# EXPLORING FACTORS INFLUENCING IMPLEMENTATION OF NURSING PROCESS IN MATHARI NATIONAL TEACHING AND REFERRAL HOSPITAL.

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# A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE DEGREE OF MASTER OF SCIENCE IN NURSING (MENTAL HEALTH AND PSYCHIATRIC NURSING) AT THE UNIVERSITY OF NAIROBI

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# DECLARATION

I **Mary Mueni Isika, H56/81829/2015,** do hereby declare that this dissertation is my original work. It has never been submitted by any other person for award of a degree in any other university.

Signature..... Date.....

# **CERTIFICATE OF APPROVAL**

This is to certify that this dissertation has been submitted with our approval as supervisors.

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# **DEDICATION**

To my parents, my husband and children for their love, patience, encouragement and perseverance during the period of my project writing.

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# ABBREVIATIONS

ANA	:	American Nurses Association
CNO	:	Chief Nursing Officer
ERC	:	Ethics and Research Committee
KNP	:	Kenya Nursing Process
KRCHN	:	Kenya Registered Community Health Nurse
MNTRH	:	Mathari National Teaching and Referral Hospital
MoH	:	Ministry of Health
NACOSTI	:	National Commission for Science, Technology & Innovation
NANDA	:	North American Nurses Diagnosis Association
NCP	:	Nursing Care Plan
NP	:	Nursing Process
QNC	:	Quality Nursing Care
UON	:	University of Nairobi
WHO	:	World Health Organization

# **OPERATIONAL DEFINITIONS**

**Assessment:** This is systematic and continuous data collection process which includes history taking through interview, physical and mental status examination and diagnostic tests eg x-rays and laboratory investigations. Assessment aims at getting information about the patients' state of health.

**Barriers:** These refer to something or a situations that makes it difficult or impossible to achieve a certain level of functioning. Barriers entail the various factors hindering implementation of nursing process.

**Explore:** To inquire into or discuss in details a certain phenomenon under study. Exploring entail discussing factors which influence implementation of nursing process in management of patient with mental disorders.

**Factors:** These entail activities, functions or process which actively contributes towards the accomplishment, result, or a particular process. These factors either enhance or hinder the implementation of the nursing process and are categorized into structural and process factors.

**Implementation:** This is the actualization of the formulated strategies or practices through allocation of the necessary resources, time, attention and skills. This entail the extent to which the nursing process is put into practice by the nurses in patient management through proper interventions and nursing diagnosis.

**Influence:** To have an effect upon so as to result in a certain desired outcome. It involves the effect of structural or process factors on implementation of nursing process.

**Management of patients:** It includes communication, empathy, examination, evaluation, diagnosis, prognosis, and intervention. It is the provision of patient care guided by the nursing process at Mathari National Teaching and Referral Hospital.

**Mental disorders:** These are syndromes characterized by clinically significant disturbance in an individual's cognition, emotion regulation, or behavior that reflects a dysfunction in the psychological, biological, or developmental processes underlying mental functioning

**Nursing process:** A systematic rational method of planning and providing individualized nursing care to individual, family and the community. It's a problem-

solving approach used to identify, prevent and treat actual or potential health problem and promote wellness. This process is composed of six steps namely; Assessment, Diagnosis, Planning, Interventions/Implementation, Evaluation and Documentation.

**Practice:** The use of one's knowledge in a particular profession. In this study it's the utilization of nursing process in management of patient at Mathari National Teaching and Referral Hospital.

#### ABSTRACT

**Background:** Nursing Process is a decision-making approach that promotes critical thinking towards enhanced patient management and better health outcomes. Its implementation in most Kenyan hospitals still remain low especially in the mental health units. Inadequate knowledge, incompetence, high patient turnover, lack of resources, inadequate administrative support and negative attitude are some of the factors which undermine the NP implementation.

**Objective:** To explore factors that influence the implementation of nursing process in Mathari National Teaching and Referral Hospital.

**Material and Methods:** MNTRH was purposely selected for the study and mixed method research design was used. The sample size was 151 nurses selected by simple random sampling technique while purposive sampling was used to select respondents for the interviews. Data was collected using questionnaires, interview guides and an observation checklist and presented in tables, graphs, charts and narrations. The data was analyzed using thematic analysis and descriptive statistics. Chi-square test of significance was used to determine the relationships between factors which influence NP implementation (Level of significance was set at p<0.05). The data was collected for a period of 4 weeks and study conducted at an estimated cost of Ksh 85,112.50.

**Findings:** The findings of the study revealed that majority of the respondents 104(93%) were affirmative on their awareness of NP. It was established that utilization of NP at MNTRH was yet to be successful with the respondents indicating 25-40% success levels. The main utilized phases of NP at MNTRH were; assessment, diagnosis, implementation/interventions, and documentation but significant gaps existed in all the phases. Both structural and process factors have positive and significant influence on NP implementation at MNTRH. The interviewees further indicated that major barriers affecting NP implementation to be poor nurse-patient ratio, lack of managerial support and lack of monitoring and follow ups on the NP implementations.

**Conclusion and Recommendations:** NP has not yet been fully utilized in patient care at MNTRH. Structural and process factors significantly influenced the level and extent of implementation of NP at MNTRH. The management of MNTRH should highly prioritize implementation of NP in patient care, offer regular in-service training on NP and monitor its practice. The Ministry of Health, regional health bureau, and other Non-Governmental partners to ensure that the institution is empowered on importance of NP and equipped with adequate nursing staffs.

