BARRIERS TO IMPLEMENTATION OF NURSING PROCESS AMONG NURSES WORKING IN NAROK COUNTY REFERRAL HOSPITAL

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DECLARATION

I declare that this thesis is my original work that has never been presented before for any award or degree in another institution of higher learning.

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DEDICATION

This research is dedicated to all nurses in Narok County both private and public sector.

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God almighty, receive glory and Honour for having given me good health, finances and time during the entire period of my research project development.

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ABSTRACT

Globally, nursing process has gained popularity and is utilized in hospitals to offer quality individual nursing care to patients. It is utilized by nurses in clinical setup to offer quality nursing care to patients individually as unique and having special needs. Nursing process non-implementation can lead to poor nursing care to patients in healthcare institutions. This study therefore assessed barriers of nursing process implementation by Narok County Referral Hospital (NCRH) nurses. A descriptive cross sectional study design was used to collect data from 102 conveniently sampled nurses in NCRH. The study instruments used were self-administered questionnaires and key informant interview. SPSS version 20.0 was used to analyze quantitative data and sample characteristics were analyzed using mean and median. Qualitative data was thematically analyzed and presented in tables. Association between the study variables was calculated using chi square at 95% level of significance while statistical significance of results obtained was calculated using p values of 0.05. Approval was sought from relevant authorities. The study findings may be of importance to Health institution managers, policy makers, nurses and patients in terms of improving service delivery, reduction in mortality and morbidity as well as length of stay of patients. The study results showed that female participants were the majority(70.6%). Most participants (71.6%) had attained diploma level of education and among them, 92.2% had received training in nursing process. Majority 95 (93.2%) were observed not to implement nursing process and of those who implemented, only 1 (1%) correctly outlined all the steps, a sign of poor nursing process implementation. NP implementation was of statistical significance with age of nurses ($p = 0.001$) since 18 out of 29 of younger nurses aged 21-30 years were found to actively practice it. This finding showed that younger nurses were found to implement NP more compared to their older counterparts. Work experience ($p = 0.015$) was also of statistical significance since the study results showed that recently qualified nurses with working experience of 10 yrs and below ($p=0.015$) had high likelihood of implementing NP at 64.7% in relation to their counterparts who are older in the profession. Those who were between 11-15 years accounted for 26.3% while 29.4% were aged 16 years and above. This finding shows that nurses who are fresh from school practiced what they learnt and try to do the ideal as opposed to their counterparts who have remained in service for many years. On the other hand, institutional factors ($p=0.075$) had no significant relationship with NP implementation except on the supply of necessary tools ($p=0.001$) and implementation of NP. Availability of materials was seen to impact positively NP implementation. The interview also revealed less commitment by the hospital administration to supporting nurses in implementation of the NP. Therefore, the study recommends that nursing process mainstreaming interventions such as regular staff refresher courses, mentorship in the hospitals, availability of relevant resources, change of attitude by nurses, hospital managers commitment towards supporting NP activities and nurses, can highly improve NP implementation and prevent the above obstacles

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ACRONYMS

BScN	Bachelor of Science in Nursing
FPC	Finite Population Correction
KeMU	Kenya Methodist University
MOH	Ministry of Health
MScN	Master of Science in Nursing
NANDA	North American Nurses Diagnosis Association
NCP	Nursing Care Plan
NCRH	Narok County Referral Hospital
NP	Nursing Process
SPSS	Statistical Package for Social Sciences
QHC	Quality Health Care
VCT	Voluntary Counseling and Testing

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Nursing process according to Carlson (2010) is an approach towards solving problems systematically through identifying, preventing as well as treating existing or possible health issues towards promotion of wellbeing of patients. Around the world, nursing process has gained popularity and is being used in health facilities to offer the best individual nursing services to patients. Although implementation of the nursing process was well investigated throughout much of the developed world, the issue has only rarely been researched in developing countries. A study by Alfaro-LeFevre(2010) revealed that many African countries have adopted the nursing process but the problem lies in its implementation in the clinical setting.

In Nigeria, nursing process through the degree program is reported to have begun in the 1980s in the universities but its implementation in the clinical set up materialized in the 1990s, which is approximately 10 years later. Wilkson (1999) explained that the nursing process terms are used by nurses as individual progressive steps which in reality are steps that progressively form continuous circle of thought and action. He further stated that nursing process is a universally applicable dynamic process which is patient-centered, goal-centered, cyclic, problem-centered and cognitive in nature. Berman et al.

(2008) also stated about the NP being continuous for every individual patient's problem and care.

A study by Mahmoud and Bayoumy (2014) found out that, usage of care plans by nurses remained a challenge specifically in middle and low income countries including Kenya. They further found out that nursing process non implementation in clinical areas was also due to negative perceptions, lack of competence and inadequate resources.

Quality nursing care can be achieved only if there is expansion of proper use of scientific nursing care process in patient management and that this is achievable through nurses who are majority in the health sector. Up to 51.5% of all health workers in Kenya are nurses and the large percentage of overall quality healthcare is contributed by nurses (Wakaba et al. 2014).

Nursing process has been included in all levels of nursing training curriculum in Kenya. However, Nyatichi (2012) stated that nurses still feel uneasy and unprepared to utilize the said process using available policies and that this has attributed to sub-standard quality care services in government health facilities in Kenya. Similar challenges according to Department of Nursing (2009) regarding use of nursing care process in practical setup are faced in Kenyan hospitals hence leading to substandard care. In support of the above statement, Mahmoud and Bayoumy (2014) have attributed these challenges to inadequate resources, incompetence, negative attitudes, nurse characteristics like age, education level and experience. A study by Manal and Hala (2014) revealed that education status of a nurse is directly proportional to the application

and use of nursing care plans. Also in support of the above findings is Queiroz et al.(2012) who found out that nurses' insufficient knowledge on the steps of the NP, nurses' inadequate training, and time constraints impede nursing process implementation in practical setup.

1.2 Problem Statement

The Ministry of Health (2010) reveals that patients in Kenyan public hospitals are dissatisfied with nursing care. Therefore, to improve the overall quality of healthcare, nursing services must be improved.

Inadequate use of NP towards patient management can lead to substandard care, prolonged hospital length of stay and increase in death rate and debilitation related to actual as well as possible risks which could have otherwise been prevented if nursing care plans are utilized by all nurses as required (Bastable, 2008).

Nursing process has been included in the curriculum for all levels of training for nurses in Kenya. However, a study by Nyatichi (2012) on factors influencing implementation of the NP in Naivasha District Hospital, Kenya, revealed that nurses find some barriers in their daily implementation of NP in health institutions contributing to poor quality of health care in public hospitals in Kenya as only 15.7% to 30.1% of them utilized some of the components of NP. This has probably attributed to substandard quality health care (QHC) in government hospitals in Kenya.

A random check on 125 patients' medical files in the seven wards in Narok County Referral Hospital in March, 2018 revealed a zero percent utilization of NCP in patient care at the time of visit since none of the randomly selected patient medical records had a Nursing care plan in it. The number of files checked per ward were; Paediatric (35), Male Medical (22), Male Surgical (15), Female Medical (20), Female Surgical (15), Obstetric and Gynaecology (8) and Maternity (10). In addition, the patients' files also revealed a prolonged average length of stay as majority of patients stayed for at least 10 days regardless of their initial medical diagnoses. This being a clear gap in terms of NP implementation necessitated this study in order to assess possible hindrances towards use of the said scientific process in this hospital since this had probably led to prolonged patient's average length of stay, increased morbidity and mortality rates, substandard patient care and poor patient outcome. In addition, there are no known studies that have been undertaken in Narok County health facilities to indicate the reason for these difficulties.

1.3 Purpose of the Study

The purpose of this study was to find out barriers to implementation of nursing process among Narok County Referral Hospital nurses.

1.4 Specific Objectives

1. To determine the institution-related barriers to implementation of the nursing process in Narok County Referral Hospital.

2. To determine the nurse-related barriers to implementation of the nursing process among nurses working in Narok County Referral Hospital.
3. To determine the patient-related barriers to implementation of the nursing process in Narok County Referral Hospital.

1.5 Research Questions

1. What are the institution-related barriers to implementation of the nursing process among nurses working in Narok County Referral Hospital?
2. What are the nurse-related barriers to implementation of the nursing process among nurses working in Narok County Referral Hospital?
3. What are the patient-related barriers to implementation of the nursing process in Narok County Referral Hospital?

1.6 Research Hypotheses

Null hypothesis: Narok County Referral Hospital nurses have no barriers to nursing process implementation

1.7 Study Justification

A study by Rivas et al. (2012) pointed out about the NP being a method which is scientifically proven towards offering the best nursing care which is holistic in nature and implementing it effectively is necessary if the best care has to be offered.

Most researches that have been undertaken by different scholars concentrated majorly on determining factors towards utilization of nursing care plan in the clinical set-up. Very little research was undertaken regarding barriers towards nursing process implementation. This necessitated a study to find out the possible barriers hindering nurses from putting to action nursing process in care of patients in Narok County Referral Hospital.

Following devolution of health services among others, it was expected that the County governments would strive to improve health services to higher standards. This is not the case in Narok County as evidenced by service delivery particularly in the health sector. Therefore, this study will be of significance as it will act as a baseline study for other researches who would like to venture a similar field in future.

1.8 Significance of the study

The findings of this study will equip nurses with information on possible hindrances towards utilization of NP and the methods of curbing these shortcomings. It will also inform in-service training coordinators in all health institutions in Kenya on the significance of updating the nurses' know-how on the said field, useful to policy makers and health care planners in up scaling NP utilization n service delivery.

It can also benefit the patients through improving the standards of care, reduce the burden of prolonged length of stay in hospitals, promote positive patient outcome, reduce mortality and morbidity as well as increase patient's satisfaction towards nursing

care. It can also promote professional responsibility and accountability of nurse practitioners. The finding of this study can also act as a basis for future studies.

1.9 Limitations and delimitations of the study

1.9.1 Limitations of the study

This study was conducted among nurses working in NCRH only and therefore, the results may not be generalized to private hospitals and non-nursing programs. Cross-sectional study design was used in this study and may not be used to infer cause-effect relationship or even study changes in behaviour for a long period of time (Pokorski, 2009) and this attributed to the independent variables not being subject to manipulations in this study. However, the design remains useful in inferring associations between the independent and dependent variables. Being a self-reported study, there could have been insincerity among the respondents in giving correct responses for fear of penalization by the institution.

1.9.2 Delimitations

The study limits itself to NCRH but can be replicated in other public hospitals which would make the results to be generalized and the choice of cross sectional study, self-reported tools and area of study made the study logistically visible. The questionnaire had majority of structured questions which helped reduce time and energy required by the respondents in filling them.

1.10 Operational definition of terms

Barriers: Factors hindering nurses in Narok County Referral Hospital (NCRH) from utilizing nursing process in patient management.

Nursing process: A systematic approach which is scientific in nature involving use of nursing process in patient management and that forms a basis for nursing care towards patient management among NCRH nurses.

Implementation of nursing process: Implementation means utilizing all the NP steps in patient care by nurses in NCRH. It was used interchangeably with utilization in this study.

Quality nursing care: This refers to best practices channeled towards patient care by attending to patients individually and holistically by applying NP steps correctly in patient management in NCRH.

Perceptions: This refers to the way in which nurses in NCRH regard or interpret the nursing process in relation to patient care.

Nurse-related barriers: Refers to hindrances arising from the nurses in NCRH and that impede them from implementing the nursing process in patient management.

Patient-related barriers: Obstacles culminating from patients in NCRH that make it difficult for nurses to apply nursing process in their management.

Institution-related barriers: Refers to obstacles related to NCRH management, preventing or barring nurses in NCRH from implementing the nursing process in patient management.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

Relevant literature on barriers to nursing process implementation were examined extensively in this chapter. The chapter will also identify gaps in literature in terms of use of nursing care plan through blending of worldwide studies that have faced the same challenges and the situation in Kenya in order to try to look at the problem in different dimensions. Written materials on barriers to nursing process implementation towards care of patients were available and were reviewed extensively based on study objectives.

Literature review according to Galvan (2006) refers to analysis of topics of interest to the researcher. The sources of literature reviewed in this study included; Books, Theses, Policy documents, Online resources, Theses, Journal articles and available conference papers. The literature search was done in the relevant databases; Nurses-Medscape, Sage, CINAHL, Google scholar and Medline. This literature was categorized in order of the objectives of the study. The search keywords included; "improving quality nursing care'', ''utilization of nursing care plan'', ''nursing process application,' ''nurses' knowledge of the nursing process'' and ''hindrances to use of nursing care plan".

According to American Nurses Association (2009) as reported by Herdman and Kamitsiru (2015) regarding nursing process, NP use entails blending its two sides; the

art and science and its application has been found practically to be effective in bringing global revolutions to patient care, outcome as well as nursing practice in general.

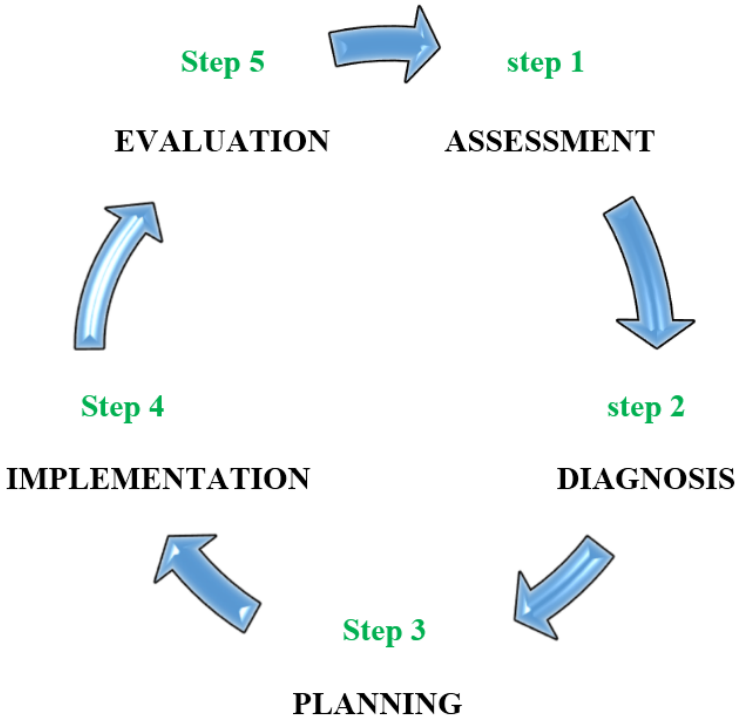
Nursing process practice is facing numerous challenges globally and even in Kenya, but despite the challenges, use of nursing care process has been found to be beneficial to patient care and nursing profession in states where its application has been done effectively. Nursing process according to Habermann and Uys (2005)has been proven through research to be offering a framework that acts as a guideline to the nurses towards provision of care that is systematic and organized in clinical area.

2.2 The Nursing Process

Nursing process is a problem solving approach that has the following steps; nursing assessment, nursing diagnosis, plan of care, intervention and care evaluation used by nurses to offer improved care based on sound scientific rationale. This process is represented in Figure 2.1 below.

Figure 2.1

Nursing Process Steps



Nursing process is scientifically proven, globally accepted method that nurses use to offer individualized patient care. Nursing care process according to Alfaro-LeFevre (2010) and Berman et al. (2012) in international literature, comprises the following steps; needs assessment, nursing diagnosis, and identification of outcome, care planning, nursing interventions, care implementation and process evaluation. Wagoro and Rakuom (2015) revealed that Kenya has added documentation as the last step following poor documentation by Kenyan nurses as observed by nurse administrators while carrying out supervision in the practical setup. Saranto and Kinnunen (2009) stated that NP is a problem-solving systematic way that promotes wellness through identification, prevention and addressing existing or foreseen health risks; recording of

every action of the nursing process in the patient's card and notes is necessary in provision of information that facilitate patients' care continuity.

Nursing process acts as a guide to the sequence of clinical reasoning through utilization of different technologies. It brings together information gathered, puts it in order and ensures there is information continuity through documentation, thus facilitating easy evaluation of nursing services efficiency by nurses themselves as well as modification of performance based on results of recovery of patients (Dal Sasso et al., 2013).

