Most of the nurses who had negative attitudes pointed out that writing a nursing care plan is time-consuming and that nurses will spend much time developing a nursing care plan, which could be used in managing patients. Mutshatshi and Mothiba (2020) found similar results, which showed that the NP is time-consuming, excessively lengthy, and complicated. The researchers also pointed out that poor execution of the NP is caused by nurses' negative views about the nursing process and their fear of being exposed to peers as incapable of writing care plans. The majority of nurses expressed unfavorable opinions regarding the nursing process, according to a report by Vincent et al. (2019), which found that most of them agreed with the statement that the nursing process is a waste of time needed to care for patients.

Contrary results have also emerged in Kenya. According to a study conducted by Mwangi et al. (2022), the majority of nurses had a poor opinion of the nursing process. The nurses said that it should only be used for seriously ill patients who need careful monitoring of the patients. They said that because every nurse on the shift must develop their own nursing care plans, drafting, executing, and assessing nursing interventions takes time and interferes with continuity of care. Similarly, a survey conducted in Uganda Eletu (2022) revealed that the majority of nurses had a negative attitude toward using the nursing process and that almost all of them did not utilize the tool. The nurses emphasized that because the nursing care plan contains several writings that interfere with the time spent providing patient care, it takes up the majority of the nurses' time.

According to research conducted at Kenyatta National Hospital, most nurses have a poor opinion about applying the nursing process. This was because most respondents said they handle a high volume of patients, making it hard to prepare a care plan for each patient. Nurses further pointed out that it consumes time to evaluate the nursing intervention. On the contrary, a survey in Machakos referral hospital showed that most of the nurses working in the maternity department had an optimistic outlook toward the application of a nursing care plan, as a majority of the respondents agreed with the statement that a nursing care plan facilitates in identifying patient needs, thus improving the quality of nursing care (Wagoro & Rakuom, 2015).

2.4.3 Work Experience

Previous studies have reported mixed findings on the association between work experience and the use of the nursing care plan. Isika (2018) revealed that there is a strong link between years of practice and the utilization of the nursing process. Nursing who have been in practice longer were using the nursing process in managing patients compared to nurses with fewer years of experience or who were newly employed. However, nurses who were more

experienced and had a more extended period in the hospital tended to verse some steps of NP to be of more importance, thus omitting some steps. In a study that reached a similar conclusion, Moghadas and Sedaghati (2020) found that nurses who had worked in the field for at least five years were 1.79 times more likely to adopt a nursing process than nurses who had worked in the field for less than five years. In spite of the fact that the aforementioned research reveals that senior nurses commonly carry out the nursing process, there are studies that run counter to this hypothesis. According to the findings of Mbithi et al. (2018), younger nurses in the field are more open to implementing the nursing process than their more seasoned colleagues. Mbithi notes that the findings may be attributable to a favorable shift in attitude towards the nursing process on the part of younger people.

2.4.4 Knowledge of the Nursing process

According to Vincent et al. (2019), a factor that influences the execution of the nursing process is a lack of awareness about the nursing process. Even though all respondents stated that they had an understanding of the nursing process, Vincent et al. found that only around one-fourth of the nurses were able to provide a definition for it. Over three half of the respondents were unable to correctly write all of the phases in the nursing procedure. In the same vein, insufficient understanding of the nursing process and how to develop the nursing care plan has been a significant barrier to the utilization of the nursing process. The similar result was found in research carried out in Ethiopia by Baraki et al. (2017). According to a research conducted in Ghana, a lack of understanding of the processes of the nursing process as well as ignorance of these steps are to blame for the country's nurse shortage (Gazari et al. 2021). According to the findings of a study conducted by Gazari et al. (2021), nurses do not comprehend the stages of the nursing process. Others indicated that they were educated on the nursing process in school but had forgotten how to develop a nursing care plan after they graduated. In a similar vein, a research conducted in the Oromia Region of Ethiopia found

that knowledge is an important factor in the application of nursing processes to patient care (Alemu & Kebede, 2020). Knowledge is vital in nursing process utilization, according to a research of inadequate recording caused by increasing workload and ignorance, which found that the majority of nurses lacked knowledge in the process of nursing diagnosis formulation. This is yet another example that supports the first. In addition, study conducted by Ebisa et al. (2022) found that nurses who had a bachelor's degree had a better comprehension of the nursing process and were more inclined to apply it, in comparison to nurses who had a lower level of qualification.

2.5 Institutionally related factor influencing implementation of the nursing process

2.5.1 Staffing

Inadequate staffing affects nursing process implementation worldwide because few nurses are on the groundwork to cover the shortfall, and there is hardly any time to engage in a nursing care plan (Moghadas & Sedaghati 2020). Since nursing care plans help identify and prioritize nursing needs, their lack compromises the quality of nursing care. Nazari et al. (2021) documented that many nurses accused heavy workloads as critical obstacles to their use of the nursing process.

According to Alemu and Kebede (2020) , a large number of nurses do not follow the nursing process because their workload prevents them from doing so. The number of patients that nurses were expected to care for exceeded their capabilities. As a consequence of this, they carried out their activities in accordance with the direction of the physicians. The results of surveys carried out in Kenya by Isika (2018) did not differ in any significant way. According to the findings of these research, poor staffing causes nurses to feel overwhelmed, which prevents them from participating in care planning.

2.5.2 Training of the nursing workforce on the nursing process

Adaro and Mengistu (2020) demonstrated that trained nurses had a greater rate of nursing process implementation compared to untrained nurses in their study. The majority of the nurses possessed knowledge about the application of the nursing process; hence, frequent training is necessary in order to guarantee that nurses possess sufficient knowledge of and expertise in the nursing process.

On-the-job training was found to be the second requirement for putting into practice the nursing process, according to research conducted in the Democratic Republic of the Congo by Julie et al. (2017). It was demonstrated that there was a requirement for further training, and after receiving additional training, the majority of nurses raised their utilization of the nursing process in the treatment of patients. The results of the study also showed that training in the nursing process is extremely important for enhancing the knowledge and abilities of nurses. In a similar vein, Ebisa et al. (2022) reported that certain nurses had received on-the-job training on the nursing process and often implemented it, in comparison to other nurses who had not been instructed. According to the findings of a study carried out by Ghanbari et al. (2017), education on the nursing process has an effect on critical thinking as well as the application of the nursing process in a clinical setting. According to the findings of the study, exceptional implementation of the nursing process was observed in settings where registered nurses had had previous training on it, in contrast to settings where they had not.

On the other hand, a research that was conducted by Lekenit and her colleagues in 2020 found that there was no statistically significant correlation between the training that nurses get on the nursing process and their actual performance of the nursing process. The majority of nurses who had been trained in the nursing process did not use it when providing care. In a similar vein, Semachew (2018) found that the majority of nurses seldom prepared and implemented nursing care plans, despite the fact that they were certified. According to the

aforementioned nurses, the inability to implement the nursing care plan was due to a high volume of work, a lack of available time, an absence of nursing process resources, and a general lack of enthusiasm among staff members.

2.5.3 Resources availability for the nursing process

Isika (2018) reported that lack of enough resources, such as inadequate stationeries to draft care plans, hindered the nursing process's use. Similar observations have been made elsewhere. (Mbithi et al. 2018; Mutshatshi & Mothiba 2020; Thuvaraka et al. 2018). These findings are also consistent with the findings of a study carried out in Ethiopia. (Alemu & Kebede, 2020). In that study, the researchers found that nurses in Ethiopia agreed on a number of resource barriers. These resource barriers included insufficient staff in the unit, a lack of specified nursing care documents and education budget, defective equipment, and an absence of supplies and materials. Julie et al. (2017) found that the lack of a sufficient supply of hospital resources was to blame for the failure to successfully execute the nursing process in the Democratic Republic of the Congo.

2.5.4 Supervision

Mbithi. et al. (2018) showed that insufficient supervision of nurses contributes to the non-implementation of the nursing process, because most of the nursing staff find it to be a lot of paperwork to write a care plan; therefore, in areas where close supervision is not done nurses will tend not to implement the nursing process in managing patients. This is consistent with the findings of a research carried out in Iran Iran (Lotfi et al. 2021) , which found that poor supervision was one of the primary obstacles in the way of carrying out the nursing process. the findings of a study carried out by Nuritasari et al. (2020) demonstrated that the supervision of nursing services confers numerous advantages on the nurses, including the enhancement of their feelings of support, the reduction of professional isolation, the reduction

of work and emotional fatigue, the increase of job satisfaction and morale, the development of professional practice and support in practice, and the development of professional practice and support in practice. In a similar vein, Munawar, et al. (2019) conducted a literature study in which they found that Supervision of the Performance of Associate Nurses in hospitals stimulates nurses to be more attached to work and leads to greater performance chances.

2.5.5 Staff motivation

The nursing process is driven by the individual's motivation to apply it. According to a number of studies, the lack of nursing staff motivation is to blame for the ineffective utilization of the nursing process. According to Semachew (2019), a lack of motivation may be related to a lack of monitoring of nursing process use, a lack of support by a colleague, and a lack of nursing process resources. Similarly, a lack of nursing process resources can also contribute to a lack of motivation. A lack of motivation may be the result of insufficient personnel, an absence of incentives, poor supervision, the absence of a suitable structure for monitoring and evaluation, or an insufficient supply of hospital resources (Isika, 2018).

The vast majority of the nurses expressed their opinion that the working atmosphere was not one that was suitable for the execution of the nursing process. In addition, poor salaries and duty payments led to a negligent attitude on the part of the majority of nurses toward the nursing process (Alemu & Kebede, 2020). According to Julie et al. (2017), nurses were deterred from adopting the nursing process to manage patients due to low compensation and a lack of opportunities for advancement in their careers. nurses, on the other hand, had the impression that their workplace was well structured, which made it easier for them to carry out the steps of the nursing process(Ebisa et al. 2022).

2.5.6 Workload

According to Isika (2018), utilization of the nursing process is contingent on the number of patients to nurses that are present. In areas with a lower number of registered nurses, nursing care plans were not being developed. The high number of patients to one nurse has a tendency to discourage the use of the nursing process among nurses. Research conducted in other parts of the world has produced comparable findings (Mbithi et al., 2018). According to Mbithi et al. (2018), a tremendous workload is combined with personnel shortages, a large amount of paperwork, a lack of refresher training, and a number of competing jobs. According to Alemu and Kebede's research (2020), a large number of nurses do not follow the nursing process because their workload prevents them from doing so. a low number of nurses to patients. As a result of their workload, nurses were required to provide care for a greater number of patients than they were capable of, and they lacked the time to plan for patient care or write a nursing care plan. According to the findings of a study carried out by Mutshatshi et al. (2022), the majority of respondents stated that poor recording was the result of increased workload and inexperience.

2.6 The Conceptual Framework

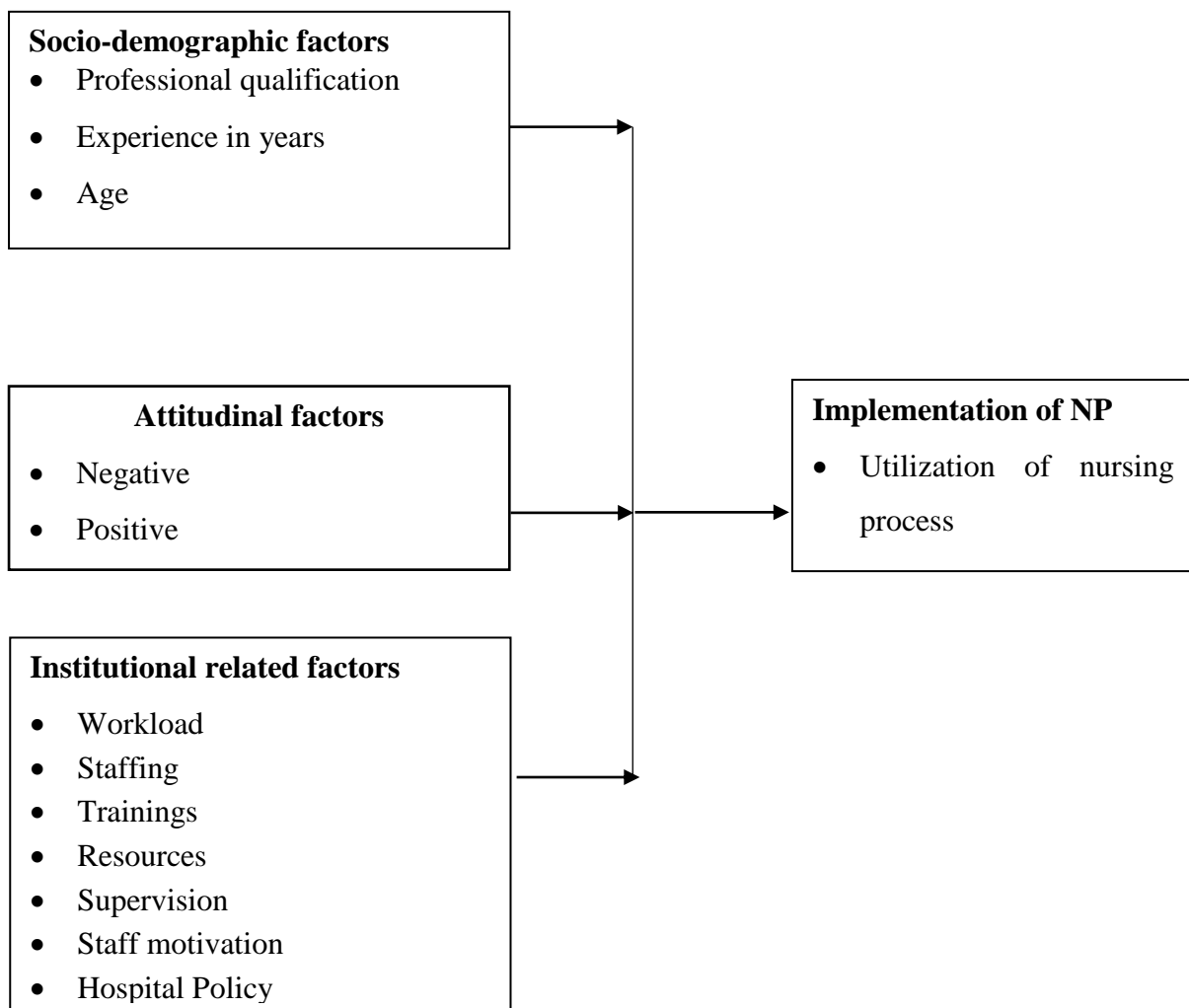
Figure 2.1 shows the conceptual framework to illustrate anchoring this study. The framework demonstrates the variables of interest to this research and the anticipated relationship among the variables.

Figure 2. 1

Conceptual Framework

Independent Variables

Dependent Variable



2.7 Gap in the Literature Review

In the literature we analyzed, the majority of researchers highlighted institutional, social, cultural, and demographic aspects. However, there has been no mentioned policy as a separate institutional variable that can influence the application of the nursing process. The researcher will ascertain if the facilities have policies on the nursing procedure in writing.

CHAPTER THREE: METHODOLOGY

3.1 Study Design

This study utilized an analytical cross-sectional design that included approaches from both quantitative and qualitative research methodologies. The methods complemented each other as they allowed the researcher to view the study area and population through multiple lenses, generating different kinds of knowledge (Burns & Grove, 2011).

3.2 Study Area

This study was carried out in Kangundo and Kathiani, two high-volume sub-county referral hospitals in Machakos County. The hospitals come second to Machakos county referral hospital. They offer curative, preventive, and rehabilitative services. They have a similar setup comprising male and female medical and surgical, maternity and pediatric inpatient wards and outpatient departments, maternal and child health units, casualty, and specialized clinics. In addition, the two hospitals provide youth-friendly services as well as counseling. The services are offered by various cadres of healthcare workers, namely doctors, nurses, radiographers, clinical officers, pharmacists, and laboratory technicians, to name a few. The nursing staff establishment in the two facilities is 187.

3.3 Target Population

The study focused on the 187 nurses working in Kangundo and Kathiani sub-county referral hospitals. These two facilities were purposively selected to represent the four-level four hospitals in Machakos County; Matuu level four, Kathiani level four, Mwala level four, and Kangundo level four hospitals. Their selection was informed by the hospitals' comparable functionality, infrastructure, human resources establishment, and patient capacity. The information is based on the Machakos county nurse registry database as of 1st June 2019.

3.4 Study Population

The study involved 79 nurses in departments implementing the nursing process in Kangundo and Kathiani sub-county referral Hospitals. These are; medical, surgical, pediatrics, and Newborn units. And two Key informants who represented the nurses in charge.

3.5 Sample Size and the Sampling Procedure

A survey of 79 nurses from purposively selected departments implementing the nursing process was conducted. These are the pediatric, newborn, and male medical and surgical units and the female medical and surgical wards. In addition, the patients had an average stay of 72 hours in the targeted units, allowing the nurses to implement a nursing care plan. Also, the interview was conducted with the two purposively selected key informants in the two facilities.

Table 3.1

Distribution of nursing staff in the selected department

Department	Kangundo	Kathiani	Total
Pediatric ward	9	7	16
Newborn unit	14	7	21
Male medical and surgical	13	7	20
Female medical and surgical	15	7	22
Total	51	28	79

3.6 Inclusion Criteria

Nurses on permanent terms of employees working in male and female, medical and surgical units, NBU, and pediatric wards. In addition, nurses who consented voluntarily to take part in the survey. Lastly, the nurses present during the data collection period, e.g., those on duty, were included.

3.7 Exclusion Criteria

Those excluded in this study include the nurses who met the inclusion criteria but failed to consent to the study.

3.8 Research Instruments

Data were collected using two separate tools: self-administered questionnaires and key informant interviews. The self-administered questionnaire (Appendix II) was constructed from information gathered during the literature review. Attempts were made to ensure that the items in the questionnaire addressed the study objectives. The questionnaire assessed the demographic, attitudinal, and institutional determinants of the nursing process utilization at Kangundo and Kathiani sub-county referral hospitals. To evaluate the attitudinal components, statements rated on a scale of one to five were used (strongly agree, agree, uncertain, disagree, and strongly agree). Ideas on a five-point Likert scale were utilized to measure attitude, with possible responses including strongly agree, agree, uncertain, disagree, and strongly disagree.

In addition, the nursing services managers at the two sub-county referral hospitals were purposively sampled for the key informant interviews. A key informant interview schedule (Appendix II) with questions addressing key thematic areas was used. The information from the key respondents was tape-recorded.

3.9 Pretesting of the Questionnaires

The study questionnaire was pretested at Mwala Sub County Referral Hospital medical surgical ward using 8 participants. Mwala was an appropriate facility for pretesting since its setup is nearly identical to that of Kangundo and Kathiani Sub-county Referral Hospitals and is on the same level. The pretest was used to assess the questionnaire's clarity and help the researcher know the needed time and potential obstacles. The questionnaires were self-administered. The respondents were informed that they had been purposively selected since they worked in departments implementing the nursing process. After the pretest, a mini-analysis was attempted to validate the tools. Necessary changes were executed accordingly.

3.10 Validity and Reliability

Efforts were made to ensure the reliability of the instrument. First, the final draft of the questionnaire and interview guides were peer-reviewed, and corrections were made. The tools were pretested in a level four hospital in Machakos County, excluding the selected facilities. Glaring errors and inconsistencies noted were corrected.

3.11 Data Collection Process

Interviews with key informants and questionnaires that respondents filled out on their own were used to collect data over three weeks, beginning on May 2021 and ending on July 2021. The data was collected solely by the principal researcher. The questionnaires were issued to the respondents at the beginning of each shift and collected at the end to avoid distractions in the busy procedures and allow respondents to fill out the questionnaires at their convenience. The researcher conducted key informant interviews with the nursing services managers at the two hospitals during the study period on a day and time of their convenience.