2.3 Nursing Process Implementation

Learning and applying nursing process in today's world are two different things according to Akbari and Shamsi (2009). They further went ahead and revealed that most nurses rarely use nursing care plan especially when the number of patients is high; they only apply it when attending to one patient and so this means that largely, nurses are responsible for non-implementation of the said technique. Approximately fifty percent (50.6%) of the subjects in this study reported having utilized nursing care plans in provision of care but contrary to what they said, most of them did not learn the process in the correct way.

A study by Pokorski et al. (2009) conducted in Porto Alegre, Brazil, revealed that more than 90% of the medical files reviewed contained all steps of the nursing process except nursing diagnosis while intervention was the least performed step.

Another study by Lopes et al. (2010) at a Brazilian Teaching Hospital, revealed that priority was given to documentation of physical body examination and sometimes records of interventions by nurses were present unlike nursing diagnoses records which were conspicuously missing. Similarly, Reppetto and Suazo (2005) at Sao Paulo city teaching hospital carried out a study on 135 medical records of three units and it revealed a gap in the evaluation of expected results since recording of the results was not done adequately.

A study by Jasemi et al. (2011) in Tabriz Teaching Hospitals in Iran on Knowledge and Practice of nurses on documentation found out a gap in most of nursing records as they had insufficient information regarding nursing process steps; nursing assessment, care planning, nursing interventions as well as evaluations.

Despite adoption of the nursing process by many countries in Africa, utilization in the clinical setting remains a problem. The extent of its implementation in many countries in Africa including Kenya has not been studied extensively (O' Connell, 1998). Sabona et al. (2005) is in agreement with the above findings and in their study in Nigeria and three other African countries, they found out that nurses do not commonly practice nursing process despite agreeing on its benefits.

In Ethiopia, nursing process utilization is still lagging behind despite the government having put a lot of effort through educating student nurses. The findings of a study in Mekelle Zone Hospitals showed that of the 200 respondents interviewed, none of them utilized even a single step of the NP (Hagos et al., 2014).

A study by Abebe and Abera (2013) in selected hospitals in Northwest Ethiopia revealed that only 37% respondents utilized nursing care plans as required. Aseratie et al. (2014)is in agreement with the above studies and found that 52.1% of the study respondents who were degree holders in nursing utilized nursing care plans in patient management.

2.4 Barriers to Implementation of the Nursing Process

Barriers are obstacles which prevent a given policy instrument being implemented, or limits the way in which it can be implemented. In the extreme, such barriers may lead to certain policy instruments being overlooked, and the resulting strategies being much less effective. Ida Jean Orlando in Schmieding(1993) emphasized those factors including increased patient turnover, inadequate time and high number of patients, limited nurses from utilizing care plans in practice despite them having the necessary knowledge on the nursing process. She further added that, frequent use of the said process is shown by the involved professionals scientific background and knowledge. Nevertheless, gaps were identified in history taking and lack of proper records of the evaluation step (Dominguez-Bellido et al., 2012).

Introduction of the nursing process as a systematic and scientific approach to patient care started in the early 60s in the developed countries (Mahmoud & Bayoumy, 2014).However, its utilization in most hospitals especially in low and middle income countries reportedly remains a challenge despite efforts being made (Alfaro-LeFevre, 2010; Mahmoud & Bayoumy, 2014; Momoh & Chukwu, 2010).

2.4.1 Organization/Institution-Related Barriers

These are factors that impede use of nursing process in patient management and that are either directly or indirectly responsible for non-implementation of the said process which are related to the institution or organization. Improved service delivery in care of patients in health facilities according to Wikipedia is directly proportional to the ability of nurses to plan care comprehensively through thorough development of strategic care plans. Many institutions still find it challenging to offer support to their nurses to further improve the skills and knowledge they already have.

2.4.1.1 Staffing

Staffing is the process of hiring eligible candidates in the organization or company for specific positions. It is a truth that human resource is one of the greatest for every organization because in any organization, all other resources can be utilized effectively and efficiently by the positive efforts of human resource. With high workload for nurses, the following happens; death of the patients increase, infection sets in for the patients, patients sustain injuries as well as being discharged home sooner than required even before they receive sufficient knowledge concerning home care of their illness. Consequently, this leads to quick return of patients to hospital feeling more sick and worse than before. Nurses with less patients often offer quality individualized care to them (Jooste et al., 2010).

A study by Jooste et al. (2010) and Edet et al. (2009)revealed that nurses have cited excess workload and inadequate staffing as the leading and greatest hindrances to

nursing process application and utilization and secondly, insufficient material resources while the least barriers nurses perceived include lack of sufficient knowledge and poor incentive. In addition, Akbari and Shamsi (2009) are in agreement with the above study and reported that the most important management barriers that emerged from other previous studies were related to excessive number of patients which in turn created constraint in time required to apply nursing process in managing these patients.

Similar studies in Botswana as reported by Sabona et al. (2005) also revealed that the leading barriers to nursing process implementation were inadequate staffing as the nurse-patient ratio was high and excess workload followed by inadequate resources while the least barriers nurses perceived were lack of sufficient knowledge and poor incentive. Clarke and Aiken (2003) are in agreement with the above findings and in their study, they found out that time constraint factor and high patient volume as hindrances towards application and utilization of nursing care plans in managing patients. Luke (2010) also found out that high patient volume made use of nursing care plans in managing patients difficult since most nurses utilized nursing care plans in managing individual patients and those with special conditions.

2.4.1.2 Resources

Resources are supplies either in monetary form, materials or human that facilitate proper running or functioning of a person or organization. (Oxford dictionary).

Lack of resources may impede use of nursing care plans in managing patients leading to substandard patient care. Regarding resource-related barriers, the result of a study by

Manal and Hala (2014) showed that 67.6% of nurse-participants cited many resource hindrances which included unspecified documents related to nursing care, lack of training budget for nurses on nursing process, lack of equipment and inadequate material supplies necessary for implementation of NP.

Inadequate resources stood out to be a hindrance towards use of nursing care plan in managing patients. The two studies revealed that time constraint and insufficient or absence of resources were the major challenges raised by nurses that prevented them from utilizing nursing care plans (Mahmoud & Bayoumy 2014;Mamseri, 2012). Potter and Perry (2007) are very much in support of the above study by Mamseri (2012) as they found out that lack of adequate time, lack of human and material resources, premature discharge of patients through self-request for referrals to other facilities were among the barriers raised by nurses that impede utilization of nursing care plans in patient management. Resources inadequacy is equally agreed upon by Dominguez-Bellido et al. (2012) and Garba et al. (2011). Mahmoud and Bayoumy (2014) also are in agreement with the above researches and indicated that, top-level hospital management need to bring the nurses who are the implementers of this process on board as well as ensuring resources are available.

A study by Aseratie et al. (2014) in Addis Ababa, on 202 nurses, revealed that organizational factors were identified to have been the greatest hindrance of nursing care process practice in management of patients. Lack of material resource was also reported by nurses as having highly affected their ability to apply the process since those staff placed in units with availability of all needed resources necessary equipment were

far much better than those lacking such equipment. The same study also revealed only 11% of nurses working in hospitals with less equipment utilized nursing care plans and38% of those based in health facilities with necessary equipment, practiced it. Nurses expressed very high dissatisfaction towards organizational support as higher officials are reported to have little knowledge of nursing process therefore, making them unable to fully support and facilitate nurses in the process of patient care.

2.4.1.3 Staff motivation and development

Personnel development are those initiatives carried out by institutions towards enhancing their employees' knowledge and skills. Motivation, according to Wikipedia, refers to the reason for people's actions, desires and needs. Means of motivating workers are an intrinsic and internal drive that makes workers strive to work harder towards activities related to work.

Individualized independence and risk preparedness are highly enhanced by trainings and other development-related activities of employees and as a result of trainings, these workers are highly productive and give their best to their respective organizations in terms of performance. The same study also revealed that lack of proper equipment, inadequate staffing, lack of training of nurses and unconducive working environment impedes practicability of the said process in care delivery in wards leading to substandard patient care in any institution (Manal & Hala, 2014). Also in agreement with the above studies are Müller-Staub et al. (2008) and Scherb et al. (2011) as they found out that in order to practice nursing care plan effectively, special education is

required by nurses because besides the physical skills that they acquire, they also need skills in critical thinking aspect towards evaluation of patient progress and needs.

A study by Nabaale (2003) on nurses' perception regarding practice of nursing process in southern Ghana, revealed that under-motivation in form of promotions of nurse practitioners was a major barrier cited by the nurses in these health institutions since majority of them have stagnated in specific job groups for more than a decade hence affecting their morale in work place. Lack of incentives also was cited as a barrier though did not majorly affect performance compared to stagnation in career progression. Consequently, this brought about turn-over of nurses to countries where their services are valued hence creating more shortage.

As revealed by Onyemenam (2013) study, the concept of staff development, continuous professional development and in-service training are the strategies required to facilitate and enhance acquisition of new cognitive and motor skills in nursing in order to enhance effective implementation and utilization of nursing care plan.

2.4.2 Nurse- Related Barriers

Nurse related barriers are hindrances culminating from nurses that make use of nursing process difficult.

2.4.2.1 Nurses' attitudes/perceptions

Attitude is a negative or positive look of the situation, persons, inanimate things, ideas, activities or events. This predisposition towards a person or duty influences a person's choice of action and how to respond to challenges, incentives and rewards. A study by Donkor (2009) revealed that majority of health care workers globally are nurses and that quality of nursing is directly proportional to the healthcare system effectiveness. He therefore recommended that for health care services delivery to improve, nursing care through nursing care process application needs up scaling. In his study in Ghana, delivery of quality service coupled with negative attitudes of health care personnel has continuously come under scrutiny of the media and public. Consequently, nurses have been criticized heavily towards the poor quality care they give to their patients. This criticism has even led to interpretation by critics as a diminishing standard because of the increasing gap and disconnect between what was taught in class and what nurses practice in the real clinical setup. The nurses reported both the framework of nursing process as being tedious, complex without really reflecting how nursing care of patients undergoes planning and execution.

Nursing process practice in Nigeria and Ghana is substandard as the identified barriers are negative attitudes of senior nurses and Matrons in Obafemi Awolowo University Teaching Hospitals. The senior nurses who are supposed to be role models to the junior ones have been found to be exhibiting negative perceptions of NP hence affecting quality service delivery towards the said process. Consequently, this has led to junior

nurses following the footsteps and instructions of their seniors by not applying NP in patient management (Ojo & Irinoye, 2002).

According to Jooste et al. (2010) study on nursing care process application in Gynecology Wards in Namibia, some study subjects claimed having knowledge of nursing care and also highly doubted the effectiveness of the process. Negative beliefs towards nursing care plan use were also highly communicated and some participants expressed their views by saying that this process is merely record keeping.

2.4.2.2 Nurses' working experience and academic qualification

Working experience refers to length of service in years while academic qualification means level of education of a person. Manal and Hala (2014) found that nurses' attitudes, working experience, resources, and administrative issues came out as hindrances utilization of nursing care plans in majority of health facilities. In addition, from the study findings, 68.2% of the respondents cited time constraint, difficulty with defining diagnosis and continuous evolution as being barriers to nursing process implementation. A study by Ojo and Irinoye (2002)also revealed that nurses in senior cadre and those holding diplomas and degrees were associated with application and use of care plans in patient management compared to their counterparts who are in junior cadre or those with less experience.

Nurses' knowledge on the nursing process according to Freitas et al. (2007) is not the only factor required by nurses to practice the process since other factors such as inadequate time, large number of patients and increased patient turnover limit nurses

from applying the nursing care plan in practice. Nevertheless, knowledge is required if this process is to be applied effectively by nurses.

2.4.2.3 Working unit/ placement

Nurses make up a greater percentage of health staff and their effectiveness is directly proportional to the productivity of health care. The working unit may also impact on the nurse's performance depending on the patients' diagnosis, prognosis and willingness of the nurse to work in a particular unit (Edet et al., 2009).

A study by Ojo and Irinoye (2002) showed that nurses working in medical units were thrice more susceptible to not using nursing care plans unlike those working in surgical units because of high patient volume and volatile nature of diagnosis. Garba et al. (2011) also found out that putting to practice nursing care plan process varies from one ward to another and received varied responses regarding use of nursing care plan across wards like medical, surgical, obstetrics & gynecology, paediatrics and special other units. This can be attributed to different conditions are managed differently in different wards and as a result, the condition of the patient dictates the ward where the patient is to be managed together with level of nursing process application. Some conditions are hard to manage using the nursing process while others are easier. The result of a study of Calabar University Teaching Hospital, by Edet et al.(2009) agrees with the above study by Ojo and Irinoye (2002) as it identified type of ward as a factor associated with non-implementation of the nursing process and the findings revealed that nurses working in

medical units were thrice more unlikely to use nursing care process unlike those who are placed in surgical units and this is because of the ever changing patient conditions.

2.4.3 Patient-Related Barriers

This refer to hindrances by patients that make implementation of nursing process difficult. Patients may become a barrier to service delivery and as such this may prolong their length of stay in hospitals as well as lead to poor outcome of care.

2.4.3.1 Poor co-operation from patients

Communication between nurses and patients impacts patient's well-being, quality service delivery and outcome of nursing care. Patients who exhibit lack of co-operation towards nurses mostly stay longer in hospitals than those that are co-operative towards their care (Funnel et al., 2009).

A research on 124 nursing staff with working experience of at least a year in Northwest Ethiopia Hospitals by Abebe and Abera (2013) revealed those patients that exhibited cooperation while undergoing care stood out to be three times lucky towards management using nursing care plans unlike those who did not cooperate. The study also showed that patients who had less medical complications were much better in terms of management using nursing care plans compared to those who presented with different complications. Funnel et al. (2009) supports the above study by Abebe and Abera (2013), on patients' co-operation.

A study by Aseratie et al. (2014) showed that patients did not complete the period that they were required to complete as they were discharged early from hospitals before completion of care because of improper comprehension of modern medicine, low economic status, long waiting time before getting services, and diseases without cure, so this affects the application of every step of nursing process for the intended period. In an in-depth interview by the same author, results revealed un-cooperation from patients, patient's family request to discontinue care and the shortage of drugs in public hospitals. Because of drugs shortage, the families of the patients are forced to buy drugs from outside even when they have no capacity to do so and thus, hampering nursing care process application and utilization.

2.4.3.2 Poor patient-nurse working relationship

A study by Funnel et al. (2009) revealed that good working relationship and effective communication between nurses and patients have impact on good health of the patient as well as enhancing positive patient outcome. Patients who exhibit poor co-operation towards nurses are more likely to stay longer in hospitals as compared to those who are co-operative towards their care and that different cultural and social norms in different countries dictate patients' rights. As reported by World Health Organization (WHO, 2005) in Europe and North America, the informative model looks at a patient as a direct beneficiary and consumer who is better placed in terms of judging the services being provided to them as whether they suit their own interests or not while the model views the health care provider majorly as being informative.

Effectiveness of patient centered care based on the best accessible facts and patient safe quality care reflects the fundamental role of nurses. Poor working relationship between nurses and patients comes as a result of negative perceptions from either side and that the competence of a nurse requires a set of knowledge, skills and above all attitude towards caring of people through addressing their behaviour as well as having sympathy and respect for other people (Gordon & Watts, 2011).

A study by Kuzu et al. (2006) revealed that it is globally agreed that patients are entitled to privacy, information and autonomy besides debate on how the service provider-patient working unity and relationship can be maintained. All in all, an approach by human rights creates advocacy for a provider-patient relationship that is accommodative in nature as this is an ideal way that guarantees patients with freedom to expression, right to autonomy, choices and determination, information, individual care as well as non-discrimination.

Berglund and Saltman (2010) reported that in order to enhance exchange of information during the nursing care process, nurse-patient working relationship requires a human touch to bring rapport with patients and clients hence enhancing exchange of information during the nursing care process. Dexter and Wash (2013) also proposed that patient's requirements, values, and wishes should be appreciated by nurses if use of nursing care process is to be effective and this is possible if communication is made politely to preserve human dignity.

2.4.3.3 Patients' age and gender

Berglund et al. (2010) in their studies found out that both extremes of age require tender care as compared to middle-aged patients. Older patients usually have poor prognosis and this makes it difficult for nurses to care for them. Female patients may prefer to be attended by staff of the opposite gender and vice versa. This at the end affects effective delivery of nursing care and reduces staff morale.

A study by McCabe et al. (2010) revealed a significant difference in age came out as a socio-cultural determinant of dignified care expected by patients from nurses through provision of nursing care. For instance, an elderly patient was full of expectation that the nursing care providers who attend to her would communicate "properly" to her because the nurses were like her grandchildren in terms of age. This age difference ultimately leads to a constraint of culture since in Kenya, the older generation command for respect from the younger generation without taking into consideration the professionalism of those serving them, in this case the young. The above is supported and is in the patients' rights Kenyan charter. Therefore, patients have a right to be respected in terms of their diverse and unique cultures. This extreme age of some patients acts as a barrier to proper care in terms of nursing process implementation.

Gender appeared to determine as well as dictate the desires of patients and contributed to prolonged hospital length of stay. In his study, the findings revealed that female patients prefer care from male gender and vice versa. For instance, a male nurse was preferred by a patient of the opposite gender because the patient alleged that the attention

and care that she received from a male nurse while undergoing the labour process was far much better compared to that offered by a female nurse (Wesley, 2006).

2.4.3.4 Patients' cultural beliefs and language

Different patients come from different cultural backgrounds and this has consequently affected effective delivery of care to them as some cultures may impede service delivery. Similarly, language barrier is also a factor that makes communication impossible hence rendering nurses unable to come up with diagnosis and interventions (Bradshow et al., 2010)

Bradshow (2010) carried out interviews which showed other determinants of patients' dignity and rights but that are not within the control of either nurses or patients. An example is that language barrier has been brought out by nurses as the major reason for lack of intelligibility and that this called for the use of interpreters to enhance understanding. Interpretation more often than not alters the real message hence the nurse may miss out the real diagnosis of the patient. Some other determinants that came out were difference in age and class between patients and nurses as well as patients' level of education all of which render communication ineffective as well as affect negatively dignified care provided to patients. These differences in backgrounds as well as personal interests and conflicts from the social tensions bring about conflict even in the later interactions between the patient and the nurse. Taboos and culture also came out as being affecting effective communication between nurse and patient because some of the patients exhibited different opinions coming up from their diverse cultures.

Consequently, this has brought about value conflict because not all nurses value diverse cultures and values. This affirms Holtgraves' (2011) contention that said the users of language are human beings who are social in nature and who through talking bring about varied socialization, intentions as well as objectives.

Generally, if efficiency of nursing care plan use has to be achieved, then nurses must be made knowledgeable through in-service training as well as through programs that enhance acquisition of knowledge such as CPDs. From the literature above, supervision, motivation as well as availing the required resources to nurses so as to increase chances of utilization of the said process are all necessary (Onyemenam, 2013).

2.5 Theoretical Framework

The researcher was guided by Orlando's nursing process theory and as explained by Orlando's theory elaborates that effective interaction between nurses and patients based on the patient's needs leads to improved patient's behaviour (Parker & Smith, 2010). Orlando's theory also puts emphasis on finding out first what the patients' needs are before attending to them, since nursing is not professional when one intervenes before scrutinizing the benefits of such interventions to the desired beneficiary in this case the patient.

According to Orlando, through implementation of nursing process, nurses can attend to patients from a nursing perspective and make them function as a separate entity and profession without necessarily relying on the orders from clinicians. Therefore, nurses

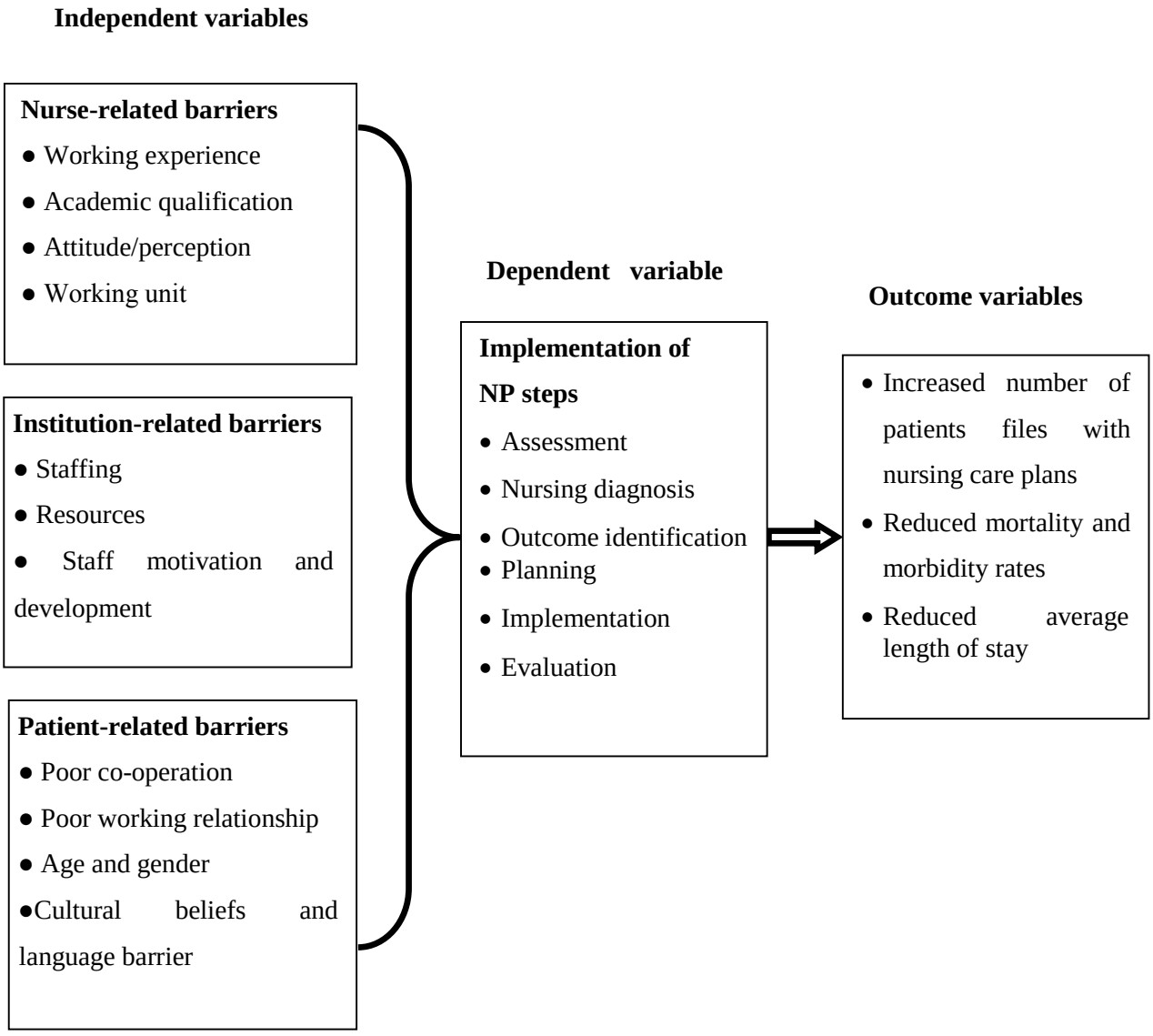
are required to ask patients what their needs are rather than attending them based on assumptions.

This theory is utilized by this study because it puts emphasis on unexpected problems arising from the patients and how nurses are required to deal with these problems as they manifest. With these, the job of the nurse is to know how to deal with those problems so the patient can continue to get back and reclaim his or her well-being. Ida Jean Orlando developed her Deliberative Nursing Process that allows nurses to formulate an effective nursing care plan that can also be easily adapted when and if any complexity comes up with the patient. This theory goes further to stress the reciprocal relationship between patient and nurse as well as emphasize the critical importance of the patient's participation in the NP.

2.6 Conceptual framework

Figure 1.2

Conceptual Framework



2.7 Gaps in Literature

Few studies have been done in Kenya on nursing process and no clear statistics are available therefore, minimum literature on the same is available. As such, this study explored more on the nursing process through forming a basis for elaborate information in a Kenyan context. The literature reviewed did not identify extensively patient-related barriers hence this research looked into that at length. Qualitative analysis methods were also missing in the reviewed literature and this research looked into such methods though not extensively.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter discusses research design, area of study, variables of the study, study population, selection criteria, determination of sample size, sampling technique, data collection techniques and instruments, data management and analysis, study limitations and delimitations and ethical considerations.

3.2 Study Design

This research adopted a mixed method embedded research approach to collect data, and the design was adopted since data was collected at a defined time from a population subset. This design was also used to increase confidence in findings as well as facilitating one method by guiding the sampling, data collection or analysis of the other. This design also yielded both qualitative and quantitative data which was of significance in the establishment of the relationships between the variables under study as well as answer research questions.

3.3 Study Variables

3.3.1 Dependent variable

The dependent variable in this study is implementation of the steps of nursing process.

3.3.2 Independent Variables

The independent variables under study were those barriers to non-implementation of nursing process by nurses working at Narok County Referral Hospital. These included; Patient-related barriers (Patient health status, patient cooperation, length of patient stay, attitude, age, gender, diagnosis), Organization-related barriers (staffing levels, resources, motivation and staff development) and nurse-related barriers (Working experience, attitude/perception, level of education and working unit).

3.3.3 Outcome variables

The outcome variables were; increased number of patients' files with nursing care plans, reduced mortality and morbidity rates as well as reduced patients average length of stay.

3.4 Study Area

The study took place in Narok County referral hospital. Narok County boarders Nairobi, Kiambu, Nakuru and Bomet counties. It is situated along the great rift-valley and is along Nairobi-Bomet highway. The County has a population of 850,920 as per the 2009 census in Kenya, with a growth rate of 4.7%. The catchment of the said health facility is 128,000 and approximately 35 health facilities (Dispensaries and health centres) and it is the main hospital that serves the entire Narok region. It offers the following services: Maternity, radiology and scanning, Theatre, outpatient, inpatient, VCT, Family planning, ANC and HBC. The hospital is situated approximately 500 metres from Narok town. The hospital has a total of 230 staff population of all cadres; inpatient nurses being

138. The facility has 7 wardsand170 bed-capacity. The units where the study will be carried out include; medical, surgical, maternity, Paediatric and gynecological units. These units/wards were purposively selected because they are the ones with hospitalized patients and since nursing process is applied only to patients who are hospitalized, the researcher's interest is in these specific units.

3.5 Target Population

The study targeted all the nurses (138) working in Narok County inpatient setup and 2 hospital managers.

3.6 Inclusion and Exclusion Criteria

3.6.1 Inclusion Criteria

Nurses of all cadres working in NCRH who consented willingly were allowed to participate in the study.

3.6.2 Exclusion Criteria Those nurses who did not consent, nurse students and those on leave at the time of the study were automatically excluded from the study.

3.7 Sampling Technique and Sample Size Determination

3.7.1 Sample size determination

The sample determination for nurses was calculated using Fishers' et al. (1998) formula as recommended by Mugenda and Mugenda (2003).

When the population is above ten thousand (10,000)

$$n = \frac{z^2 p(1-p)}{d^2}$$

Where;

n = Desired sample size

z = Degree of confidence we wish to have in the results which is 95% confidence interval falling in 1.96 normal distribution curve.

p =The target population estimated to have characteristics being measured. 50% will be used. d = precision (i.e. ± 5%)

Hence;

$$n = \frac{1.96^2 0.5(1-0.5)}{0.05^2}$$

$$= \frac{3.8416 \text{ x } 0.25}{0.0025}$$

$$= 384.16$$

$$n = 384$$

Since the nurses' population in Narok County referral hospital is <10,000, then the required sample size was calculated using Finite population correction for proportion formula by Yamane (1967) as follows;

Finite population formula

Sample size will be adjusted using this equation

$$nf = \frac{\text{n}}{1 + {}^{n}/_{N}}$$

Where;

nf= final derived sample size

n= sample size for population greater than 10,000

N=the estimated target population. In this study, N=138

Therefore;

$$nf = \frac{384}{1 + {}^{384}/_{138}}$$

$$= 101.5175$$

$$nf = 102$$

3.7.2 Sampling techniques

Mixed method of sampling was utilized by this study. Narok County Referral Hospital had 7 wards at the time of study and proportionate sampling was adopted in obtaining nurses in each ward for equal representation and to minimize bias. These are surgical wards (male and female) medical wards (male and female), obstetrics and gynecology, maternity and pediatric wards. All the 102 nurses participated in the research and were selected using proportionate calculation formula where each ward/ unit received a certain percentage as shown in table 3.1 below. Convenience sampling method was applied to obtain the desired population of respondents per ward/unit. The researcher preferred convenience sampling because nurses work in shifts and at no particular point

in time were all of them available at work. Therefore, this method was easier to use to select the most readily available or accessible subjects in a study.

The total population of nursing managers in the facility was 8 and administrators were 4.The nursing officer in-charge of the hospital and the overall hospital administrator were purposively selected for the interview on hospital support towards nurses who are the direct implementers of NP. This sampling method was used because, this population subset was of interest to the researcher because they were the ones authorized to give out any confidential information regarding nurses in that particular hospital.

Table 3.1

Sample Size

Ward/Unit	Proportionate Calculation	Number of Respondents	Percentage
Pediatric	18/138×102	14	13.7
Male medical	25/138×102	18	17.7
Male surgical	20/138×102	15	14.7
Female medical	25/138×102	18	17.7
Female surgical	22/138×102	16	15.7
Gynecology/OBS	11/138×102	8	7.8
Maternity	17/138×102	13	12.7
		102	**100%**

3.8 Data Collection Tools/Instruments

Data collection utilized a self-administered questionnaire which had structured questions for quantitative data collection and an open ended question for collection of qualitative data. A non-structured question was also included in the survey and this yielded qualitative data. A Likert's scale with the statements "Strongly Agree" and "Strongly disagree" was used. In this instrument, Close ended questions were a majority in order to increase the response rate through minimizing the fatigue associated with open ended questions (Bryman, 2012). The questionnaire was concise, logical and the study objectives guided its construction. The nurse managers and hospital administrator were interviewed so as to establish the support nurses receive from the institution that

enabled them implement the nursing process. The research instruments were presented in English. An interview guide was used to obtain information on the support given by the hospital administration to nurses who are the direct implementers of nursing process in the hospital. This was done by asking one question at a time while writing down one response at a time as well.

3.8.1 Research instrument reliability and validity

In enhancing data quality, a pilot study was conducted on a similar population at Ololulung'a Sub-County Hospital and its aim was to ascertain the instrument's clarity, respondents' willingness to answer the questions and to ascertain if there was need to revise the presentation of the questionnaire. This as well provided the researcher with feedback on whether the study objectives were well presented, any gaps, omissions as well as additions that may be of value to the instrument.

The pre-test was done for one day with 10% of the sample size (10 respondents). The pre-test data was then analyzed and the data collection tool was revised based on the results of the pretested analyzed data.

3.8.2 Training of data collection assistants

Four assistants underwent selection from among nurses who were not participating in the study. They were trained for one day on how to obtain cooperation, making clarifications of questions in a neutral manner without using leading questions as well

as confirming completeness of the questionnaires before receiving them. The researcher supervised the whole process.

3.9 Data Collection Procedures

Questionnaire was employed in data collection and data was collected from nurses from Monday to Saturday for 6 days between 8.00 am to 6.00 pm. Twenty nurses were given questionnaires per day as each research assistant administered 5 questionnaires per day until the sample size was achieved. This procedure took place daily until the sample was achieved. The questionnaire took 20 minutes on average. The overall nursing officer in charge and hospital chief administrator were the key informants for the study and were interviewed on the last day of data collection. Each of the two took approximately 30 minutes to answer the questions. A brief explanation of the study was given to the nurses who met the inclusion criteria and voluntary consent was sought from them.

Questionnaires were self-administered but the overall process of data collection was under close supervision of the principal researcher. Reminders in form of text messages and phone calls were used for self-administered questionnaires to enhance the response rate. The two hospital managers were interviewed separately in their respective offices after booking for appointment. The purpose of the interview was explained and informed consent obtained. After filling, the questionnaires were scrutinized for completeness and in preparation for analysis; data entry into the computer took place.

3.10 Data Management and Analysis

Following filling of the questionnaires, they were checked for completeness then arranged in order and coded for easier processing and analysis. The principal researcher carried out the storage of data into the computer database (excel) and all statistical tests of significance were at 95% Confidence level, which is widely acknowledged as conventional (Polit & Beck, 2012). Serialization of all questionnaires was done to reduce duplication of responses, the data was entered into SPSS template from which analysis was done using mean, median and percentages. Chi-square was used in establishing the relationship between categorical variables. Quantitative data presentation was done using graphs, bar graphs as well as frequency tables. The researcher analyzed qualitative data thematically by reading and re-reading, coding, creating categories and building themes on the data collected through interview. Thematic analysis is a search across a set of interview data to find repeated patterns of meaning. It involved identifying, analyzing and reporting patterns or themes within data (Polit & Beck, 2012). Likert's scale data was analyzed and presented narratively.