3.12 Data Sorting, Cleaning and Storage

As soon as the research was finished, the questionnaires were organized and examined for completeness to make sure that every question had been addressed. Following the coding of the replies, their responses were entered into version 23 of the Scientific Package for the Social Sciences (SPSS) to analyze them. The exploration of the data revealed no anomalies or outliers. The research tools were kept in a cabinet that had a lock on it and was only available to the researcher.

3.13 Data Analysis and Presentation

Quantitative data was analyzed using SPSS IBM version 23. Analytical statistics (such as percentages, proportions, and data frequencies) were computed. Further, Chi-square was computed to determine any association between the independent and dependent variables of interest. The findings were significant at $p < .05$. The data was presented in figures, tables and prose. The qualitative data were coded and thematically analyzed to produce a report in narrative form.

3.14 Ethical Consideration

Before embarking on the data collection process, clearance was obtained from the Kenya Methodist University ethics review committee. In addition, permission to collect data was granted by the National Commission for Science, Technology, and Innovation and the Machakos Department of Health and Emergency Services, office of the nursing service manager at Kangundo and Kathiani Hospitals. Additionally, the participants were informed of all material facts regarding the study (for example purpose of the research) before their informed, voluntary consent was sought. The researcher guaranteed the participants' anonymity and confidentiality by ensuring no names were printed on the questionnaires. Besides, participation was voluntary, and the respondents were free to withdraw without

penalty. The consequent data was kept under lock and key and only accessed by the researcher.

CHAPTER FOUR: RESULTS AND DISCUSSION

4.1 Introduction

The goal of this investigation was to evaluate how the nursing process was being used. The study's specific objectives were to 1) evaluate the socio-demographic factors influencing the application of the Nursing Process at Kangundo and Kathiani Sub County Referral Hospitals in Machakos County; 2) identify attitude-related issues influencing the application of the Nursing Process, and 3) identify institutional-related factors influencing the use of the Nursing Process at Kangundo and Kathiani Sub County Referral Hospitals in Machakos County. In this chapter, the findings are presented and discussed following the study objectives. The analysis is divided into two sections: a quantitative and qualitative analysis.

4.2 Quantitative Data

4.2.1 Response Rate

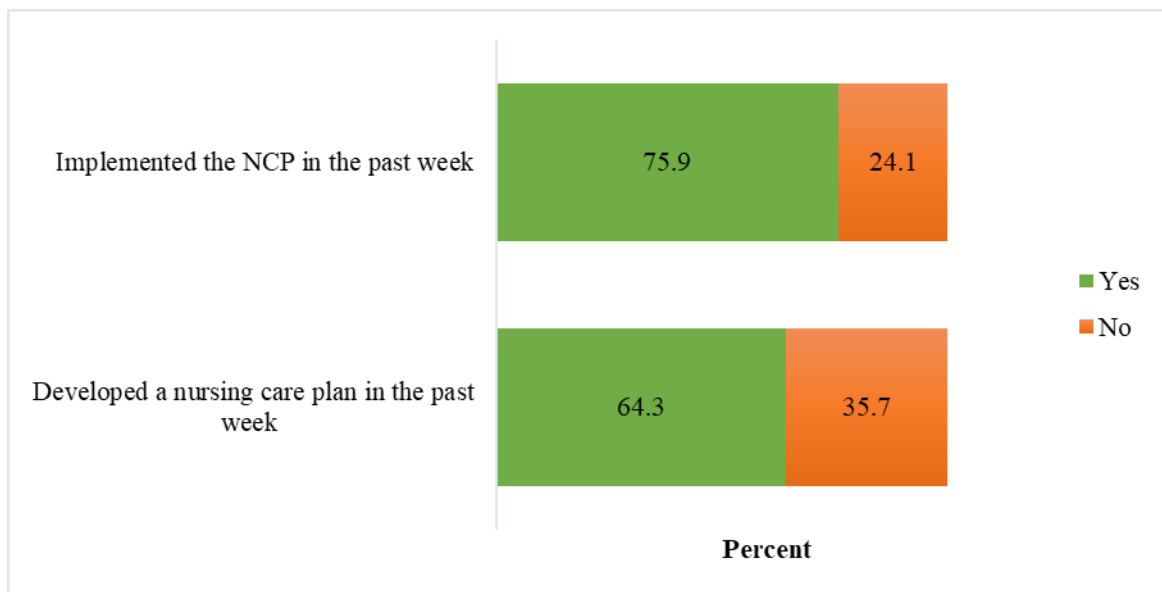
Initially, the researcher wanted to survey all the nurses in the said departments; however, only 69 were reached, translating to a response rate of 87.3%. Survey studies consider good response rates above 65% (Polit & Beck 2017).

4.2.2 Implementation of the nursing process

The dependent variable in this study was the implementation of the nursing process. Figure 4.1 demonstrates that, in contrast to 35.7% (n=25), 64.3% (n=45) of the nurses had created the nursing care plan the week before the interview. Asked if they implemented the nursing care plan developed, 54 nurses responded to this question, with 75.9 % (n=41) reporting to have implemented a care plan the week before the data collection.

Figure 4. 1

Percentage of nurses who developed or implemented nursing Care Plan



4.2.3 Nurse-related factors and nursing process implementation

The personal characteristics of the nurses are shown in Table 4.1. In general, 82.6% (n=57) of the participants were below 50 years, with those in the age bracket of 31-40 years dominating this cohort. Only 17.4% (n=12) of nurses were aged above 50 years. Most nurses, 53.6%

(n=37), have attained a diploma in nursing, with those holding certificates and bachelor's degrees in nursing almost tying at 18.8% (n=13) and 17.4% (n=12), respectively. Regarding working experience, among the nurses who participated in this study, 79.7 % (n=55) had more than six years of working experience.

Table 4. 1
Socio-demographic characteristic of the nurses

	Characteristics	Frequency	Percentage
Age bracket	21-30 Years	16	23.2
	31-40 years	23	33.3
	41-50 years	18	26.1
	Above 50 years	12	17.4
	Total	69	100.0
Highest qualification	Enrolled Nurse	13	18.8
	Diploma	37	53.6
	Higher Diploma	6	8.7
	Bachelor's Degree	12	17.4
	Master's Degree	1	1.4
	Total	69	100.0
Working experience	1-5 Years	14	20.3
	6-10 Years	25	36.2
	11-15 Years	8	11.6
	More than 15Years	22	31.9
	Total	69	100.0

To investigate the nature of the connection that exists between the categorical socio-demographic factors presented in Table 4.2 and the NP, the chi-square test was carried out. There was no significant link between nursing process implementation and the age of the nurses (LR=3.197, df=3, p=0.362), the professional qualification (LR=1.453, df=4, p=0.729), or the amount of working experience (LR=0.458, df=3, p=0.857).

Table 4. 2

Cross tabulation of demographic characteristics and implementation of the nursing process

Variable	Implemented the nursing process in the past week					<i>Significant at p≤0.05</i>	
	Yes		No		N		
	N	%	n	%			
Age bracket	21-30 Years	11	27.5	2	15.4	13	LR=3.197 df=3 p=0.362
	31-40 Years	12	30	6	46.2	18	
	41-50 Years	8	20	4	30.8	12	
	>50 Years	9	22.5	1	7.7	10	
Highest qualification	n	40	100	13	100	53	LR=1.453 df=4 p=0.729
	EN	7	17.5	2	15.4	9	
	Diploma	20	50	7	53.8	27	
	Higher Diploma	3	7.5	2	15.4	5	
	Bachelor's Degree	9	22.5	2	15.4	11	
	Master's Degree	1	2.5	0	0	1	
Working experience	n	40	100	13	100	53	LR=0.458 df=3 p=0.857
	1-5 Years	8	20	2	15.4	10	
	6-10 Years	16	40	6	46.2	22	
	11-15 Years	5	12.5	1	7.7	6	
	>15Years	11	27.5	4	30.8	15	
Total	40	100	13	100	53		

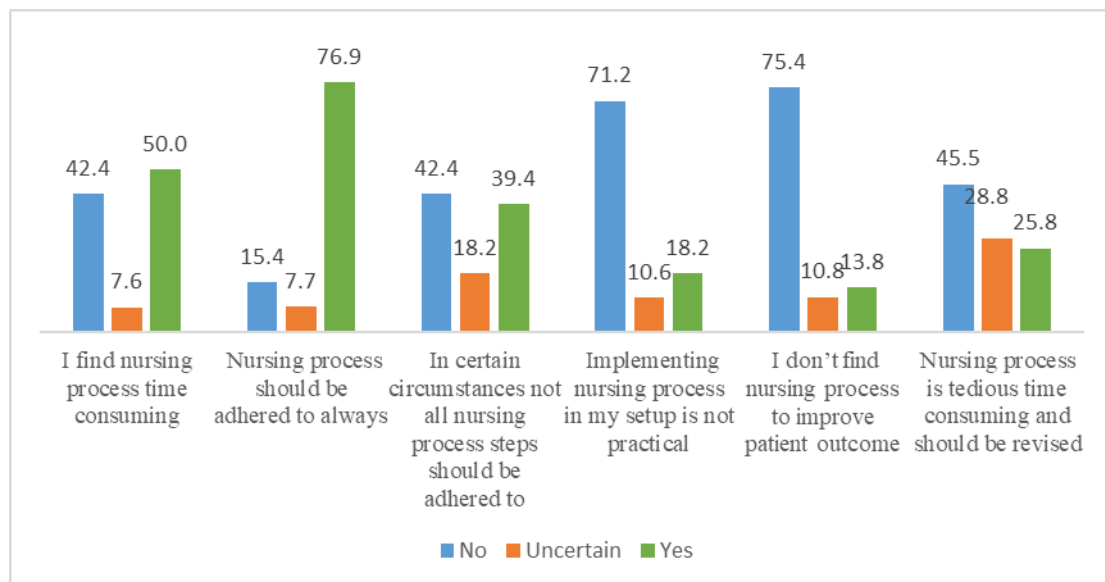
4.2.4 Attitudinal factors and implementation of the nursing process

We asked them to reply to several assertions to get insight into the nurses' attitudes (See figure 4.2). Most respondents suggested that the nursing process should always be adhered to

(76.9%, n=50), and 50%(n=33) found the nursing process time-consuming. However, opinion was almost evenly divided on whether all the circumstances warrant adhering to the steps of the nursing process. Thirty-nine percent (n=26) of the nurses disagreed with the 42.4% (n=28) who said that all nursing process stages should be followed. Fewer nurses (18.2%, n=12) thought it impractical to apply the nursing process at their institutions than those who believed it was feasible (71.2%, n=47). If the nursing process improves patient care, 75.4%(n=47) responded in the affirmative, while 13.8% (n=12) thought the NP does not change the patient outcome. Whereas 25.8 % (n=17) of the participants felt the NP should be revised to make it less tedious and time-consuming, the rest (74.3%, n=49) were either uncertain or outrightly opposed to revising the care plan.

Figure 4. 2:

What the respondents feel about the nursing process



Chi-square tests to evaluate the link between the various attitudinal variables and the nursing process implementation were computed at a 5% confidence level. The findings are shown in

Table 4.3. Compared to nurses who did not create the nursing care plan, those who did commonly implemented it, according to statistical analysis (fisher's exact test $P=0.000$). Similarly, among the nurses who did not use the nursing process, 76.9% ($N=10$) agreed that NP takes a lot of time, whereas only 15.4% ($N=2$) disagreed. ($LR=8.717$, $df=2$, $p=0.013$) This difference was noteworthy. Furthermore, among the nurses who believed it would be hard to apply every stage of the nursing process, 42.1% ($n=16$) applied it, compared to 30.8% ($n=4$) who did not. This difference was insignificant ($2=0.929$, $df=2$, $p=0.628$). Likewise, 86.8%(33) of the nurses who implemented the nursing process thought it was practical in their setup, compared to the 10.5% ($n=40$) who implemented it despite feeling impractical. This relationship was also not significant ($LR=5.665$, $df=2$, $p=0.059$). Moreover, there was no association between the nursing process implementation and the nursing process's perceived impact on patients' outcomes ($LR=1.696$, $df=2$, $p=0.395$).

Table 4. 3

Cross tabulation of attitudinal characteristics and the implemented nursing process

Variable		Implemented the nursing process in the past week					<i>Significant at</i> <i>p≤0.05</i>
		Yes		No		N	
		N	%	n	%		
I find the nursing process time consuming	No	21	55.3	2	15.4	23	LR=8.717 df=2 p=0.013
	Uncertain	0	0	1	7.7	1	
	Yes	17	44.7	10	76.9	27	
	Total	38	100	13	100	41	
The nursing process should be adhered to always	No	6	16.2	1	7.7	7	LR=3.261 df=2 p=0.196
	Uncertain	0	0	1	7.7	1	
	Yes	31	83.8	11	84.6	42	
	Total	37	100	13	100	50	
In certain circumstances, not all nursing process steps should be adhered to	No	17	44.7	6	46.2	23	$\chi^2=0.929$ df=2 p=0.628
	Uncertain	5	13.2	3	23.2	8	
	Yes	16	42.1	4	30.8	20	
	Total	38	100	13	100	51	
Implementing the nursing process in my setup is not practical	No	33	86.8	7	40	40	LR=5.665 df=2 p=0.059
	Uncertain	1	2.6	1	7.7	2	
	Yes	4	10.5	5	38.5	9	
	Total	38	100	13	100	51	
I don't find the nursing process to improve patient outcome	No	32	84.2	8	66.7	40	LR=1.696 df=2 p=0.395
	Uncertain	2	5.3	1	8.3	3	
	Yes	4	10.5	3	25	7	
	Total	38	100	12	100	50	

4.2.5 Institutional factors and the implementation of the nursing process

These include staffing factors, training on the NP, and the role of the hospital management in implementing the nursing process.

4.2.5.1 Nursing staff establishment

The respondent was asked to respond to two issues that touch on staffing: the adequacy of nursing staff and if the staffing ratios affect the implementation of the nursing process. A large proportion of the nurses, 98.9%(n=68), felt the nursing staff is inadequate in the hospitals where they work (Figure 4.3). Further, most nurses (82.4%, n=56) observed that the nursing staff shortage impacts their ability to implement the nursing process (See figure 4.4).

Figure 4. 3

Proportion of nurses who felt the hospital has enough nurses

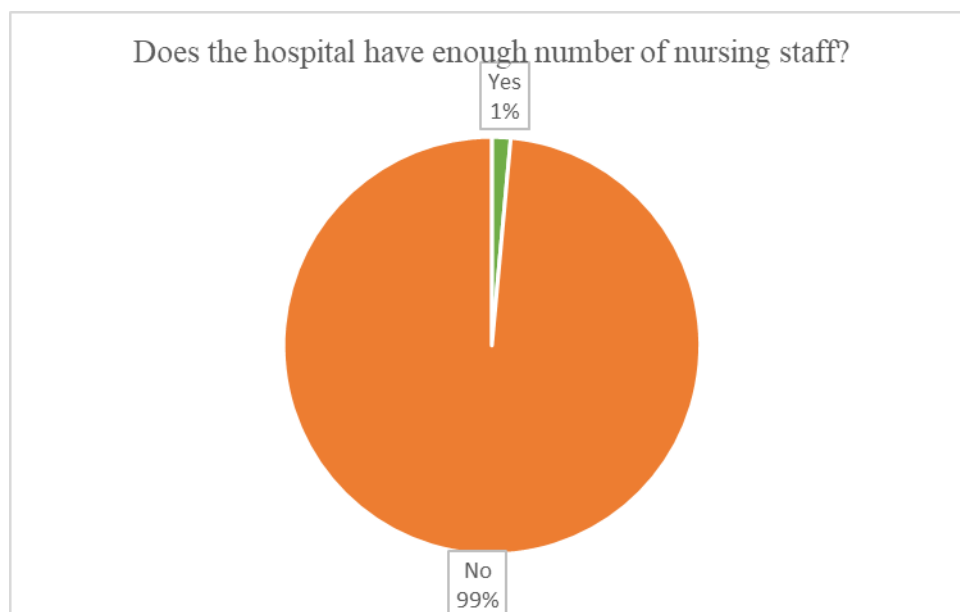


Figure 4. 4

If the nursing staff ratio impacts the nurse's ability to implement the NP

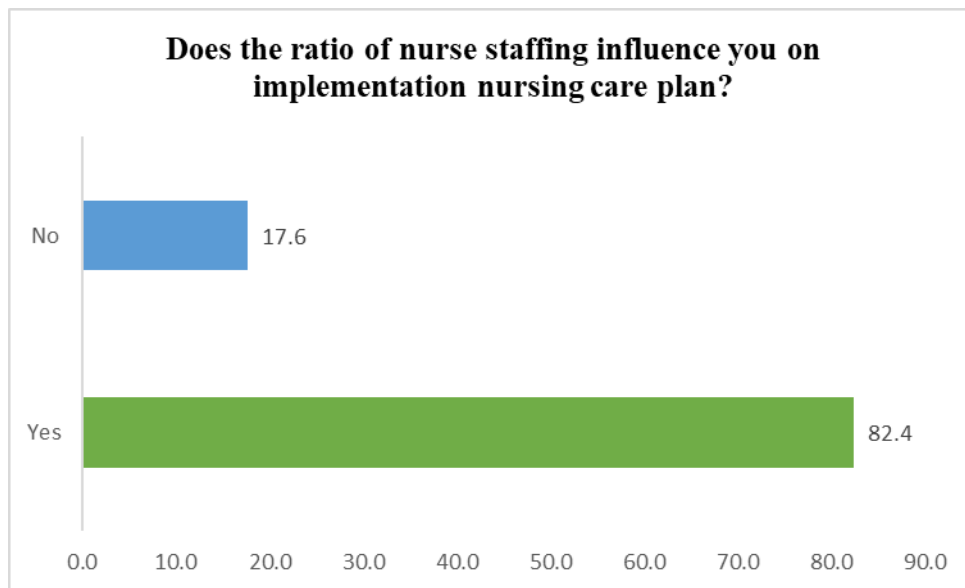


Table 4.4 shows results from cross-tabulations of institutional factors against nursing process implementation. Fisher's Exact Test ($P=0.759$) revealed no statistically significant association between the number of nurses and the use of the nursing process. The nursing ratio influences the nurse's capacity to execute the NP, as stated by 87.5% ($n=35$) of the nurses that carried out the nursing process. However, this was statistically negligible (Fisher's Exact Test $P=1.000$).

4.2.5.2 Training on the nursing process

Figure 4.5 illustrates the proportion of the nurses who participated in the nursing process training sessions if and when offered. More than half of the participants (50.7%, n=35) acknowledged that the hospitals had training sessions on NP. Asked if they had taken the training, most of the nurses, 76.1% (n=35), answered in the affirmative.

Figure 4. 5

Showing reported availability and uptake of training on the NP



The link between the nursing process implementation and training is shown in Table 4.4. Whereas 60% (n=24) of the nurses who implemented the nursing process acknowledged there was training on the NP in their hospitals as compared to 40% (n=16) who were not aware of the presence of the training, this difference was not significant ($\chi^2=0.306$, $df=1$, $p=0.580$). In a further look at the group that implemented the nursing process, 86.2% (n=25) of them had taken the nursing process training, compared to 13.8% (n=4) who had not participated. This difference was similarly not statically significant (the Fisher's Exact Test yielded a P value of 0.199).