3.11 Ethical Considerations

The approval to conduct the research study was sought and granted by KeMU Ethics and Review Committee and NACOSTI. The proposal also passed through KeMU library for antiplagiarism assessment. Anonymity was maintained by asking the respondents to avoid providing their identification details like names in the questionnaires.

Voluntary consent was sought from the study participants after comprehensive explanation on the study objectives as well as purpose. I sought permission for carrying out research from the County director for health, County director for education, County commissioner, Medical Superintendent and hospital matron. Confidentiality of data obtained was maintained and research assistants took a confidentiality pledge prior to data collection. The participants were provided with an email address so that they can write to the researcher if they would wish to get the final report. They were equipped with information on where to obtain the study findings and that the study results may be published in peer reviewed journals.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents research findings, analysis as well as discussion of the findings.

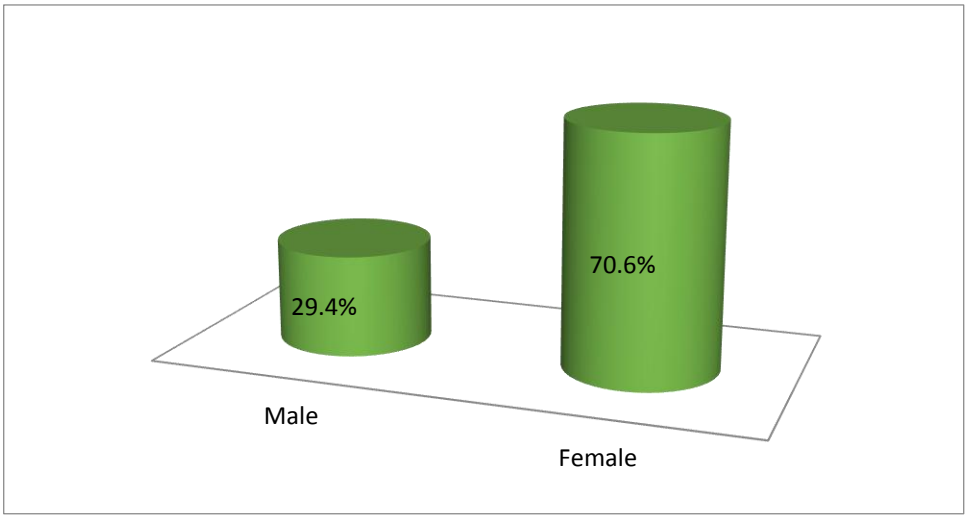
4.2 The Respondents' Demographics

4.2.1 Respondents distribution by gender

Figure 4.1 shows summarized characteristics of the study participants. The female participants were the majority (70.6%) and males (29.4%).

Figure 4.1

Respondent's Distribution by Gender

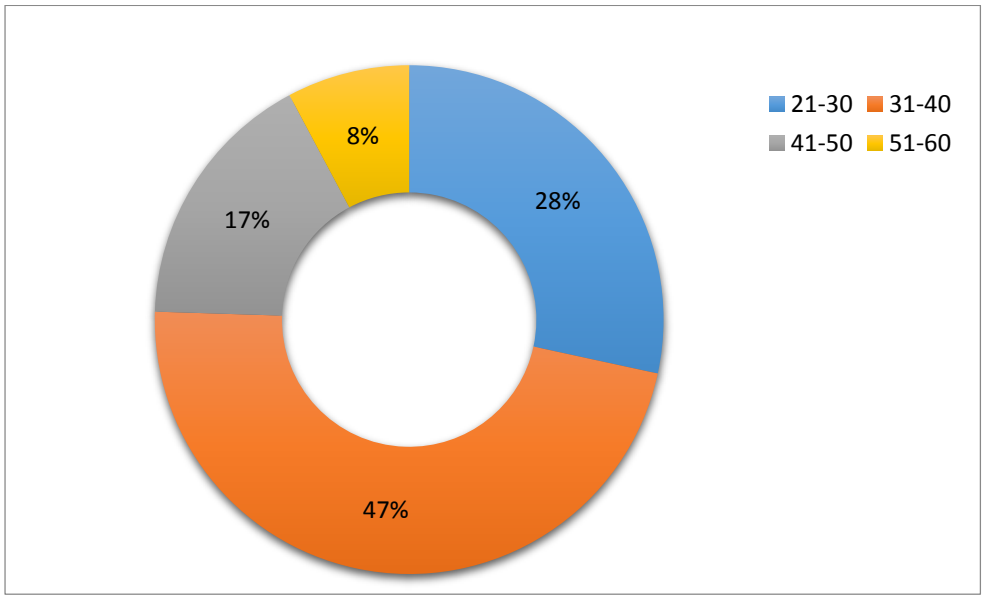


4.2.2 Respondents distribution by age

Most participants were aged between 31–40 years (47%) while 51-60 years were the least at (8%). This is illustrated in the figure below.

Figure 2.2

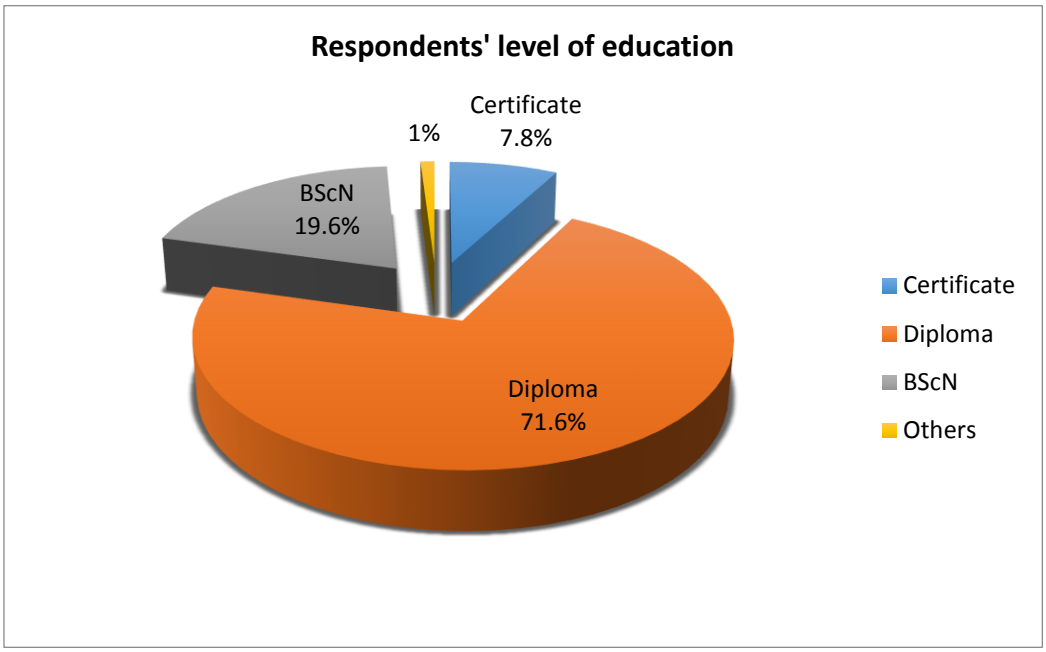
Respondents Distribution by Age



In figure 4.3, the different levels of education of nurses working in Narok County Referral Hospital are shown. Majority (71.6%) of nurses indicated that they are diploma holders followed by Bachelor's degree (19.6%).

Figure 4.3

Respondents Level of Education



There was a fair distribution in terms of the working experience with nurses having worked for 16 years and above taking the lead with (33.3%) followed by those who have worked between 6 – 10 years (31.4%). These results are shown in figure 4.4.

Figure 4.4

Respondents' Working Experience

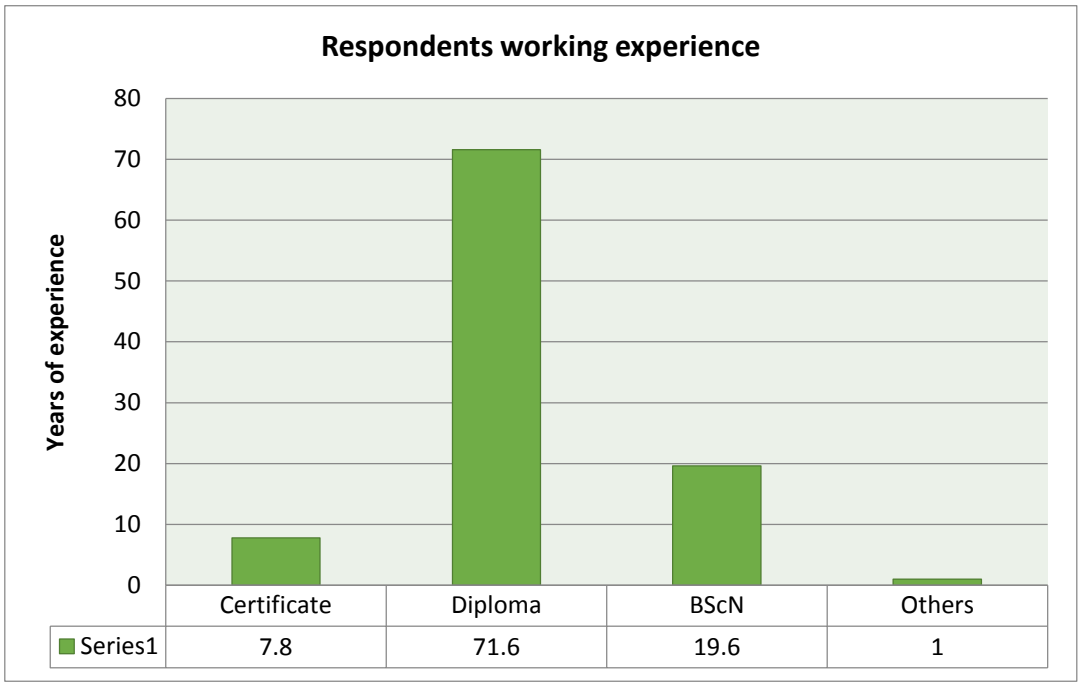
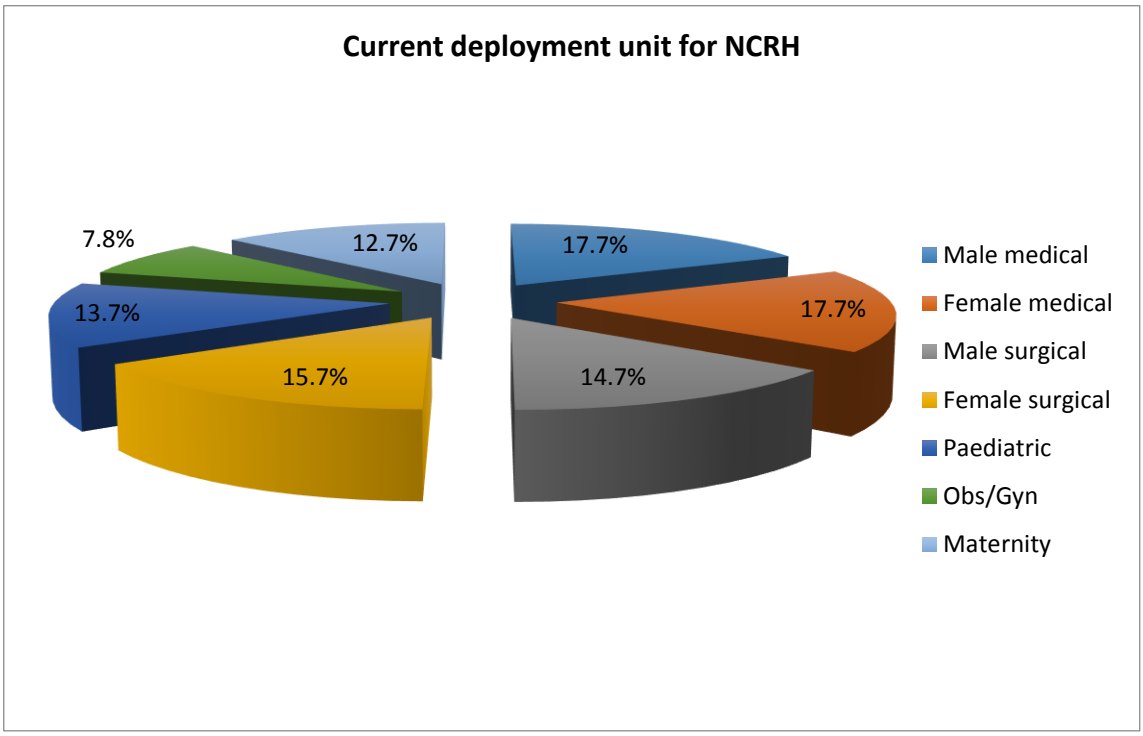


Figure 4.5 shows the units of work/ wards of deployment of nurses in Narok County referral hospital. Medical wards had highest number of nurses as Obstetric and Gynaecology ward recorded the least number of nurses. This is attributed to preference of medical conditions in the region compared to illnesses related to reproductive health of the population.

Figure 4.5

Units of Deployment for Nurses in Narok County Referral Hospital



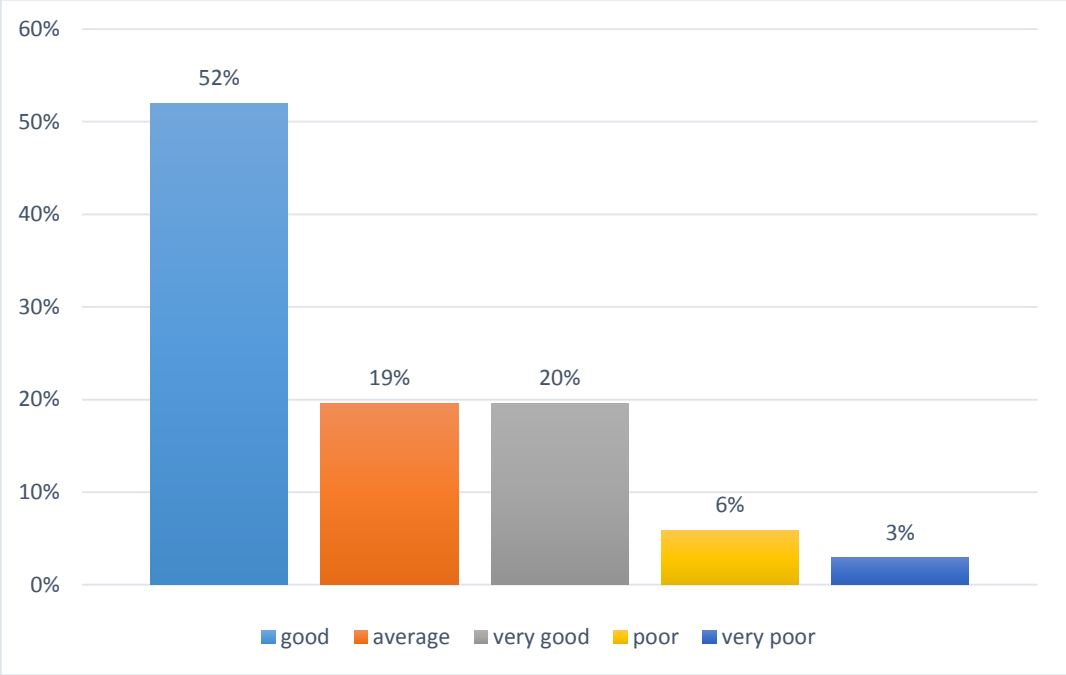
4.3 Nursing Process Training

4.3.1 Nurses' Knowledge of the NP

Regarding self-assessment on knowledge of the NP, 52% (n=53) of the nurses rated themselves as having good understanding of the process. This is shown in figure 4.6.

Figure 4.6

Nurse Self-Rated Understanding of the NP



4.3.2 Training on Nursing Process

Table 4.1 shows that majority (92.2%) of the nurses reported to have received training on the nursing process. Of those, 95.1% were trained in college while those trained in seminars were (4.9%). On whether the acquired knowledge was sufficient to allow nurses practice NP, majority (76.5%) reported that the acquired knowledge was not sufficient enough to competently allow for development and use of NP.