Table 4. 4

Implemented nursing process Vs. Training and staffing ratios

Institutional-related Factors		Implemented the nursing process in the past week					Significant at $p \leq 0.05$	Exact
		Yes		No		N		
		N	%	n	%		N	
There are enough nurses in the hospital	Yes	1	2.4	0	0	1	Fisher's Test P=0.759	Exact
	No	40	97.6	13	100	53		
	Total	41	100	13	100	54		
The ratio of nurses affects the nurse's ability to implement NP	Yes	35	87.5	11	84.6	46	Fisher's Test P=1.000	Exact
	No	5	12.5	2	15.4	7		
	Total	40	100	13	100	53		
The hospital offers training on the nursing care plan.	Yes	24	60	6	46.2	30	$\chi^2=0.306$ df=1 p=0.580	
	No	16	40	7	53.8	23		
	Total	40	100	13	100	53		
Has the respondent taken the training on NP?	Yes	25	86.2	6	66.7	31	Fisher's Test P=0.199	Exact
	No	4	13.8	3	33.3	7		
	Total	29	100	9	100	38		

4.2.5.3 Managerial support

The nurses were asked to gauge the role played by the hospital and ward managers in implementing the NP. The results are shown in Figure 4.6. On coordinators, 72.1%(n=49) of the nurses stated that there are no NP coordinators in their facilities and 80.9 %(n=55) reported a lack of written hospital policy to anchor the NP implementation in the hospital. The nurses' opinions were almost equally divided on whether the hospital administration provides the required resources to plan patient care; 50.7% (n=35) agreed, and 49.3(n=34)

disagreed. Of most of the nurses, 81.2% (n=56) reported that there was some managerial supervision on NP implementation.

Figure 4. 6

Performance of management in supporting NP implementation

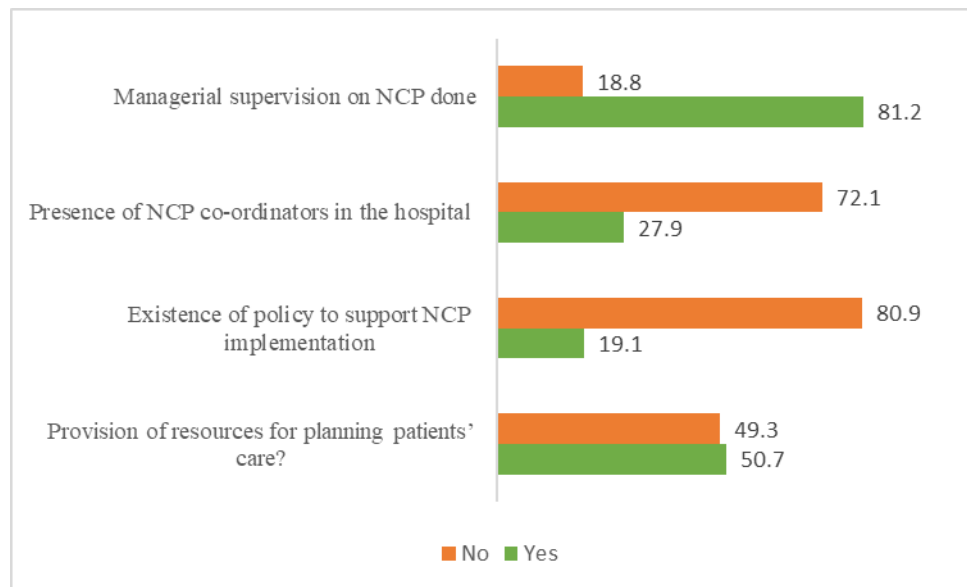


Figure 4.7 reveals most managerial supervisions, 52.8% (n=28), were done monthly. Lastly, most of the nurses (80%, n=60) felt that the hospital does not offer motivation to nursing staff to implement the nursing process (Figure 4.8).

Figure 4. 7

Frequency of Managerial supervision on NP

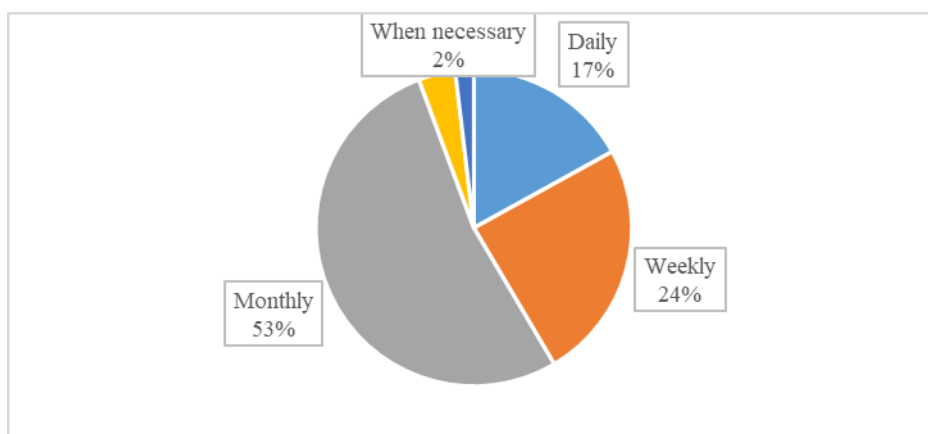
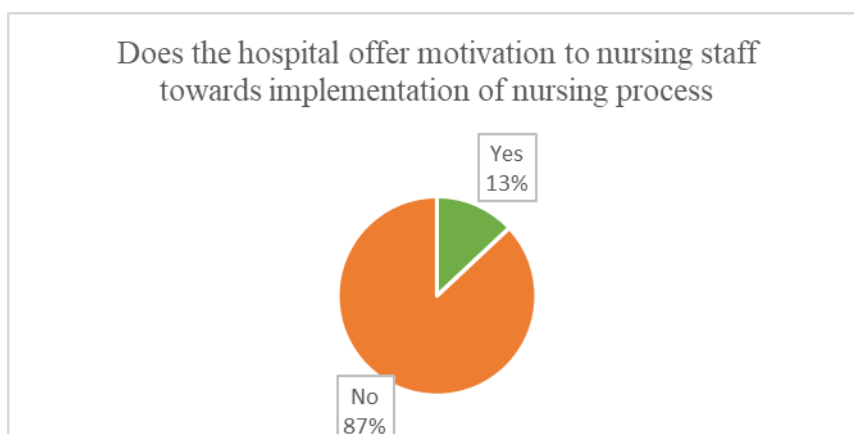


Figure 4. 8

Whether the hospital encourages Nursing staff to implement the Nursing process



There was not a statistically significant association between nursing process implementation and the existence of a policy to support NP implementation (Fisher's Exact Test, P=0.16); the presence of NP coordinators in the hospital (Fisher's Exact Test, P=0.299); or if the hospital offers motivation to nursing staff to implement NP (Fisher's Exact Test, P=0.561), according to the cross-tabulation (See Table 4.5). It was shown that nurses who reported that the resources available were insufficient for planning the treatment of patients (76.9%, n=10) were significantly more likely not to apply the NP (Fisher's Exact Test P=0.010). Also, nurses who felt they had enough supervision were more likely to follow the nursing procedure (Fisher's Exact Test = 0.007).

Table 4. 5

Implemented nursing process Vs. Resources, managerial support/supervision, policy or staff motivation

Institutional-related Factors		Implemented the nursing process in the past week					N	<i>Significant at</i> <i>p</i> ≤0.05	Exact
		Yes		No					
		N	%	n	%				
	Total	29	100	9	100	38			
Provision of resources for planning patients' care?	Yes	26	65	3	23.1	29	Fisher's Test P=0.010	Exact	
	No	14	35	10	76.9	24			
	Total	40	100	13	100	53			
Existence of policy to support NP implementation	Yes	11	27.5	1	23.1	12	Fisher's Test P=0.16	Exact	
	No	29	72.5	11	91.7	40			
	Total	40	100	12	100	52			
Presence of NP coordinators in the hospital	Yes	11	28.2	2	15.4	13	Fisher's Test P=0.299	Exact	
	No	28	71.8	11	84.6	39			
	Total	39	100	13	100	52			
Managerial supervision of NP done.	Yes	38	95	8	61.5	46	Fisher's Test P=0.007	Exact	
	No	2	5	5	38.5	7			
	Total	40	100	13	100	53			
Hospital offers	Yes	4	10	0	0	4	Fisher's	Exact	

Institutional-related Factors		Implemented the nursing process in the past week					Significant at $p \leq 0.05$ Test
		Yes		No		N	
		N	%	n	%		
motivation to nursing staff to implement NP	No	36	90	13	100	49	P=0.561
Total		40	100	13	100	53	

4.3 Qualitative analysis

4.3.1 Implementation

When the Nursing services managers (NSM) as key informants (KIs) were interviewed, there was consensus that there remained some gaps notwithstanding attempts to implement the nursing process. The ideal NP steps were rarely followed, with most nurses said to cut corners in the NP. Their assessment data and nursing diagnosis were not exhaustively captured. As one nurse typically stated:

'Most nurses will do the procedures and then fill the (NP) form afterward.'

4.3.2 Challenges and opportunities for successful implementation of the nursing process

4.3.2.1 Age and experience of nurses

Several themes pointing to challenges and areas that can be strengthened to make the nursing process entrenched in nursing care were identified during key informant interviews. Age and experience emerged as key themes during key informants' (KIs') interviews. There was consensus that recent nursing graduates better understand the nursing process. For example, one KI typically stated that the nurses who qualified when the nursing process was not

mandatory in their exams 'were slow to pick it up. On experience, the KIs felt that the 'the more a person practices, the better they become in the implementation.' However, one key informant felt that most of the recent nursing graduates performed poorly on the implementation of the NP plan when compared to their 'older counterparts. The respondent retorted that she noted that *'the [younger] nurse say it (NP) is a wastage of time....'*

4.3.2.2 Attitude to the nursing process

Another obstacle to the nursing process' adoption was attitude. Some of the preceding thoughts were supported by the primary informants. The managers felt that a negative attitude towards the NP is a key challenge in implementing the nursing process. The managers argued that even if the nurses knew what to do, they might not implement it because they feel it is extra work to draft and implement. Most nurses who do not implement NP think it is a waste of time to do something that adds no value to patient care. One key informant characteristically retorted:

'The nurses still feel they can care for the patient without going into NP....that is the main issue.' **KI-1**

The attitude that documentation is out of fear of attempts to comply with the administration's expectations is rampant. One retorted as follows:

'Even now, you could find some nurses doing it (NP) because it is a requirement, maybe from the administration, but not for the patient's benefit. We can say they (nurses) are practicing it but not 100%. Some have the attitude that it is a time waste'.

KI-2

The above scenario explains why some nurses will do the procedures and, to avoid administrative sanctions, fill out the (NP) form afterward.

Similarly, during his interviews, the nursing services managers identified shortages as a key deterrent in implementing the NP. A nursing officer-in-charge of one of the hospitals stated as follows:

'... I would say staffing is an issue, especially the issues of nursing staff; you will find in some departments where you find one nurse in a shift. And patients are coming in for admissions. The nurses will often start and write the care plan after you(sic) have already started the care.' **KI-1**

4.3.2.3 Training on the nursing process

The presence of regular training on the nursing process was also identified as a vital facilitator of the implementation of the nursing process. As KIs, the nurse managers revealed that there are opportunities deliberately created to equip nurses with the knowledge and skills in the nursing process. However, not all nurses are enthusiastic about the sessions.

'We have started CMEs on NP. We have asked other institutions, like the Agha Khan School of nursing, to come and do some facilitation in our hospitals. However, when there are CMEs, they are snapped (skipped). We have tried to motivate the staff, but it has not been taken up to the expected level.' **KI-2**

4.3.2.4 The role of policy and managerial support in the nursing process

The role of policy and managerial support in nursing process implementation was also mentioned. The hospital administrators argued that the policy on the nursing process is implied since all the nurses, by their training and work, are expected to use it in nursing care. One typically stated as thus:

'A policy is something to be followed. There may be no written policy on the plan, but we frequently review the NP to see its implementation. According to the NCK guideline, every patient coming to the hospital must have the NP.' **KI-1**

The nurses' opinions were almost equally divided on whether the hospital administration provides the required resources to plan for patients' care, with 50.7% (n=35) agreeing and

49.3(n=34) dissenting. The managers also agreed that the resources are inadequate to implement the nursing process. The excerpts below summarize their sentiments:

Sometimes when you want to implement your NP, you lack the tools to use in the implementation. For example, according to the care plans, you want to give medicines, Monitor SPO2, etc., but you find that there are no drugs or SPO2 machines. KI-2.

'...Sometimes you need a ready template so that you can now assess the patient as you write in the care plans. But, once in a while, there is a shortage of stationary [such templates]'. KI-1

4.3.2.5 Managers' views on how to strengthen nursing process implementation.

The key informants suggested measures the hospitals take to motivate nurses to implement the nursing process. These include training, frequent CMEs, and bonding sessions.

'The institution has given time to do CMEs for nurses a lot. We used to have CME every Thursday for nurses before COVID. The nurses will come up with a condition, discuss its management then finish with the nursing process. And all nurses will chip in and make comments. Sometimes during that time, there is tea and togetherness. I also have a tool that I use and give the NOIs to go and assess the implementation and see which departments are implementing it well. And they are congratulated.' KI-2

4.4 Discussion

This study examined the nursing process implementation in two sub-county hospitals in Machakos County, Kenya. The research focused on the influence of socioeconomic, attitudinal, and institutional factors on the nursing process implementation.

In developing and implementing the nursing care plan, it was observed that most nurses develop the care plans, but few execute the care as planned. However, this study shows that the nurses who develop nursing care plans are disproportionately more likely to implement them than those who do not.

The influence of nurses' socioeconomic status on nursing process implementation was also examined. Despite being knowledgeable, most recent graduates allegedly perform poorly on the performance of NP compared to their 'older counterparts. This difference was attributed to experience and attitude. Younger nurses view the nursing process as an unnecessary waste of time. Similarly, Mbithi et al. (2018) contended that older nurses are less knowledgeable about NP than their younger counterparts because the NP was not part of the curriculum when they trained. Furthermore, Toney-Butler and Thayer (2022) discovered that nurses with five years of experience were 1.79 times more likely to execute a nursing process than those with less than five years of experience.

Though academic qualification was not a significant determinant in the implementation of the NP in this inquiry, Semachew (2017) showed that the qualification level significantly influences the nursing process's implementation among nurses. Compared to nurses with a Bachelor of Science in nursing, nurses with diploma certificates were less likely to use the nursing process. According to the report, there is a lack of nursing process expertise and confidence. According to research conducted in southwest Ethiopia (Adrarro and Mengistu 2020), nurses with certificates in their training were less likely to use the nursing process than those with a bachelor's degree.

In this study, Key Informants suggested that the more experienced nurses are, the better they become at implementing the NP. Previous studies have reported mixed findings on the association between work experience and the use of nursing care plans. Isika (2018) revealed a strong link between years of practice and the utilization of the nursing process. Nurses who have been in practice longer were using the nursing process in managing patients compared to nurses with fewer years of experience or newly employed. However, nurses who were more experienced and had a longer period in the hospital tended to view some steps of NP to be of more importance, thus omitting some.

Similarly, Mwangi et al. (2019) found that nurses with fewer than five years of work experience were 1.79 times more likely to apply a nursing process. Contrary evidence exists despite the literature's assertion that senior nurses commonly use the nursing process. According to Mbithi et al. (2018), younger nurses are more receptive to using the nursing process than their more experienced colleagues. According to Mbithi, the results may be explained by the young developing a more favorable attitude toward the nursing process.

The influence of various attitudinal factors on nursing process implementation was also examined. Even though most nurses felt that the NP significantly impacts patient outcomes and should be adhered to, some argued that implementing all the steps was impossible in some circumstances. Some nurses frequently cited staff shortages or claimed that the nursing process wastes time and does not impact patient outcomes. In such cases, the nurses reportedly execute the NP but retrospectively develop the care plans to comply with the professional and institutional requirements. Some of these findings are consistent with past studies. Isika (2018) deduced from earlier study findings that people who had a favorable attitude about the nursing process were more likely to utilize it than people who had a negative attitude. Most of the nurses who had a poor attitude said that it takes time to write a nursing care plan and that it takes time to build the nursing process. Similar results were

found by Mutshatshi and Mothiba (2020), which showed that the nursing process is time-consuming, excessively lengthy, and complicated. According to the research, inadequate nursing process implementation is caused by nurses' negative views about the nursing process and their anxiety about telling their colleagues they cannot develop care plans. According to research by Vincent et al. (2019), most nurses had a negative opinion about the nursing process and agreed that it wastes the time needed to care for the patient.

Most nurses' claim that the nursing process affects patient outcomes and should always be followed is supported by earlier studies. According to a previous poll by Mwangi et al. (2019), nurses had a good attitude about adopting the nursing process, and most respondents thought it should be made mandatory.

Although key informants consistently linked staffing ratios and NP training to the adoption of the NP, both factors were deemed statistically unimportant in affecting the nursing process. According to Moghadas et al. (2020), inadequate staffing impacts the execution of nursing processes worldwide since the few nurses who are on the ground must work to make up the difference and have little time to devote to the nursing care plan. The lack of nursing care plans undermines the standard of nursing care since they assist in identifying and prioritizing nursing needs. Heavy workloads were identified by Gazari et al. (2021) as a significant barrier to many nurses using the nursing process. These findings align with those of Alemu and Kebede (2020), who found that a low nurse-to-patient ratio and a heavy workload prevented many nurses from using the nursing process. As a result, circumstances drove nurses to care for more patients than they could handle. They, therefore, carried out their tasks following the doctors' instructions. Isika (2018) did surveys in Kenya and found similar results. According to this research, a lack of staffing causes nurses to become so overworked that they cannot participate in care planning.

According to the findings of this qualitative study, frequent training on the nursing process was recognized as a critical facilitator of the nursing process' implementation concerning the influence of training on its implementation. The findings of earlier investigations are conflicting. According to Adraro and Mengistu (2020), trained nurses were more likely to carry out the nursing procedure than untrained nurses. Since most nurses were aware of how the nursing process was implemented, regular training is necessary to ensure that nurses are sufficiently informed and proficient in the nursing process.

After retraining, most nurses increased their use of the nursing process in patient management, according to a study by Julie et al. (2017) in the Democratic Republic of the Congo. The study's findings indicated that on-the-job training is the second requirement for implementing the nursing process. The survey also found that training in the nursing process is crucial for enhancing nurses' abilities and knowledge of the process. In contrast, Lekenit (2020) study found no statistically significant link between nurses' training in the nursing process and how the process is actually carried out. Most nurses who had received nursing process training did not apply it to patient care. Similarly, Semachew (2018) found that despite receiving training, most nurses seldom created and carried out nursing care plans. The nurses mentioned above blamed a ton of work, a lack of time, a lack of nursing process tools, and low staff motivation for the inability to use the nursing care plan.

This study discovered a connection between sufficient resources and the application of the nursing process. Resources and implementation have also been linked in previous research. Isika (2018) said that using the nursing process was hampered by a shortage of resources, such as inadequate stationery for drafting care plans. Similar findings have been reported elsewhere Thubaraka et al. (2018), where it was noted that nurses' perceptions of material accessibility helped them carry out the nursing procedure.

The execution of the nursing process and the existence of management oversight were shown to be substantially correlated in this study. According to Mbithi et al. (2018), most nursing personnel regard creating a care plan as a lot of paperwork, which leads to the nursing process not being implemented. Therefore, nurses prefer not to use the nursing process while managing patients in places where strict supervision is not practiced. Similarly, Nuritasari et al. (2020) demonstrated that the management of nursing services benefits nurses by improving their feelings of support, decreasing professional isolation, reducing work and emotional fatigue, increasing job satisfaction and morale, and developing professional practice and support in practice. Similar to this, a study of the literature by Munawar et al. (2019) revealed that hospital supervision of associate nurses' performance encourages nurses to feel more connected to their jobs and results in greater performance.

CHAPTER FIVE: SUMMARY, CONCLUSION, AND RECOMMENDATIONS.

5.1 Introduction

This chapter provides a summary of the findings, draws implications from those findings, and makes suggestions that are in keeping with the study's aims.