Table 4.1

Nurses' Training on NP

	Frequency(n)	Percentage(%)
Received training on nursing process		
Yes	94	92.2
No	8	7.8
Total	**102**	**100**
Where did you train on nursing process		
College	89	95.1
Seminars	5	4.9
Total	**94**	**100**
Sufficiency of acquired knowledge towards practice		
Yes	24	23.5
No	78	76.5
Total	**102**	**100**

4.4 Nursing Process Implementation

Table 4.2 shows that out of those 6.9% (N=7) nurses who reported to have actively practiced nursing process, only 1% (N=1) of them was able to list correctly all the NP steps meaning that the gap is extremely huge in terms of knowledge as well as practice. Workload as a barrier took the highest percentage at 57.9% followed at a distance by staff shortage, insufficient knowledge and finally lack of motivation.

Table 4.2

NP Implementation Among Nurses in NCRH

	Frequency(n)	**Percent (%)**
Prepared NCP for patients		
Yes	7	6.9
No	95	93.1
Total	**102**	**100%**
NP steps used in preparation of the NCP		
Correctly outlined all the NP steps	1	1
Incorrectly outlined all the NP steps	6	6
Total	**7**	**100%**
Reasons for non-implementation of NP in patient care		
High workload/ High patient volume	55	57.9
Staff shortage	24	25.3
Insufficient knowledge	8	8.4
Lack of motivation from administration	3	3.1
No reason	5	5.3
Total	**95**	**100%**

4.5 Institution Barriers

4.5.1 Workload distribution

Regarding nurse-patient ratio in various in-patient departments in NCRH, the ratios between nurses and patients were high and male medical ward reported the highest mean

ratio of 32.0 (range 18 to 45) meaning the number of patients in this ward is high at a given point in time compared to the number of nurses working in this unit. In female medical ward, the mean ratio was also high at 33.0 (range 17 to 48) depicting high patient volume in relation to nurses working in this unit. The lowest ratio was reported in Obs/Gynae ward (mean 17.0 and range 10-24) and this is as a result of lower number of patients admitted in this particular unit at a specific time or day. The widest variability of nurse to patient ratio was recorded in Maternity unit with a mean ratio of 23.0 and a range of 6 to 40. This range depicted the different nurse to patient ratios in the postnatal, antenatal and labour wards all of which are under maternity department. Generally, the ratios were high compared to World Health Organization recommendations of 25:10,000 for outpatient setup. Table 4.3 illustrates the above information.

Table 2.3

Nurse to Patient Ratio in Inpatient Units in NCRH

Ward	**Minimum ratio**	**Maximum ratio**	**Mean ratio**
Paediatric	1:15	1:38	1:27
Male medical	1:18	1:45	1:32
Male surgical	1:10	1:30	1:20
Female medical	1:17	1:48	1:33
Female surgical	1:12	1:33	1:23
Obs/Gynae	1:10	1:24	1:17
Maternity	1:6	1:40	1:23

4.5.2 Institution support

Table 4.4 illustrates the support given by hospital administration towards NP use in patient management. Majority (90.2%) of the respondents said there is no recognition of NP by hospital leadership as a tool for delivery of quality nursing care and the same number also said that no support was given by the hospital leadership. Majority (92.2%) stated that there is no monitoring of NP implementation, 100 (98%) said that there is no recognition of staff for application of NP. All respondents 102 (100%) said that no incentive is given by the hospital administration, 90 (88.2%) said that NP implementation is not part of their annual performance appraisal objectives and majority (83%) of them said that the hospital management provided them with the necessary NP equipment.

Table 4.4

Support by Institution/Hospital

	Frequency(n)	Percent (%)
Recognition of NP as a quality nursing care delivery framework		
Yes	10	9.8
No	92	90.2
Total	102	100
NP implementation		
Yes	10	9.8
No	92	90.2
Total	102	100
Monitoring of NP implementation		
Yes	8	7.8
No	94	92.2
Total	102	100
NP use being among performance appraisal objectives		
Yes	12	11.8
No	90	88.2
Total	102	100
Supply of relevant tools for use by staff in implementation of the NP		
Yes	85	83
No	17	17
Total	102	100

4.6 Patient Related Barriers

When asked if patients were a potential barrier to nursing process implementation, 73% of the nurses agreed on the statement and out of these, 40% cited lack of co-operation and respect from patients as a barrier. On the patients age as a possible barrier to NP

use, the following responses were given; Both old and young change conditions easily hence making it hard to be managed, in nursing care, children they are unable to express their feelings hence use of objective data, some old and young patients are not able to give history and relevant information and finally, old patients are extremely difficult to manage as they are uncooperative.

4.7 Relationship Between Nurses' Demographics and Nursing Process Implementation

Chi-square test was utilized to assess the relationship between implementation of nursing process and demographic characteristics of the respondents which included age, academic qualification, working experience and unit. The test showed that there was a close relationship between respondents' age and implementation of the NP ($p = 0.001$). 62% of the younger nurses aged 21-30 years utilized the NP in managing patients unlike their older counterparts. This declined with increase in age as only 12.5% of those aged 51-60 reported to have practiced it. The chi-square value (2.72) depicts that the observed results varied slightly with the expected i.e. significant relationship between the age of the respondents and implementation of the NP.

There was also a close association between nurses' working experience and implementation of NP ($p = 0.015$) because the study revealed that recently qualified nurses with work experience below 10 years had high probability of implementing the NP at 64.7% in relation to their counterparts with a work experience of 11 and above

years. The chi-square value of (33.308) indicates that working experience affects greatly implementation of the NP.

The other covariates on academic qualification (p=0.626) and working unit (p=0.725) showed that they do not influence nursing process. Academically, the observed values did not match at all with the expectations i.e. those respondents with certificate and diploma qualifications practiced the NP more than their counterparts with higher qualifications (degree and above). This is evidenced by a $\boldsymbol{\chi^2}$= $\mathbf{15.515}$, $\boldsymbol{df}$ = $\mathbf{3}$, $\boldsymbol{P}$ = $\mathbf{0.626}$. Finally, the study results revealed that there was no close association between the unit of placement and NP implementation as depicted by a $\boldsymbol{\chi^2}$= $\mathbf{19.502}$, $\boldsymbol{df}$ = $\mathbf{4}$, $\boldsymbol{P}$ = $\mathbf{0.725}$. These results are illustrated in table 4.5.

Table 4.5

Nurse Demographics and NP Implementation

Variable	Implemented NP (n=40) Number (%)	Didn't implement NP (n=62) Number (%)	Statistical test
Age versus implementation of nursing process			
21-30	18 (62%)	11 (38%)	
31-40	12 (25%)	36 (75%)	$\chi^2 = 2.72$, $df = 3$, $P = 0.001$
41-50	4 (23.5%)	13 (76.5)	
51-60	1 (12.5)	7 (87.5%)	
Academic qualification versus implementation of nursing process			
Certificate	1(2.5%)	7(11.3%)	$\chi^2 = 15.515$, $df = 3$, $P = 0.626$
Diploma	35(87.5%)	38(61.3%)	
BScN	4(10%)	16(25.8%)	
Masters	0(0%)	0(0%)	
Others	0(0%)	1(1.6%)	
Working experience versus implementation of nursing process			
<5 years	11(27.5%)	6(9.7%)	$\chi^2 = 33.308$, $df = 3$, $P = 0.015$
6-10 years	14(35%)	18(29%)	
11-15 years	5(12.5%)	14(22.6%)	
>16 years	10(25%)	24(38.7%)	
Working unit/ward versus implementation of nursing process			
Paediatric	5(12.5%)	9(14.5%)	$\chi^2 = 19.502$, $df = 4$, $P = 0.725$
Male/ Female Medical	13(32.5%)	22(35.5%)	
Male/ Female surgical	11(27.5%)	21(33.9%)	
Obs/ Gynae	4(10%)	4(6.5%)	
Maternity	7(17.5%)	6(9.7%)	

4.8 Association Between Training and Nursing Process Implementation

Table 4.6 shows that there was no close relationship between the training nurses have ever received and NP implementation (p=0.158), $\chi 2 = 1.994$, df = 1, P = 0.158). The observed values did not tally with the expectations because it was expected that those who have received training on NP would practice it but this was not the case as only 37 respondents out of 94 were able to utilize the said process in patient management. Based on self-rated understanding of the nursing process (p=0.548, $\chi 2 = 13.09$, df = 4), the results revealed that there was no close relationship between self-rating and NP implementation because those respondents who highly rated themselves as being very good and good in terms of understanding of the NP did not implement it.

On the other hand, the sufficiency of acquired knowledge through training (p=0.001, $\chi 2 = 18.436$, df = 1) turned out to have a statistically significant relationship with NP implementation as 36 out of 66 of the respondents agreed to be sufficient in terms of knowledge acquired during training and at the same time implemented it. However, this number is slightly above the average yet having received sufficient training, the expectation is that a better number than this would put to practice what they acquired through theory.

Table 4.6

Association Between Training and NP Implementation

Variable	Implemented NP (n=40) Number (%)	Didn't implement NP(n=62) Number (%)	Statistical test
Ever been trained on NP vs NP implementation			
Yes	37(92.5%)	57(91.9%)	
No	3(7.5%)	5(8.1%)	$\chi^2 = 1.994$, df = 1, P = 0.158
Self-rated understanding of NP vs NP implementation			
Very good	9(22.5%)	11(17.7%)	$\chi^2 = 13.09$, df = 4, P = 0.548
Good	25(62.5%)	28(45.2%)	
Average	4(10%)	15(24.2%)	
Poor	1(2.5%)	5(8.1%)	
Very Poor	1(2.5%)	3(4.8%)	
Sufficiency of acquired knowledge vs NP implementation			
Yes	36(90%)	30(48.4%)	$\chi^2 = 18.436$, df = 1, P = 0.001
No	4(10%)	32(51.6%)	

4.9 Association Between Institutional Factors and Nursing Process Implementation

Table 4.7 depicts that majority of the institutional factors did not have a significant relationship with NP implementation. There was a close statistical significance between nursing process recognition as a tool for quality nursing care delivery by hospital administration and NP implementation (p=0.085, $\chi 2 = 3.372$, df = 1, P = 0.085). This is

depicted by the study results whereby, 32 out of 41 of the respondents who agreed with the statement, also went ahead to implement the NP. On hospital administration support ($p=0.123$ $\chi 2 = 12.692$, $df = 1$), the study findings showed that there was a close correlation between the support given by the hospital administration and NP implementation. This is so because 32 out of 41 respondents who said that they received support from the hospital administration, were able to put to use NP in patient management. Therefore, these results clearly show that the hospital support towards the respondents who are the direct implementers of NP is closely related to its implementation.

There was a close statistical relationship between supply of necessary tools by the institution with implementation of the NP ($\chi 2 = 36.125$, $df = 1$, $P = 0.001$) as those nurses who indicated that they were supplied with necessary materials, majority (70%) were able to put to use NP. While on the other hand, 12 out of 17 of those who said that they did not receive the necessary tools implemented it hence this explains the chi-square values which shows a greater variability in terms of the variables under study.

Table 4.7

Association Between Institutional Factors and Implementation of Nursing Process.

Variable	Implemented NP (n=40) Number (%)	Didn't implement NP(n=62) Number (%)	Statistical test
Recognition of NP as a tool for quality nursing care delivery by hospital administration vs NP implementation			
Yes	32(80%)	9(14.5%)	
			χ^2 = 3.372, df = 1, P = 0.085
No	8(20%)	53(85.5%)	
Hospital administration supports vs NP implementation			
Yes	30(75%)	7(11.3%)	χ^2 = 12.692, df = 1, P = 0.123
No	10(25%)	55(88.7%)	
Monitoring of NP implementation by hospital administration vs NP implementation			
Yes	28(70%)	7(11.3%)	χ^2 = 7.182, df = 1, P = 0.034
No	12(30%)	55(88.7%)	
NP implementation being among performance appraisal (annual) objectives vs NP implementation			
Yes	20(50%)	11(17.7%)	χ^2 = 11.959, df = 1, P = 0.056
No	20(50%)	51(82.3%)	
Institution supplies relevant tools for use by staff in implementation of the NP vs NP implementation			
Yes	28(70%)	57(91.9%)	χ^2 = 36.125, df = 1, P = 0.001
No	12(30%)	5(8.1%)	

4.7.1 Analysis of relationship between patient-related barriers and use of NP

The analysis of patients as a potential barrier to NP implementation showed that there was a close association between some patient-related barriers and nursing process implementation. Lack of patient co-operation towards their care was closely associated

with NP implementation (p=0.001& a Pearson's chi-square of 39.088) showing that an observed value was similar to expected results since 54% of the respondents cited lack of patient co-operation as a barrier to care provision using NP. This was followed by 24% of the respondents who cited poor working relationship between them and the patients in relation to NP implementation (p=0.001,Pearson's chi square of 39.005) depicting a relationship between the observed results versus the expected. Age and gender difference between the nurse and patient (p=0.003,Pearson's chi square of 20.163)was not closely related to NP implementation as only 8% of the respondents said that age and gender of patients is a potential barrier towards NP implementation in nursing care provision. Other patient related barriers that were not closely related to NP implementation were patients' complex diagnosis (p=0.003,Pearson's chi square of 20.105), high patient turnover (p=0.003, Pearson's chi square of 20.104) and language barrier/ cultural beliefs (p=0.003, Pearson's chi square of 20.034). The table below shows the above results.

Table 4.8

Association Between Nursing Process Implementation and Patient-Related Barriers

Covariate	Pearson chi-square	df	Sig
Lack of co-operation	39.088	6	0.001
Poor nurse-patient working relationship	39.005	6	0.001
Patients age and gender	20.163	6	0.003
Patients' complex diagnosis	20.105	6	0.003

High patient turnover	20.104	6	0.003
Language barrier and cultural beliefs	20.034	6	0.003

4.10 Perceptions of Nurses on NP

It was evident from the study results that negative attitude of the nurses towards nursing process was evident with regards to their responses The study revealed that, more than half (50.9%) of the respondents said that they liked nursing process and regarding the use of NP as an easy way of identification of patients' priority, majority (64.7%) of the respondents disagreed. On the use of nursing care plan as a tool for enhancing provision of individualized quality care, 58.8% while varied responses were given by the respondents pertaining to whether NP can be applied for all patients as most of them 68.6% disagreed.

Majority (98%) of the respondents strongly agreed that NP is a tedious process while the remaining too also agreed. When asked if nursing process can increase patient satisfaction towards nursing care, 51.9% disagreed, 32.4% agreed,11.7% strongly disagreed, 3% strongly agreed while 1% did not know. Concerning NP being used in any setting, 62.7% disagreed and on the other hand 27.5% agreed.

Majority (79.4) of the respondents strongly disagreed with a statement regarding whether NP is not applicable in practice while varied responses were given regarding NP being a waste of time as24.5% strongly agreed, those who agreed were 31.4%, 8(7.8%) disagreed and 30 (29.4%) strongly disagreed.

On whether NP is only record keeping, 36.3% agreed, 26.5% strongly agreed, 29.4% strongly disagreed and 7.8% disagreed. The responses given towards a statement on whether NP is a burden to nurses, a significantly high number of the respondents 76.4% strongly agreed. Finally, regarding a statement on whether the NP should only be used by BScN and those nurses with higher qualification, 49% strongly agreed and 30.4% agreed while 20.8% disagreed strongly.

In summary, the respondents had negative perceptions towards NP as a tool for quality service delivery. Majority of them found NP to be a burden to them and as such did not add much value to their practice. These findings can be attributed to high workload and shortage of staff.

The above findings are supported by Jooste et al. (2010) study on NP application in Gynecology Wards in Namibia, whereby some study subjects claimed having knowledge of NP and also highly doubted the effectiveness of the same. Negative beliefs towards NP use were also highly communicated and some participants expressed their views by saying that this process was merely record keeping.

4.11 Key Informant Interview

4.11.1. Data collection technique

The principal researcher collected data from two senior hospital managers; the nursing officer in charge of nursing services in the facility and the chief hospital administrator. The data was collected through a face to face interview by use of an interview guide and

each participant was interviewed separately. The interview guide consisted of 6questions and this took approximately 30 minutes for each interviewee to answer and elaborate appropriately.

4.11.2 Reading and re-reading, coding, creating categories and building themes

The principal researcher read and re-read thrice the notes that were written down during the interview in order to familiarize oneself with the data as well as searching for meaningful segments.