5.2 Summary

In developing and implementing the nursing care plan, it was observed that most nurses develop the care plans, but few execute the care as planned. The nurses who develop the nursing care plan are disproportionately more likely to implement it than those who do not. In addition, the ideal steps of the NP are rarely followed, with most nurses failing to capture assessment data and nursing diagnosis exhaustively. Further, some seemingly plan for care have already been affected.

According to the qualitative research findings, freshly certified nurses appear to have a better understanding of the nursing process than their more experienced colleagues. However, despite their extensive education, younger nurses tend to perceive the nursing process as a needless waste of time.

The influence of various attitudinal factors on nursing process implementation was examined. Even though most nurses feel that the NP significantly impacts patient outcomes and should be adhered to at all times, some argue against this proposition. Some nurses frequently cited staff shortages or claimed that the nursing process wastes time and does not impact patient outcomes.

Though staffing ratios, NP training, the existence of NP policy, and the presence of NP coordinators were considered statistically insignificant in influencing the nursing process implementation, the key informants cited training and staffing ratios as key determinants in the implementation of the NP. This study also linked nursing process implementation with

the availability and adequacy of resources and the presence of managerial supervision in the nursing process.

5.3 Conclusion

In conclusion, there was no major link between social demographics and the nursing process implementation. However, despite being relatively more knowledgeable than seniors on NP, the poor attitude makes the younger nurses poor implementers of the nursing process. Although most nurses feel the NP is useful, a sizeable proportion of the nursing population who see it as a waste of time exists. When they do, it is often to avert reprisals by the administration.

Some institutional factors were noted as impairing the nursing process implementation. Those cited in this study include lack of training, shortage of staff, and inadequate resources such as stationery. Further, frequent managerial supervision was linked to better nursing process implementation.

5.4 Recommendations

This study recommends that:

1. Deliberate efforts to change the attitude of younger nurses toward embracing senior nurses, mentors and supervisors should make the NP. Further, the management in each hospital in Machakos County should ensure they develop a way to motivate the nurses to use NP and reward the best practices. Regular training and continuous professional development training may help.
2. The nursing administration cultivates a positive attitude among nurses regarding the nursing process. In particular, the administration emphasizes making nurses understand that the tool should be used consistently with all patients and that it significantly improves patient care.

3. The facility management ensures the availability of NP resources and provides continuous nursing education, workshops, and seminars on NP. Also, the management should ensure that nurses who completed college before NP was introduced into the curriculum are trained.
4. The county government of Machakos needs to employ more nurses to meet the standard nurse-to-patient ratio to reduce the workload for nurses and enable them to offer individualized care to the patient by having enough time to plan for the care.

5.5 Areas for further research

The study observed that nurses were biased in favor of implementing nursing care plans for critically ill patients. Therefore, further research should be conducted in acute and critical care units to ascertain these assertions and assess the NP's impact on patient outcomes.

REFERENCES

- Adraro, Z., & Mengistu, D. (2020). 'Implementation and Factors Affecting the Nursing Process among Nurses Working in Selected Government Hospitals in Southwest Ethiopia'. *BMC Nursing* 19(1),105. doi: 10.1186/s12912-020-00498-8.
- Alemu, B. & Tolessa, K. (2020). 'Factors Affecting Implementation of Nursing Process Among Nurses Working in Governmental Hospitals, Oromia Region, Ethiopia, 2016: Cross Sectional Study'. *International Journal of Clinical and Experimental Medical Sciences* 6(3), 28. doi: 10.11648/j.ijcems.20200603.11.
- Baraki, Z., Fiseha, G., Kalayou, K., Hadgu, G., Dejen, G. & Hafte, T. (2017). 'A Cross Sectional Study on Nursing Process Implementation and Associated Factors among Nurses Working in Selected Hospitals of Central and Northwest Zones, Tigray Region, Ethiopia'. *BMC Nursing* 16(1), 1–9. doi: 10.1186/s12912-017-0248-9.
- Benedet, S, A., Maria, I, P, Francine, L., Gelbke, & Maria, B. (2018). 'The Model Professionalism in the Implementation of the Nursing Process (1979-2004)'. *Revista Brasileira de Enfermagem* 71(4), 1907–14. doi: 10.1590/0034-7167-2017-0226.
- Ebisa, Z., Dechasa, A., Robi, M., Chaka, E. & Guta, K. (2022). 'Implementation of Nursing Process and Its' Associated Factors among Nurses' Working at Public Hospitals of Central Ethiopian, 2020; Institutional Based Cross-Sectional Study'. *Journal of Nursing and Practice* 5(3), 1-7. doi: 10.36959/545/422.
- Eletu, E. (2022). 'Nurses' Perceptions of the Nursing Process at Soroti Regional Referral Hospital.' [Masters, Thesis, Busitema University]. <http://hdl.handle.net/20.500.12283/884>
- Gazari, T, Apiribu, F, Adongo, R., Atanuriba, A., Awenabisa, G. & Margaret, W. K. (2021). 'Qualitative Exploration of the Challenges and the Benefits of the Nursing Process in Clinical Practice: A Study among Registered Nurses in a Municipal Hospital in Ghana'. *Nursing Open* 8(6), 3281–90. doi: 10.1002/nop2.1043.
- Ghanbari, A., A. Monfared, T. Hoseinzadeh, F. Moaddab, & A. Sedighi. (2017). 'The Impact of the Nursing Process Education on Critical Thinking of Nursing Students'. *Research in Medical Education* 9(2), 33–25. DOI:10.29252/rme.9.2.33
- Godin, G. & Gerjo, K. (1996). 'The Theory of Planned Behavior: A Review of Its Applications to Health-Related Behaviors'. *American Journal of Health Promotion* 11(2), 87–98. doi: 10.4278/0890-1171-11.2.87.
- Isiaho, L, A. (2019). 'Factors influencing implementation of nursing process among registered nurses in vihiga county referral hospital.' *International Journal of Advanced Research* 7(6), 938–89. doi: 10.21474/IJAR01/9301.
- Isika, M. (2018). 'Exploring Factors Influencing Implementation of Nursing Process in Mathari National Teaching and Referral Hospital.[Doctoral Dissertation, University of Nairobi]. <http://hdl.handle.net/11295/105853>

- Julie, N. K., Ilunga, K., Matungulu, S., Kabange, C., Uamba I., Mahuridi, A Mwinkeu Kasongo, N. (2017). 'Factors Associated with the Implementation of the Nursing Process in the Public Hospitals of Lubumbashi in the Democratic Republic of Congo: A Cross-Sectional Descriptive Study'. *OALib* 04(11), 1–9. doi: 10.4236/oalib.1104054.
- Lekenit, A. S., Gatere, R & Mutinda, A.K. (2020). 'Barriers to Implementation of Nursing Process among Nurses Working in Narok County Referral Hospital'. *Journal of Health, Medicine and Nursing* 5(4), 15–35. DOI: <https://doi.org/10.47604/jhmn.1145>
- Lotfi, M., Vahid, Z, Rahim, K. & Khorshid, M. (2021). 'Nursing Process from Theory to Practice: Evidence from the Implementation of "Coming Back to Existence Caring Model" in Burn Wards'. *Nursing Open* 8(5), 2794–2800. doi: 10.1002/nop2.856.
- Mbithi, B. W., Mwenda, C.S & Karonjo, J. (2018). 'Institutional Factors Affecting Utilization of Nursing Process among Nurses in Selected Public Health Care Facilities in Kenya'. *International Journal of Advances in Scientific Research and Engineering* 4(10), 146–53. doi: 10.31695/IJASRE.2018.32922.
- Moghadas, T. & Maryam, S. K. (2020). 'Factors Influencing Implementation of Nursing Process by Nursing Students: A Qualitative Study'. *Journal of Medical Education* 19(4), Article e110810 doi: 10.5812/jme.110810.
- Munawar, M., Ariyanti, S., & Rini, R. (2019). 'The Influence of Supervision on the Performance of Associate Nurse in Hospitals: A Literature Review'. *Journal of Nursing Practice* 2(2), 91–96. doi: 10.30994/jnp. v2i2.47.
- Mutshatshi, T. E. &Tebogo, M. (2020). 'Nurses' Practices During Implementation of the Nursing Process at a Selected Public Hospital of Limpopo Province, South Africa: A Qualitative Pilot Study Analysis'. *The Open Public Health Journal* 13(1), 1-7 <https://openpublichealthjournal.com/VOLUME/13/PAGE/309/>
- Mwangi, C., Meng'anyi, L. & Mbugua, R.G (2019). 'Utilization of the Nursing Process among Nurses Working at a Level 5 Hospital, Kenya'. [Master's Thesis, South Eastern , Kenya University], <http://repository.seku.ac.ke/handle/123456789/5033>
- Nuritasari, R T., Erfan, R., Tan, F. & Rizal, T.A. (2020). 'The Effect of Clinical Supervision on Nurse Performance. *Jurnal Ners* 14(3),161–64. doi: 10.20473/jn. v14i3.16956.
- Polit, D.F. & Chery, T, B. 2017. *Nursing Research: Generating and Assessing Evidence for Nursing Practice*. (10th ed). Wolters Kluwer Health.
- Semachew, A. (2018). 'Implementation of Nursing Process in Clinical Settings: The Case of Three Governmental Hospitals in Ethiopia, *BMC Research Notes* 11(1),173. doi: 10.1186/s13104-018-3275-z.
- Sibandze, B. T. & Scafide, K.N. (2018). 'Among Nurses, How Does Education Level Impact Professional Values? A Systematic Review'. *International Nursing Review* 65(1),65–77. doi: 10.1111/inr.12390.
- Thuvaraka, S., S. Vijayanathan, M. Pakeerathy, R. Subathra, M. Laavanya. & Priyanthi, W.N, (2018). 'Challenges Faced by Nurses for Implementation of Nursing Process in

Special Units at Teaching Hospital Jaffna'. *International Journal of Science & Healthcare Research* 3(1), 61–64. doi: 10.1002/nop2.1043.

Toney-Butler, T.J. & Jennifer, M. T. (2022). 'Nursing Process'. in *StatPearls*. Treasure Island (FL). StatPearls Publishing.

Umutesi, M.C. (2017). 'Assessment of Barriers to Implementation of Nursing Process among Nurses Working at a Selected Referral Hospital in Rwanda'. [Doctoral Dissertation, University of Rwanda]. <http://dr.ur.ac.rw/handle/123456789/412>

Vincent, C. C. N., C. Asodike, M. S., Naze, N., E., Gloria, U. N., Obeagu, E., Ifeanyi, J. & Ezeama, M.C. (2019). 'Knowledge, attitudes and practices of nurses regarding infection prevention and control in imo state university teaching hospital (imsuth), orlu, imo state, nigeria'. *European journal of pharmaceutical and medical research* 8(6), 127-134. <https://www.ejpmr.com/>

Wagoro, M. Carole, A.& Chris, P. R. (2015). 'Mainstreaming Kenya-Nursing Process in Clinical Settings: The Case of Kenya'. *International Journal of Africa Nursing Sciences* 3, 31–39. doi: 10.1016/j.ijans.2015.07.002.

APPENDICES

Appendix I: Informed Consent

My name is **Hellen Makandi Kiarie**, a Master of Science in Nursing degree (Nursing Education) student from Kenya Methodist University conducting a study on the implementation of the nursing process at Kangundo and Kathiani sub-county referral hospitals in Machakos county in partial fulfillment of the requirements for the award of the degree. You are kindly requested to answer these questions as honestly and precisely as possible. Responses to these questions will be treated as confidential. Participation is voluntary, and non-participation will not be used against you.

Benefits: The outcome of the study will help in improving the implementation of the nursing process

Risks: There is no risk involved in the study as it is voluntary.

Having understood the above information and knowledge that the survey is voluntary and that confidentiality and anonymity are guaranteed, I now accept to participate in the survey.

Respondent Signature _____ Date _____

Appendix II: Key Informant Interview Guide

I thank you for taking the time to meet with me for the interview.

My name is **Hellen Makandi Kiarie**, a Master of Science in Nursing degree (Nursing Education) student from Kenya Methodist University conducting a study on the implementation of the nursing process at Kangundo and Kathiani sub-county referral hospitals in Machakos county in partial fulfillment of the requirements for the award of the master's degree

This section is going to take 60-120minutes. The interviewer will be taking notes and the interview will be recorded to avoid missing on any comments you will give. All responses will be kept confidential, this means that your responses will only be shared with the research team members and we will ensure that any information included in our report does not identify you as the respondent. You don't have to talk anything that you are not comfortable with.

Is there a question about what I have just explained?

Are you willing to participate in this discussion?

Yes..... No.....

TOPICS

Q1. Are nurses implementing nursing process in this hospital? If yes

Q2. How do you think the following factors influence implementation of nursing process in this hospital?

- a. Socio-demographic factors
- b. Attitudinal factors
- c. Institutional factors
- d. Hospital policy

Q3. Does this hospital have a policy on the implementation of the nursing process? If yes, what does it say?

Q4 What type of supervision do you do, and how often?

Q4 Does the hospital organize nursing process training for nurses? If yes, how many nurses have been trained, and how often is the training?

Q4. Do you do audits to determine the implementation of the nursing process in this hospital?

If yes, how often were the key findings in the most recent audit report?

Q5. Is there³ a policy on implementing the nursing process in this facility? Do you think the policy influences the implementation in any way? (Probe for reasons)

Appendix III: Questionnaire

Questionnaire serial number.....Interviewer ID..... Date of
interview...../...../.....

Instructions

Do not write your name anywhere on this questionnaire

Put a tick (✓) against the appropriate response and fill in the blank spaces where appropriate

Part 1: Socio-demographic factors influencing implementation of nursing process

Q1. What is your age bracket?

1. 21-30 years []
2. 31-40 years []
3. 41-50 years []
4. Above 50 years []

Q2. What is your highest professional qualification?

1. Enrolled nurse []
2. Diploma []
3. Higher diploma []
4. BSc. Nursing []
5. MSc Nursing []

Q3. How long have you practiced as a nurse?

1. Less than one year []
2. 1 – 5 []
3. 6- 10 []
4. 11-15 []
5. Above 15 []

Part II: Implementation of the nursing process

4). Have you developed a nursing care plan in the last seven days you have been on duty, including today?

- 1. Yes []
- 2. No []

Q5. If yes, have you implemented the nursing process?

- 1. Yes
- 2. NO

If yes, list the steps you followed to develop and implement the nursing process

.....

.....

.....

Part III: Attitudinal factors influencing implementation of the nursing process

	STRONGLY AGREE	AGREE	UNCERTAIN	DISAGREE	STRONGLY DISAGREE
Q6. I find the nursing process time consuming					
Q7. The nursing process should be adhered to always					
Q8. In certain circumstances, not all nursing process steps should be adhered to					
Q9. Implementing the nursing process in my setup is not practical					
Q10. I don't find the nursing process to improve patient outcome					
Q11. The nursing process is a tedious time consuming and should be revised					

Part IV: Institutional factors influencing implementation of the nursing process

Q12. Does the hospital have enough nursing staff?

- 1. Yes []
- 2. No []

If No in the above question, what is the ratio of nurse to the patient in your ward

.....

Q13. Does the ratio of nurse staffing influence you on the implementation nursing care plan?

- 1. Yes []
- 2. No []

If yes to the above question, please explain

.....
.....

Q14. Has the hospital offered training on a nursing care plan?

- 1. Yes []
- 2. No []

(b) If yes to the above question, are you trained?

- 1. Yes []
- 2. No []

Q15. Does the hospital administration provide the required resources to plan patient care?

- 1. Yes []
- 2. No []

If yes, to the above question, please explain

.....
.....

Q16. Is there a policy written down by management about implementing the nursing process?

1. Yes, 2. No

(a) If yes. Does the policy influence whether or not to implement the nursing process?

Explain.....,.....

b) what does the policy say if there is any.....

Q17. Do you have nursing process coordinators in this hospital?

1. Yes, 2. No

If yes, what is their role?

.....
.....

Q18. Is there any supervision done by the hospital managers on the nursing process?

1. Yes, 2. No

If yes how often

1. Daily 2. Weekly 3. Monthly 4. Yearly

Q19. Does the hospital offer motivation to nursing staff towards implementation of nursing care plan?

1. Yes []

2. No []

If yes, how?

.....
.....

THANK YOU FOR PARTICIPATING

Appendix IV: PERMIT FROM NACOSTI

 <p>REPUBLIC OF KENYA</p> <p>Ref No: 527767</p>	 <p>NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION</p> <p>Date of Issue: 18/May/2021</p>
RESEARCH LICENSE	
<p>This is to Certify that Ms. KIARIE makandi HELLEN of Kenya Methodist University, has been licensed to conduct research in Machakos on the topic: Implementation of nursing process at Kangundo and Kathiani sub county hospitals of Machakos County for the period ending : 18/May/2022.</p>	
License No: NACOSTI/P/21/10482	
Applicant Identification Number	 Director General
NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION	
Verification QR Code	
	
<p>NOTE: This is a computer generated License. To verify the authenticity of this document, Scan the QR Code using QR scanner application.</p>	

Appendix V: Authority from KeMU SERC



KENYA METHODIST UNIVERSITY
P. O. BOX 267 MERU - 60200, KENYA FAX: 254-64-30162
TEL: 254-064-30301/31229/30367/31171 EMAIL: serc@kemu.ac.ke

April 26, 2021

KeMU/SERC/MSN/21/2021

HELLEN MAKANDI KIARIE
Kenya Methodist University

Dear Hellen,

SUBJECT: IMPLEMENTATION OF NURSING PROCESS AT KANGUNDO AND KATHIANI SUB COUNTIES REFERRAL HOSPITALS IN MACHAKOS COUNTY

This is to inform you that Kenya Methodist University Scientific Ethics and Review Committee has reviewed and approved your above research proposal. Your application approval number is KeMU /SERC/MSN/21/2021. The approval period is 26th April 2021 – 26th April 2022.

This approval is subject to compliance with the following requirements

- I. Only approved documents including (informed consents, study instruments, MTA) will be used.
 - II. All changes including (amendments, deviations, and violations) are submitted for review and approval by Kenya Methodist University Scientific Ethics and Review committee.
 - III. Death and life-threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to KeMU SERC within 72 hours of notification.
 - IV. Any changes, anticipated or otherwise that may increase the risks or affected safety or welfare of study participants and others or affect the integrity of the research must be reported to KeMU SERC within 72 hours.
-
- V. Clearance for export of biological specimens must be obtained from relevant institutions.
 - VI. Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. Attach a comprehensive progress report to support the renewal
 - VII. Submission of an executive summary report within 90 days upon completion of the study to KeMU SERC.

Prior to commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology and Innovation (NACOSTI) <https://oris.nacosti.go.ke> and also obtain other clearances needed.



Appendix VI: Authorization from Machakos County Government

REPUBLIC OF KENYA



GOVERNMENT OF MACHAKOS COUNTY
DEPARTMENT OF HEALTH AND EMERGENCY SERVICES
Office of the County Director of Medical Services

Machakos Highway
P.O. Box 2574-90100
Machakos, Kenya
REF: MKS/DHES/RSCH/VOL 1/34

Telephone: +254 -44-20575
Fax: 254-44-20655
12th May 2021

Principal Investigator - ATTN: Hellen Makandi

Dear Hellen,

RE: LETTER OF AUTHORIZATION FOR CONDUCTING PROPOSED RESEARCH

Reference is made to your request to conduct a study titled "Implementation of nursing process at Kangundo and Kathiani sub-county hospitals"

Kindly adhere to research ethics during your study.

You are hereby authorized to proceed with the research and urged to share the findings with the Department of Health and Emergency Services; Machakos County, through this office.

Sincerely,

A handwritten signature in black ink, appearing to read "Clarice Ambale".

Dr. Clarice Ambale

Research Co-ordinator

For; Director Medical Services, Machakos County

CC:

Medical Superintendent – Kangundo Subcounty hospital

Medical Superintendent – Kathiani Subcounty hospital