Coding which is the process of examining and organizing the information obtained in an interview into meaningful and analytically relevant units(Polit & Beck, 2012) was done. The researcher selectively highlighted and pulled out statements that seemed essential to the study. Coding was done manually and the data was converted into smaller, more manageable units that could easily be retrieved and reviewed.

A theme according to Polit and Beck (2012) is an abstract entity that brings meaning and identity to a current experience and its variant manifestations. Codes were linked to form categories which were later illustrated by means of relevant quotes from the interviews. The themes were identified from within each section of the transcript. By developing themes, the researcher managed to discover commonalities and variants across participants. Commonalities were then grouped together.

The final part of the research was putting the themes together in order to describe the "whole". Once the themes had been identified they became the object of reflection and

interpretation through follow-up interviews with participants (Polit & Beck, 2012). The main features of the themes from the data and confirmed by the research participants were produced as tables with evidence from the interview and quotations which, the researcher felt, best captured the essence of the person's thoughts, perceptions and their knowledge of the nursing process.

4.11.3 Themes

The following four themes emerged from the thematic analysis of individual interview data

4.11.3.1 Theme 1: Knowledge of nursing process

The first theme that emerged was knowledge of nursing process. Within the theme, one category emerged and the subcategories were as shown in table 4.9.

Table 4.9

Knowledge of Nursing Process

Theme	Categories	Sub-categories
Knowledge of nursing process	Limited knowledge and understanding of the nursing process	Correct but inadequate information (4.11.5.1.1)
		Lack of knowledge (4.11.5.1.2)

4.11.3.1.1 Correct but inadequate information

The participants demonstrated inadequate understanding and knowledge of the nursing process. Regarding the understanding of the term nursing process, one respondent gave only one characteristic of nursing process (a way of managing patients by nurses) while the other said that he has no idea. The sample responses were as follows:

Participant DD1: "Nursing process is a way of managing patients by nurses."

Participant DD2: "No idea of the nursing process."

Nursing process is an approach towards solving problems systematically through identifying, preventing as well as treating existing or possible health issues towards promotion of wellbeing of patients (Carlson, 2010). None of the participants defined nursing process correctly.

4.11.3.1.2 Lack of knowledge

One of the participants said that he did not have any knowledge regarding nursing process. Some of the responses given were as follows;

Participant DD1: "I do not know what nursing process is". "That is not my area of specialization, I only deal with management issues arising from the staff...kindly direct that question to the nurse manager".

4.11.3.2 Theme 2: Nursing process implementation by nurses in NCRH and the challenges facing the same

In theme 2, the categories and the subcategories that emerged are shown in table 4.10.

Table 4.10

Nursing process implementation, challenges and hospital administration support

Theme	Categories	Sub-categories
Nursing process implementation by nurses in NCRH, challenges facing the same and hospital administration support	No implementation of nursing process in NCRH	Nurses do not use NP in patient management (4.9.5.2.1) Many challenges face NP implementation (4.9.5.2.2) No much support from the hospital administration (4.9.2.2.3)

4.11.3.2.1 Nurses do not use NP in patient management

The two respondents had the same answer to NP implementation as they said that "nursing process is not used in patient management in NCRH" and gave their reasons as follows.;

DD1: "Nurses do not use NP in patient management...mmh yes, I mean NP is not used in patient management in our facility because of the many challenges facing nursing department"

DD2: "I think the said approach to patient care is not used in patient management".

4.11.3.2.2 Many challenges face NP implementation

The two respondents gave their views regarding challenges facing NP implementation in NCRH as follows;

DD1: Nurses shortage has been and is still a major challenge facing nursing not just here in Narok but in Kenya as a whole. Because of this shortage, nurses are unable to manage patients using NP because it is a tedious process. Other reasons are nurses' insufficient knowledge and lack of motivation for nurses in terms of promotions and career progression...I think those are the major problems we are facing as a facility and county in general"

DD2: because of the high patient volume in the facility...eeh burnout...just that".

Some of the problems facing nursing process implementation include; high workload, inadequate staffing, inadequate material resource, insufficient knowledge, poor incentive, time constraint and high patient turnover through premature self-requested referrals to other health facilities (Jooste et al., 2010;Mahmoud & Bayoumi, 2014; Mamseri, 2012; Potter & Perry, 2007;Sabona et al., 2005) are in support of the above findings.

The two key respondents mentioned only four reasons why nursing process was not utilized in patient management in that facility. There was no mention of nurses' perceptions, inadequate material resources, lack of monitoring and evaluation of the NP, lack of trainings on NP among others and high patient turnover.

4.11.3.2.3 Support from the hospital administration

The responses were varied between the two respondents and are as follows;

DD1: "Yes, sometimes we support nurses. We give moral support, but no material support or incentives from us as the management".

DD2: "No, not much support from us".

The above findings are supported by various studies that also found out that lack of support to nurses, absence of unspecified documents related to nursing care, lack of training budget for nurses on nursing process, lack of equipment and inadequate material

supplies necessary for implementation of NP hindered NP use in patient management (Mahmoud & Bayoumy, 2014; Mamseri, 2012;Manal & Hala, 2014).

4.11.3.3 Theme 3: Percentage of nurses trained on NP in NCRH

Regarding the number of nurses who had been trained on NP in NCRH, the responses are varied and shown in table 4.11

Table 4.11

Percentage of Nurses Trained on NP in NCRH

Theme	Categories	Sub-categories
Percentage of nurses trained on NP in NCRH	Not sure but almost certain that more than 70% have received training from their various colleges	Insufficient knowledge of staff returns, inadequate information and lack of knowledge (2.9.5.3.1) Lack of commitment to training of nurses (2.9.5.3.2)

4.11.3.3.1 Insufficient knowledge and inadequate information of staff by the hospital administration

The participants demonstrated inadequate understanding and knowledge of staff (nurses) in the said health facility because the two respondents were not sure of the number of staff that have received training on the NP. The sample responses were as follows:

DD1: "I am not very sure but I think majority of them have received training in the various colleges that they attended.... Mmmh.....eeeh... Nursing process is in the nursing curriculum so maybe, those who graduated before incorporation of the same are the only ones who may not have that knowledge".

DD2: Not sure.... I mean, I can't tell the exact number...laughs.

4.11.3.3.2 Lack of commitment to training of nurses

The respondents demonstrated lack of commitment to supporting NP implementation in the hospital through facilitating trainings to the nurses and the responses are as follows;

DD1: "I will be lying if I give you an exact percentage of nurses who have received training on NP (pauses) all I can say is that almost if not all nurses in this facility have received NP training in their various colleges because NP is in the nurses' curriculum".

DD1: "Not sure but we do not have a budget or provision for training nurses on NP....Mmmh to be precise, we do not train nurses on NP".

4.11.3.4 Theme 4: Staff audit and evaluation

On whether the hospital audits and evaluate staff regarding nursing process implementation, table 4.12 below shows the responses given;

Table 4.12

Staff Audit and Evaluation

Themes	Categories	Sub-categories
Staff audit and evaluation by the hospital administration	Yes, but not on nursing process	No need for audit (4.11.5.4.1)
		Too many staff to be audited (4.11.5.4.2)
		Not a requirement for staff appraisal (4.11.5.4.3)

4.11.3.4.1 No need for audit

The respondents were asked whether staff are audited and evaluated on NP implementation and the responses were as follows:

DD1: " We evaluate and audit staff on other areas but so far, we have not done NP implementation audit...So, in short, we do not audit staff on NP implementation because of the various reasons that I gave".

we do not audit staff on NP implementation".

DD2: "Am not aware of any audit of staff regarding NP use".

4.11.3.4.2 Too many staff to be audited

One of the reasons given by the respondents regarding lack of audit or evaluation of staff on NP use was that there were too many staff in the facility to be audited nurses being a majority. Below are the responses

DD1: " If we think of auditing every other activity done by nurses, it may not be practical because we are already overworked. There are so many staff in the facility hence unable to audit them all. We do general staff audits but no specific one for nursing process implementation".

DD2: "We have too many staff, too much work to be precise".

4.11.3.4.3 Not a requirement for staff appraisal

One of the responses regarding evaluation of staff on nursing process implementation was that NP implementation did not form part of staff appraisal and the responses are as follows;

DD1: " We do not audit nursing process implementation because it does not form part of staff annual appraisal objectives as of now".

DD2: "Not sure, it is not a requirement for appraisal of staff at the moment, maybe it can be done in future".

4.12 Discussion

The research findings on nurses, patients and institution as possible barriers to NP implementation and how they related to previous scholars' works as well as how the study variables related to one another are discussed at length. These findings are discussed based on the study objectives.

The research findings revealed a close relationship between respondents' age and working experience with implementation of the NP. Nurses who are younger and aged between 21-30 years and those with a work experience <10 years had a high probability of implementing the NP compared to their older and more experienced counterparts. These findings could be attributed to positive shift of attitude towards nursing process by the young and newly employed nurses, the current mode of nursing upgrading system which is enhancing upward mobility of nursing education and more so the push for patient centered care in our current society. Manal and Hala (2014) are in total agreement with the above results as they also found out that demographic characteristics of nurses; working duration as well as age significantly impact nursing process application in provision of nursing services to patients.

Although level of education impacts directly to the nurses' knowledge of the NP and how they implement it as revealed by Manal and Hala (2014) through their study which revealed that, bachelor's degree nurses however had high likelihood of implementing the process unlike certificate and diploma holders. On the contrary, the results of this study indicate that academic qualification had no statistical relationship with use of NP

in patient management. These findings are as a result of lack of emphasis of NP training curriculum, lack of enabling or facilitating factors in the institution like facilitative supervision by managers, lack of enough resources, poor staffing levels and lack of guided practice as clearly indicated by the findings of this study.

The training received by the respondents and NP implementation had no significant relationship according to the findings of this study, as majority of nurses who acknowledged having received training on nursing process did not practice the same in the clinical areas. On the other hand, some of those nurses who said they did not receive any training on the nursing process actually implemented it in service delivery while those who said that they ever received training, agreed that the acquired training was sufficient enough to enable them apply nursing care plan towards service delivery and patient management. However, among those nurses that used NP through developing care plans (39.2%), only 2 of them were able to outline correctly the order of steps of the NP that they used in formulation of patient nursing care plan. This shows that majority (92.2%) of those nursing staff who received training were unlikely to practice NP and based on the findings of this study, this is due to lack of know-how on NP, increased workload, lack of updates on nursing process, inconsistence in facilitative supervision, negative attitude towards NP as well as low motivation of nursing staff. These findings agree with the findings of Delgado and Mendes (2009) who also found out that there was a huge gap between theory and practice. Conclusively, what is learnt in class is not always obviously practiced.

Regarding self-rating on knowledge of the nursing process, 52% of the participants rated themselves as having good understanding while very good and average rating received (20%) and (19%) respectively. However, the findings of this study reveal that nursing process implementation does not have any relationship of statistical significance with the nurses' knowledge. This statistical insignificance of these findings could be as a result of negative perceptions of nurses towards it regardless of their knowledge on NP, inadequate staffing, missing supportive supervision, inconsistency in their practice of NP whereby, nurses hardly utilize the said process in care provision contrary to the ideal in which they are required to use this process every time they manage patients. Staff shortage tends to bring overworking of the available personnel and as such, these staff do not manage patients as required even with the knowledge that they have.

A study by Adenike et al. (2013) found out that more knowledgeable nurses have high likelihood of using nursing process in patient management and another study by Reppetto and Souza (2005) in Brazil revealed that inadequate knowledge is among the several hindrances to efficient use of NP. Also having divergent views with this study is Hagos, et al. (2014) research conducted in Ethiopia which revealed out about knowledge deficit being amongst the leading hindrance for utilization of nursing care plan in service delivery by nurses. Similarly, Zewdu and Abera (2014) in their study observed that those nursing staff with sufficient education had 8.78 times probability index of using nursing care plan in managing patients compared to their counterparts who lacked knowledge of nursing process.

Institution barriers that came out as barriers to NP implementation were shortage of resources, lack of support by the institution, lack of recognition of nurses by the hospital management, lack of supportive supervision on NP use as well as lack of monitoring of NP implementation.

High nurse-patient ratio is amongst major barriers which came out in this study and the results obtained showed that nurse to patient ratio was very high in all the units/wards and this could be a major hindrance for non-implementation of NP in care delivery to patients. Generally, this means that some wards have fewer patients compared to others and this may mean that nurses' distribution per department is not revised according to workload. There was also a greater variability of ratios between departments and this would mean that nurses are distributed by the hospital management based on the prevailing workload conditions in each ward and that this distribution need revision from time to time so as to avoid overworking nurses in particular departments. The varied range of number of patients per ward may mean that nurses gave out the numbers based on the workload at a particular point in time as well as based on disease outbreaks which tend to bring up the numbers of patients admitted in a particular time. A study by Luke(2010) revealed similar results to those of this study that nursing process is easily applicable by nurses to manage individual patients with special medical conditions as opposed to an individual nurse taking care of many patients. This is also in agreement with Clarke and Aiken (2003) research which revealed that specific barriers like high patient volume and lack of time reduced the efficiency of nursing staff in daily use of the scientific process in delivery of individualized patient services and care.

The study findings also revealed a close relationship of statistical significance between provision of necessary tools for NP application and the actual implementation of the said process as those nurses who indicated that they were supplied with necessary materials such as nursing care plans and pens, majority (70%) were able to put to use NP. The above results are therefore in agreement with the findings of Abebe and Abera (2013) in Northern Ethiopia which showed that nurses who reported having enough supply of materials required for daily operation in the ward had a higher probability of using nursing care plan in patient management than those who reported lacking some equipment for patient care.

The study also revealed a close statistical significance between nursing process recognition as a tool for quality nursing care delivery by hospital administration and NP implementation. Regarding hospital administration support, the study findings showed that there was a close correlation between the support given to nurses by the hospital administration and NP implementation. This is evidenced by the study results which revealed that 32 out of 41 respondents who said that they received support from the hospital administration were able to put to use NP in patient management while only 10 out of 65 of those who said that they did not receive hospital support implemented the NP. Therefore, these results clearly show that the hospital support towards the respondents who are the direct implementers of NP is closely related to its implementation.

The study findings on nurses' perceptions of NP, revealed that 50.9% of respondents agreed that they liked NP followed closely by (31.4%) who on the contrary said they

disliked the nursing process concept. Regarding the concept of NP being an easy way of identification of patients' priority, 64.7% did not agree and similarly 58.8% disagreed about the nursing care plan enhancing nurses' ability towards provision of individualized quality care which is patient oriented. Varied responses were given by the respondents pertaining to NP being applied for all patients; 68.6% disagreed and 98% had a strong feeling that NP is tedious. Regarding whether the nursing process can increase patient satisfaction towards nursing care, 51.9% disagreed and on whether NP should be used in any setting, 62.7% disagreed while 27.5% agreed. On NP not being applicable in practice, 79.4% of the respondents strongly disagreed with this statement. It was also observed that most nurses were in agreement with statements regarding NP being a waste of time and that it is all about record keeping. The responses given towards a statement on whether NP is a burden to nurses, a significantly high number of the respondents (76.4%) strongly agreed. On whether the NP should only be used by BScN and those nurses with higher qualification, almost half (49%) strongly agreed. According to Bowman et al. (1983) study in Australia, use of NP in patient management underwent negative perceptions and similarly, another study by Shabel (2009) expounded on the issue of attitude that there was a 20% variation towards using NP in patient management. Also in perfect agreement is a study by O'Connell (1998) which revealed that negative perceptions regarding use of NP were shown by some of the nursing staff.

On the key informant interview, it came out clearly that not much support was given by the hospital administration to the nurses who are the direct implementers of the NP. The

administration pointed out that the much support needed by nurses towards practice of NP was beyond their reach and that the County Government play a major role particularly when it comes to staffing which is a major obstacle to the health facility. The nursing officer also reported that nurses' shortage had been and was still a barrier to quality service delivery in health care as a whole and in NCRH in particular and until this stalemate is solved, quality service delivery will remain a nightmare to NCRH.

Integration of the research findings from the nurses and the two hospital managers was done and they revealed some commonalities in terms of responses that the hospital did not offer much support to nurses towards implementation of NP. This can be attributed to lack of knowledge of the importance of NP by the hospital managers hence making them not put more emphasis towards its implementation. Lack of monitoring and evaluation as well as lack of adequate human resource also came out from both parties and this can be attributed to workload and lack of commitment from the management regarding pushing for employment of nurses from the County Government. Staff audit with regards to implementation of the NP was reportedly not done and this was also evident from the nurses' responses. This can be attributed to lack of seriousness of NP and less importance attached to the same subject hence warranting non-auditing of the said staff.

On the contrary, some divergent views were also received between the nurses' responses and the hospital managers regarding material resources availability, because majority of the nurses reported to have received the necessary materials for NP implementation while the two hospital managers said that they do not support NP in any way because of

lack of resources. This finding can be attributed to insincerity of the responses given by either the nurses or the managers. The nursing officer in charge and the hospital administrator reported that they do not have a provision or budget for training nurses on the NP. Their assumption was that majority if not all nurses have been trained in the various colleges they attended and this goes a long way in affecting NP implementation hence poor quality services to patients. This also meant that up scaling of quality service delivery, more so nursing care will remain a nightmare in NCRH because the administration did not take the scientifically proven process seriously as a tool to improving patient outcome as well as quality care; this has negative implication to service delivery by nurses.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

This chapter entails the summary of the study; purpose of the study, study methods, findings in relation to previous work of other scholars, conclusions based on the study findings as well as recommendations for areas that need to be researched on by other scholars wishing to explore the same field.

5.1 Summary

The study results were discussed according to the objectives of the study. The purpose of this study was to find out barriers to implementation of nursing process among Narok County Referral Hospital nurses. The study investigated barriers to implementation of nursing process among 102 nurses working in Narok County Referral Hospital. It intended to generate more information on the possible barriers to use of the said process since there existed a huge gap in terms of practice of NP in patient management in the above mentioned health facility. The sample size was calculated using Fishers' et al. (1998) formula. Data collection tools were self-administered questionnaires and Likert's scale because both qualitative and quantitative data were collected.

The findings of this study will equip nurses with information on possible hindrances towards utilization of nursing care plans and the methods of curbing these shortcomings. The study sought to examine institution, patient and nurse-related barriers in respect to

implementation of NP and as such established that some of the barriers related to nurses themselves were; level of education, working experience, negative perceptions and workload. The institution barriers that came out were; understaffing, lack of necessary support and supervision and finally lack of motivation and recognition of staff for application of NP while patient barriers were age, gender, attitude, and diagnosis. The study established that nurses had negative attitudes towards nursing process as a whole despite the many challenges that impede their utilization of the said scientific process.

5.2 Conclusions

In view of the research findings, the study therefore concludes that, nurses, patients and institution were a potential barrier to implementation of the nursing process. Regarding nurses, the barriers that featured from the study results were; insufficient knowledge of the NP, working experience, age, training, level of education and negative attitudes.

Patients were also a potential barrier to the use of NP in their management. The two major patient-related barriers to NP implementation that came out from the study were poor patient-nurse working relationship and lack of co-operation from the former. For care to continue smoothly, there has to be a good therapeutic/ working relationship between the care giver and care recipient in this case a patient.

Other patient-related barriers that came up from the study were complex medical diagnosis, both extremes of age, gender, language barrier and high turnover. All these as revealed by the study results showed that patients impeded use of NP implementation in their care provision.

Institution barriers such as inadequate human and material resources, insufficient support towards nurses who are the implementers of NP as well as lack of supportive supervision on nurses were found to negatively affect NP implementation. Nursing process is time consuming and as such requires sufficient personnel to implement it fully on every patient.

The institution was also cited as being unsupportive to nurses who are direct implementers of the said process hence impacting utilization of NP negatively. All the above factors contributed to under-utilization of nursing process which is a scientifically proven process in patient management by nurses.

Lastly, the two key informants clearly demonstrated how the institution did not fully embrace and support nurses towards use of nursing process in patient management. The two managers reported that there was no much support from them because, they did not have resources to enhance NP implementation.

5.3 Recommendations

5.3.1 Recommendations on research findings

Based on the study findings, the following are the recommendations:

1. There is need for the department of health in Narok County to offer refresher courses on NP to all nurses in Narok County and more so to the older category as well as those nurses who qualified prior to integration of NP in nursing training

curriculum, because the study showed that majority of them did not manage patients using the said process. These category of nurses should be empowered continuously with knowledge so as to enable them practice NP in care delivery. Furthermore, if nurses are empowered with knowledge, this would positively influence their attitudes as well as improve patient's outcome.

2. Narok County Referral Hospital management to scale up NP empowering strategies to nurses such as organizing OJTs and mentorship sessions on nursing process
3. Nurses need to be motivated and recognized by their respective health institutions managers so as to boost their morale in order to enhance patient care through NP use.
4. Health institution managers should reinforce the existing mechanisms of ensuring that there is availability of resources needed to implement NP; material and human resource (nurse: patient ratio based on WHO recommendation)so as to enable nurses implement NP on patient management.
5. The hospital management should put strict measures and guidelines in place to ensure that nurses are held accountable for poor quality services including but not limited to non-implementation of NP in nursing care delivery. This can be enhanced through auditing of nurses on NP use in patient management.
6. Nurses should embrace positive attitude towards care provision and this can be achieved through peer education and discussions among themselves. With positive attitude, NP implementation is made easier even in the presence of other obstacles.

7. The Ministry of Health, Kenya, Department of Nursing to continue with the nursing process mainstreaming program as an intervention to scale up its implementation in clinical setting.
8. Nurses should sensitize patients on the benefits of NP in care delivery through developing a positive and strong therapeutic relationship that will go a long way in enhancing patients' co-operation. This can be done through individual or group health education.

5.3.2 Recommendations for further research

There is need for further research especially regarding nursing process implementation strategies so as to understand the specific point or stage where the implementation may be weak or strong. This is necessary in order to critically look into issues affecting NP implementation in geographically diverse areas in Kenya and in higher and lower level health facilities since NP had already been incorporated into the nursing curriculum for all carders.

Researchers also need to look critically into the role played by health institutions/health managers in relation to nursing process implementation as it came out clearly from this study that nurses needed support from their various health institutions so as to embrace the said process in service delivery. The key informants who were the two health managers in the facility also pointed out that there was no much support from them in helping nurses practice nursing process and this had probably contributed to low scale nursing process implementation.

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APPENDICES

Appendix 1: Informed Consent

Title: Barriers to implementation of nursing process

Investigator

Anna Saretin Lekenit, MScN student

Kenya Methodist University

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Purpose and background

The purpose of this study is to assess barriers to implementation of nursing process in Narok County Referral Hospital. The study findings may be of importance to nurses and patients.

Procedure

Data collection will utilize self-administered questionnaire for nurses working in inpatient setup.

Benefits and risks

No psychological or physical harm will be involved in the study however, those nurses who have not been using nursing process in patient management may find it difficult to give relevant answers to the questions asked through questionnaire. The study may be beneficial to patients, nurses, nurse managers, hospital administrators, policy makers and health institutions.

Confidentiality

Anonymity will be maintained and all data obtained will be kept confidential and only used for the purpose of the study. Participation is voluntary following informed consent

Consent

I agree to participate in this study. I have a copy of this form which I have read, and everything clearly explained to me.

Signature .....

Date.....

Appendix 2: Study Questionnaire

Questionnaire Serial Number _____ Questionnaire Status _____ (1=complete; 2= partially complete)

Interviewer ID _____ Date of Interview ____/____/___

Your honest responses on the following questionnaire will greatly assist in the attempt to identify different barriers hindering Nurses from implementing nursing process. All responses will be coded by an identifying number only, kept confidential, and analyzed in group form so that no personal information is revealed. Thank you for taking your time (estimated at 20 minutes) to complete the questionnaire.

Instructions

- ❖ These questions are meant solely for education reasons; Confidentiality will be of utmost importance; your co-operation is highly appreciated.
- ❖ Please ticks [√] the correct answer in the box provided and write the appropriate answer in some of the questions.
- ❖ Answer all questions.
- ❖ Do not indicate your name

SECTION 1 a: Demographic characteristics/Nurse-related barriers (general)

1. What is your gender?

   Male [ ] Female [ ]

2. How old are you in years? ……

3. What is your highest academic qualification?

   Certificate [ ] Diploma [ ] BScN [ ] MScN [ ] Others

4. How long have you worked as a nurse.....?
5. How long have you worked in Narok County Referral Hospital.....
6. Which unit/ward are you currently working in?.....
7. How do you rate your understanding of NP?

Very good [ ] Good [ ] Average [ ] Poor [ ] Very poor [ ]

8. Have you ever been trained on Nursing Process?

Yes [ ] No [ ]

9. If yes where? (*Where applicable tick more than one*) College [ ] seminar [ ] on job training [ ] MOH NP training [ ]

Others (specify)…….

10. Does the NP training you have acquired enable you to practice NP competently?

Yes [ ] No [ ]

11. Give suggestions to improve on NP trainings

……

……

12. Have you developed a nursing care plan of a patient in the last one week?

Yes [ ] No [ ]

*If **No** move to question 14*

13. If Yes, list the steps of the NP that you followed when preparing the nursing care plan

……

……

……

……

If No, What are the barriers hindering you from developing a patient's nursing care plan?

……

……

14. How many steps does the nursing process have?

……

15. What is the major importance of NP?

a) To make diagnosis and treat existing health problems and risks

b) To treat specific diseases that the individuals has

c) To treat anatomical and physiological body alterations

d) To offer health education on disease diagnosis and management

16. What are the benefits of nursing process?

a) Improve quality of nursing care

b) Promote patient satisfaction

c) Increase nurses job satisfaction

d) All

17. Nursing care plans make it possible for interventions to be recorded and their effectiveness assessed

a) True b) False

18. If true to question 17, do you prepare nursing care plans for patients?

a) Yes b) No

19. If no to question 18, explain why

.....

.....

20. The key nurses' action under first step (assessment) of nursing process is;

a) Collecting nursing health history

b) Performing physical examination

c) Collecting laboratory data

d) All of the above

21. If a patient tells you they have had a great amount of pain in their joints, what type of data is this?

a) Objective

b) Subjective

22. Objective Data:

a) This is a complain coming from the patient through verbalization

b) Refers to observation and examination results by a medical provider

c) Also called symptom of the diseases or problem

23. Under planning step of nursing process, a nurse should have to do:

a) Prioritization of problem

b) Setting goal

c) Putting expected outcomes

d) All of the above

24. Using Maslow's hierarchy of needs, a nurse assigns the highest priority to which client need?

a) Elimination

b) Security

c) Safety

d) Love and belonging

25. Briefly explain the activities that a nurse undertakes while carrying out nursing interventions of the patient

.....

.....

.....

.....

26. A nurse is revising a client's care plan. During which step of the nursing process does such a revision take place?

a) Assessment

b) Planning

c) Implementation

d) Evaluation

27. After revising the patient’s care plan, what follows?

a) Change of interventions based on the revision findings

b) Continue with the current interventions

c) Cancel the entire plan

d) Stop all interventions according to doctor’s orders

28. Documentation is the last step in the nursing process

a) True b) False

29. If true to above, briefly describe the importance of documentation in nursing process

……

……

……..

SECTION 2:

Institutional/organizational support

29. What is the ratio of nurse to patients in your ward?

.....

.....

30. Does the hospital administration recognize nursing process as a framework of nursing care delivery?

Yes [ ] No [ ]

31. Does the hospital administration support the implementation of NP?

Yes [ ] No [ ]

32. If yes, what form of support is given to you by hospital administration?

……

……

33. How does the administration monitor the implementation of NP?

……

34. In which way does the management recognize staff for applying NP in patient care?

……

35. Is NP implementation part of your annual performance appraisal objectives? Yes [ ] No [ ]

36. Which tools are supplied by the institution to enable you implement NP?

……

…….....

For how many hours do you work per day?

……....

37. On average, what is the number of patients do you attend in a day?

……....

38. How does your ward look like?

a) Very Organized

b) Really full of stress

c) Looks neglected

d) Very disorganized

40. What do you think is strains you most in your place of work?

a) Attending to a lot of patients

b) Lack of involvement in formulation of rules and regulations

c) Unbecoming colleagues

d) Resources shortage

41. Have you got on job training on nursing process?

a) Yes

b) No

42. Is there monitoring and evaluation for application of nursing process?

a) Yes

b) No

43. If you did not implement nursing process in your practice, what is your primary reason?

.....

.....

SECTION 3: Patient-related barriers

44. Are patients a potential barrier to implementation of the nursing process?

a) Yes b) No

45. If yes to question 44, give a brief explanation to support your answer……

45. Is language barrier a factor that impedes you from implementing nursing process?

a)Yes b) No

47. How does the age of a patient affect implementation of the nursing process?

……

……

48. Does the patient's diagnosis affect implementation of the nursing process?

a)Yes No)

49. If yes to question 40, explain how?

.....

SECTION 4

Nurses' perception towards NP

	Questions	**Strongly agree**	**Agree**	**Do not know**	**Disagree**	**Strongly disagree**
1	I like the concept of the nursing process					
2	Identification of patients priority is easy using NP					
3	NP enables a nurse to provide quality nursing care to patients					
4	The NP should be implemented in every patient					
5	The NP is a tedious process					
6	Nursing process can increase patient satisfaction towards nursing care					
7	The nursing process should be used in any settings					
8	Nursing Process is not applicable in practice					
9	Nursing process is a waste of time					
10	Nursing Process is only Record Keeping					
11	Nursing Process can be a burden to nursing staff					

1 2	Nursing Process should only be used by BScN and above nurses					

Appendix 3: Key Informant Interview Guide

My name is Lekenit Saretin Anna from Kenya Methodist University. I am pursuing a Master of Science in Nursing Education and I am carrying out this research for academic purposes. The study is assessing barriers to implementation of nursing process among nurses working in Narok County Referral Hospital. I believe you will allow me take your little time to ask some questions.

Confidentiality will be maintained throughout and no victimization of any kind as all responses will be generalized.

Are you willing to answer my questions? Do you have any questions before we begin?

1. What is nursing process?

.....

2. Is Nursing Process (NP) being implemented by nurses in this hospital?

.....

3. What are the problems facing nursing process implementation?

…….....

4. How does hospital administration support NP implementation?

……..

5. What is the percentage of nurses trained on NP in NCRH?

…….....

6. How do you evaluate/audit NP implementation?

…….....

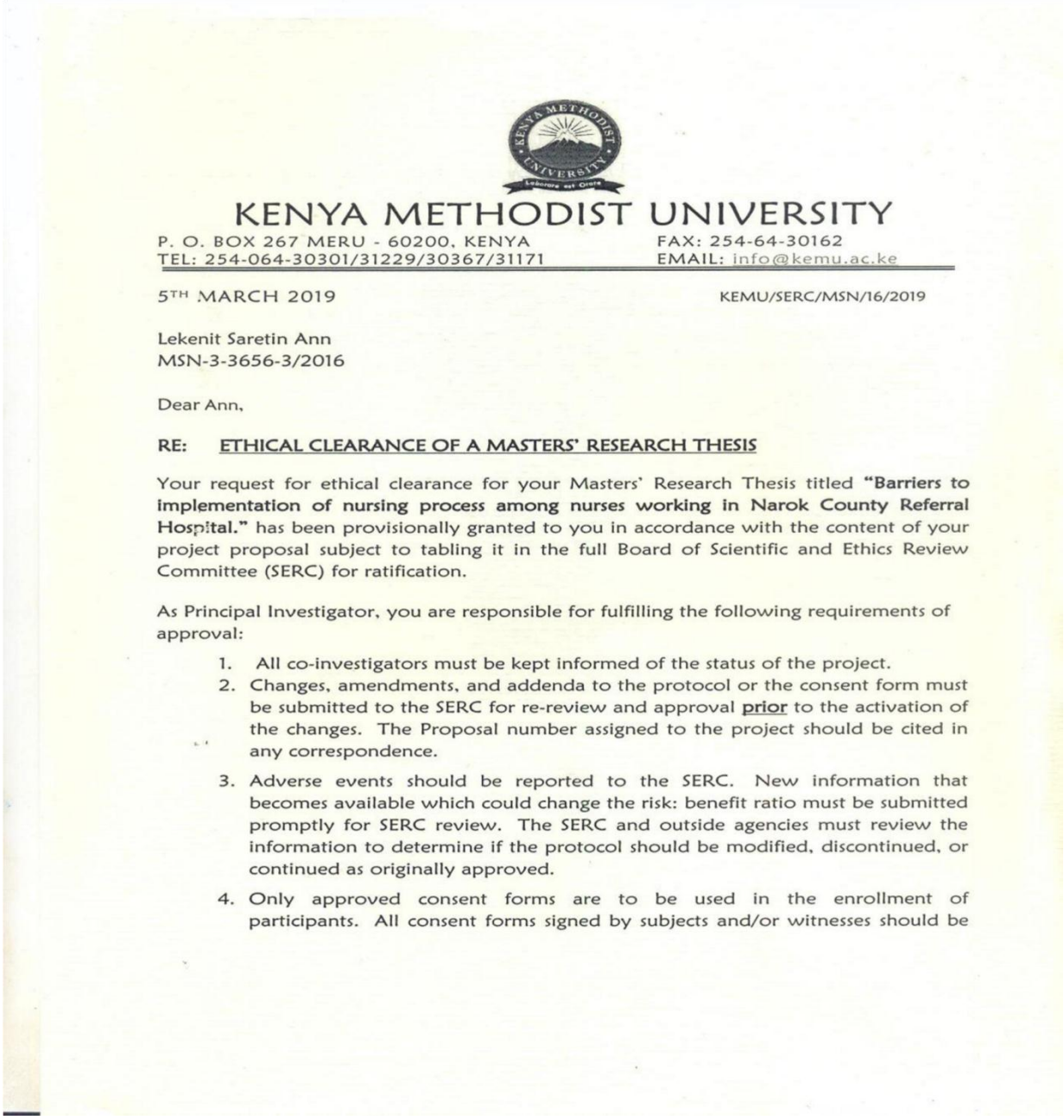
Thank you very much for your time and for sharing your experiences with us.

Do you have any additional comments or insight on barriers affecting nursing process implementation?

Do you have any questions for us?

Again thank you very much.

Appendix 4: Ethical Clearance



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5TH MARCH 2019

KEMU/SERC/MSN/16/2019

Lekenit Saretin Ann
MSN-3-3656-3/2016

Dear Ann,

RE: ETHICAL CLEARANCE OF A MASTERS' RESEARCH THESIS

Your request for ethical clearance for your Masters' Research Thesis titled **"Barriers to implementation of nursing process among nurses working in Narok County Referral Hospital."** has been provisionally granted to you in accordance with the content of your project proposal subject to tabling it in the full Board of Scientific and Ethics Review Committee (SERC) for ratification.

As Principal Investigator, you are responsible for fulfilling the following requirements of approval:

1. All co-investigators must be kept informed of the status of the project.
2. Changes, amendments, and addenda to the protocol or the consent form must be submitted to the SERC for re-review and approval **prior** to the activation of the changes. The Proposal number assigned to the project should be cited in any correspondence.
3. Adverse events should be reported to the SERC. New information that becomes available which could change the risk: benefit ratio must be submitted promptly for SERC review. The SERC and outside agencies must review the information to determine if the protocol should be modified, discontinued, or continued as originally approved.
4. Only approved consent forms are to be used in the enrollment of participants. All consent forms signed by subjects and/or witnesses should be

retained on file. The SERC may conduct audits of all study records, and consent documentation may be part of such audits.

5. SERC regulations require review of an approved study not less than once per 12-month period. **Therefore, a continuing review application must be submitted to the SERC in order to continue the study beyond the approved period.** Failure to submit a continuing review application in a timely fashion will result in termination of the study, at which point new participants may not be enrolled and currently enrolled participants must be taken off the study.

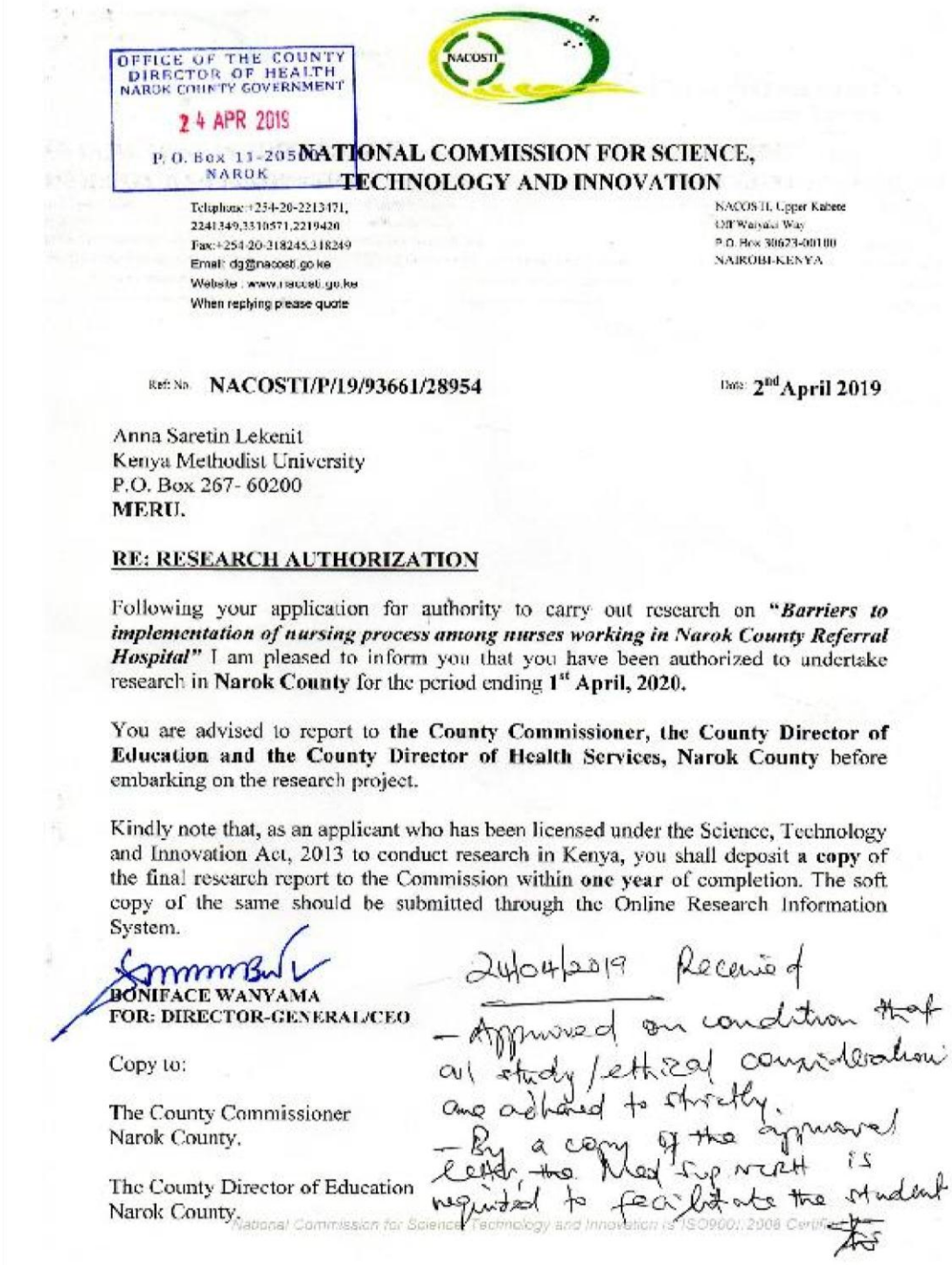
Please note that any substantial changes on the scope of your research will require an approval.

Yours sincerely,

DR. WAMACHI
Chair, SERC

cc: Director, RI & PGS

Appendix 5: NACOSTI Research Authorization



OFFICE OF THE COUNTY DIRECTOR OF HEALTH
NAROK COUNTY GOVERNMENT
24 APR 2019
P. O. Box 11-20500
NAROK

NACOSTI

NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone: +254-20-2213471, 2241349,3310571,2219420
Fax: +254-20-318245,318249
Email: dg@nacosti.go.ke
Website : www.nacosti.go.ke
When replying please quote

NACOSTI, Upper Kabete
Off Waiyaki Way
P.O. Box 30623-00100
NAIROBI-KENYA

Ref: No. **NACOSTI/P/19/93661/28954**

Date: **2nd April 2019**

Anna Saretin Lekenit
Kenya Methodist University
P.O. Box 267- 60200
MERU.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on ***"Barriers to implementation of nursing process among nurses working in Narok County Referral Hospital"*** I am pleased to inform you that you have been authorized to undertake research in **Narok County** for the period ending **1st April, 2020.**

You are advised to report to **the County Commissioner, the County Director of Education and the County Director of Health Services, Narok County** before embarking on the research project.

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit **a copy** of the final research report to the Commission within **one year** of completion. The soft copy of the same should be submitted through the Online Research Information System.

BONIFACE WANYAMA
FOR: DIRECTOR-GENERAL/CEO

24/04/2019 Received
- Approved on condition that all study/ethical considerations are adhered to strictly.
- By a copy of the approval letter, the Med Sup NCRH is requested to facilitate the student

Copy to:

The County Commissioner
Narok County.

The County Director of Education
Narok County.

National Commission for Science, Technology and Innovation is ISO9001: 2008 Certified

Appendix 6: Narok County Director of Health Research Authorization

NAROK COUNTY GOVERNMENT
DEPARTMENT OF HEALTH AND SANITATION

Telegrams: "**HEALTH**", Narok
Telephone: Narok 22300 and 22308
Fax: (050) 22394
Email: *countyhealthdirectornarok@gmail.com*

COUNTY DIRECTOR OF HEALTH
NAROK COUNTY
P.O. BOX 11- 20500
NAROK

When replying please quote our Ref and date

OUR REF: DIR/NRKCNTY/MOH/60/170 **24th April, 2019**

Anne Saretin Lekenit
Kenya Methodist University
P.O BOX 267-60200
MERU

RESEARCH AUTHORIZATION FOR ANNE SARETIN LEKENIT

Reference is made to the National Commission for Science, Technology and Innovation letter Ref. No. **NACOSTI /p/19/93661/28954** dated 2nd April, 2019 requesting to undertake the study at Narok County Referral Hospital.

Authority is hereby granted to conduct the research entitled "***Barries to implementation of nursing process among nurses working in Narok County Referral Hospital***". The research should be carried out in conformity with the study protocol and ethics.

By a copy of this letter, the Medical Superintendent Narok County Referral Hospital is hereby requested to receive and support the student during the study period.

Dr. Francis K. Kiio
County Director of Health
Narok County Government

COUNTY DIRECTOR OF HEALTH
NAROK COUNTY GOVERNMENT
24 APR 2019
P. O. Box 11-20500,
NAROK

C.C: Medical Superintendent, Narok County Referral Hospital.

Appendix 7: Narok County Director of education research authorization

REPUBLIC OF KENYA

MINISTRY OF EDUCATION

State Department of Early Learning and Basic Education

FAX NO. 050-22391
When replying please quote;

Ref. CDE/NRK/RES/VOL1/184

COUNTY DIRECTOR OF EDUCATION
NAROK COUNTY
P.O BOX 18
NAROK

DATE: 24TH APRIL, 2019

TO WHOM IT MAY CONCERN

RE: RESEARCH AUTHORIZATION – ANNA SARETIN LEKENIT.

The above mentioned is a student of Kenya Methodist University, Meru.
She has been authorized to carry out research on ***"Barriers to implementation of nursing process among nurses working in Narok County Referral Hospital" in Narok County.***

Please accord her the necessary assistance.

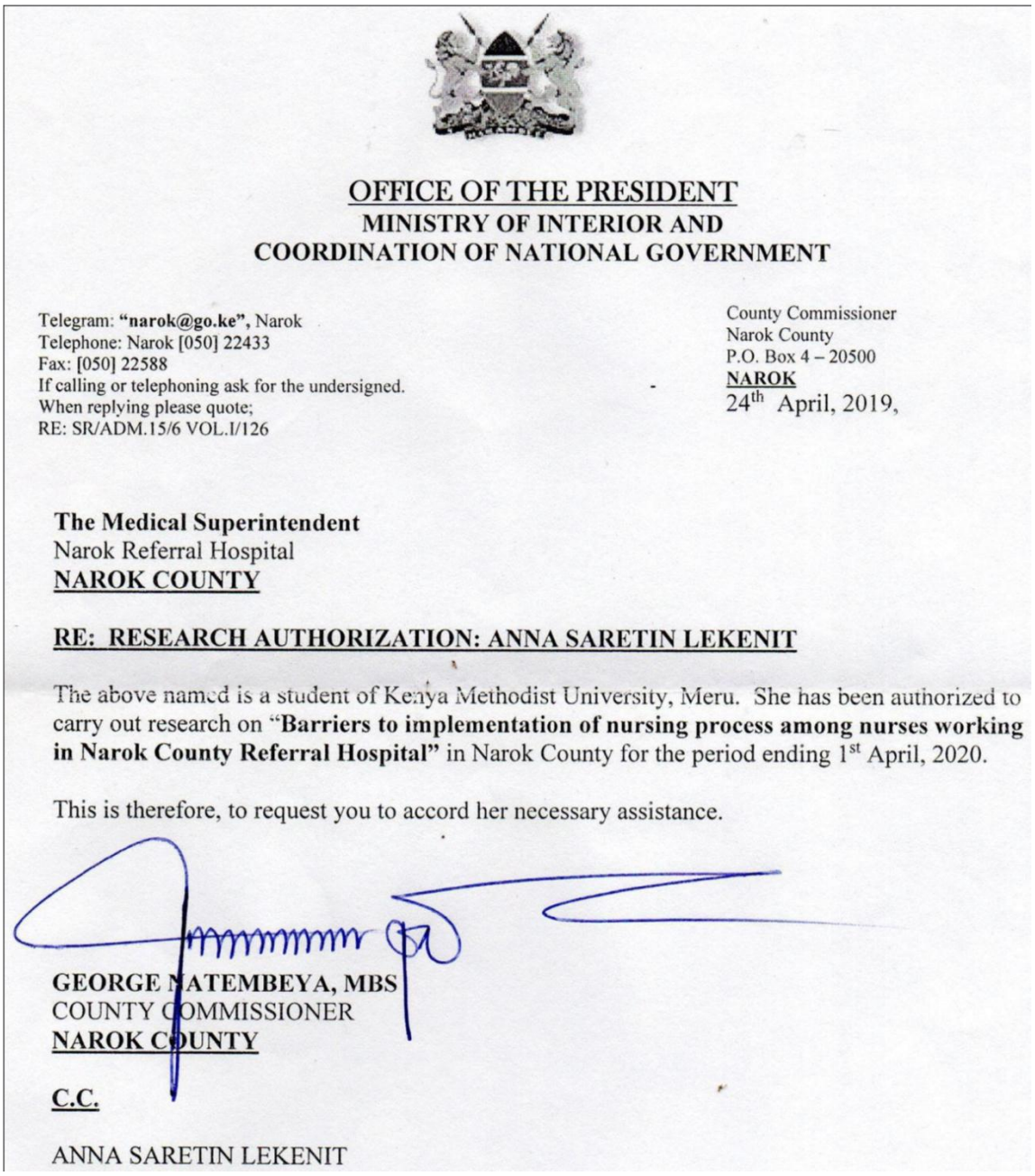
For: COUNTY DIRECTOR OF EDUCATION
14 APR 2019
NAROK COUNTY
P.O. Box 18 20500 NAROK

ANTONY MAKORI
FOR: COUNTY DIRECTOR OF EDUCATION
NAROK COUNTY

C.C

- The County Commissioner – **Narok**
- The County Health Director - **Narok**
- Anna Saretin Lekenit

Appendix 8: Narok County Commissioner research authorization



OFFICE OF THE PRESIDENT
MINISTRY OF INTERIOR AND
COORDINATION OF NATIONAL GOVERNMENT

Telegram: **"narok@go.ke"**, Narok
Telephone: Narok [050] 22433
Fax: [050] 22588
If calling or telephoning ask for the undersigned.
When replying please quote;
RE: SR/ADM.15/6 VOL.I/126

County Commissioner
Narok County
P.O. Box 4 – 20500
NAROK
24th April, 2019,

The Medical Superintendent
Narok Referral Hospital
NAROK COUNTY

RE: RESEARCH AUTHORIZATION: ANNA SARETIN LEKENIT

The above named is a student of Kenya Methodist University, Meru. She has been authorized to carry out research on "**Barriers to implementation of nursing process among nurses working in Narok County Referral Hospital"** in Narok County for the period ending 1st April, 2020.

This is therefore, to request you to accord her necessary assistance.

GEORGE NATEMBEYA, MBS
COUNTY COMMISSIONER
NAROK COUNTY

C.C.

ANNA SARETIN LEKENIT