### **CHAPTER ONE: INTRODUCTION**

#### **1.1. Background of the study**

Nursing Process (NP) is defined as an organized framework of care that provides guidelines to sequence of reasoning in clinical settings (Stonehouse, 2017; Sendín & Ceña, 2018). NP is used by professional nurses to ensure provision of high quality standards of patient care (American Nurses Association, 2017). The Nursing Council of Kenya recommends that nursing practice in the country should be based on the scientific approach of this NP. The main aim of the NP is to ensure delivery of holistic and quality nursing care in an organized manner (Mahmoud & Bayoumy, 2014; Varcarolis, 2016). Effective implementation of nurse process is critical in the achievement of high quality health care which translates to better patients' health outcomes (Ngao, 2015; Wagoro & Rakuom, 2015). However, despite this perceived importance in patient management, reports at the Ministry of Health indicate that in most hospitals, the NP framework is not completely utilized in nursing care provision (MoH, 2010).

Failure to use the NP leads to low Quality Health Care, disorganization of nursing care and conflicting roles (Mangare, Omondi, Ayieko, Wakasiaka, & Wagoro, 2016). Factors such as lack of resources, incompetence's, negative attitudes among nursing staffs and inadequate staffing have been associated in failure of full implementation of the NP (Manal, & Hala, 2014).

The implementation of NP thus tend to be more challenging in mental health units where most nurses are faced with difficulties in identifying psychological problems and stating diagnostic labels. Sendín & Ceña, (2018) further argue that implementation of NP in the mental health facilities are lacking in some instances. The barriers mainly originate internally from the nurses themselves, the health care facilities and even the patients (Herr, Marie, Gordon, & Young, 2015; Sendín & Ceña, 2018). These factors not only hinder the proper identification of the patient problems but also result in delayed diagnosis.

Given the benefits of the nursing process to both the nursing care and patient outcomes, it is important that the underlying factors to its implementation be fully understood (Wagoro & Rakuom, 2015). Measures to ensure proper implementation of KNP will act to ensure improvements in the quality of mental health care which will go a long way in achievement of vision 2030 that aims to promote provision of better health care to all Kenyan citizens. This is through the promotion of optimal health, the prevention of illness, and the care and treatment of persons with mental disorders through efficient nursing diagnosis (Prince, *et al* 2016).

# **1.2 Statement of the Problem**

Nursing Process acts as a decision-making approach that promotes critical thinking geared towards enhanced patient management and better health outcomes (Melin-Johansson *et al*, 2017). However, most nurses have not been able to fully implement it in their daily practices (Blais, Hayes, Kozier, & Erb, 2015; Zamanzadeh, *et al*, 2015). The use of nursing process in most hospitals is still lagging despite all the efforts that have been made by the nursing professionals to implement its use (Mwenda, Kangethe, & Maranga, 2016). In this regard, factors such as inadequate knowledge, incompetence, high patient turnover, and lack of time undermine the NP implementation process (Sendín & Ceña, 2018; Herr, *et al*, 2015).

Mahmoud and Bayoumy (2014) observed that most nurses complained of lack of time and high patient volume as significant barriers to NP implementation. Mangare, *et al*, (2016) further found out that though nurses may have a positive attitude towards the NP, they experience difficulties performing most of the phases of the NP. Ngao, (2015) noted that the application of the nursing process in patient care was minimal in most healthcare facilities in Kenya including Machakos Level 5 Hospital. Agyeman-Yeboah, *et al*, (2017) found out that clinical utilization of the Nursing Process at clinical settings was influenced by lack of clear understanding on the Nursing Process and Care Plans. Ota, (2014) found out that the nurses in Level Five mental health units in Kenya faced many challenges related to work environment and patient-related factors. Similarly, Zamanzadeh, *et al*, (2015) established that most of the mental health institution lacked well-structured Nursing Processes implementation strategies. Patients with mental health disorders require individualized and more sensitive care due to their emotional and mental health concerns which further makes the nursing process implementation more challenging (Moetsana-Poka, Lehana, Lebaka & McCarthy, 2014; Varcarolis 2016).

Mental Health Disorders account for approximately 16 percent of the burden of disease in Kenya (MoH, 2010). Therefore understanding the factors influencing implementation of the nursing process in the care of patients with mental disorders will go a long way in improving patient outcomes in the mental health sector. Effective implementation of the NP is essential so as to ensure that all the patient's needs are met and improving the quality of patient care.

## **1.3 Purpose of the Study**

The purpose of the study was to explore factors that influence implementation of the nursing process in the care of patients with mental disorders in Mathari National Teaching and Referral Hospital.

#### **1.4 Research Questions**

The study aimed to address the following research questions;

- i. How has nursing process been adopted in management of patients with mental disorders in Mathari National Teaching and Referral Hospital?
- ii. What structural factors influence the implementation of nursing process in management of patients with mental disorders in Mathari National Teaching and Referral Hospital?
- iii. What process factors influence the implementation of nursing process in management of patients with mental disorders in Mathari National Teaching and Referral Hospital?

## **1.5 Specific Objectives**

The specific objectives of the study were to;

- i. To establish the extent of nursing process utilization in management of patients with mental disorders in Mathari National Teaching and Referral Hospital.
- To determine the structural factors that influence the implementation of nursing process in management of patients with mental disorders in Mathari National Teaching and Referral Hospital.
- iii. To establish process factors that influence the implementation of nursing process in management of patients with mental disorders in Mathari National Teaching and Referral Hospital.

# **1.6 Justification**

Nursing Process provides a framework for facilitating well-coordinated nursing care and has proved helpful in accessing quality nursing care. It allows the nurse to apply their knowledge and interventions in an organized manner as well as ensuring high standards are maintained. However, despite this perceived importance, the implementation of NP and its practice is not easily achieved (Mahmoud, 2014). Reports from the Ministry of Health indicated that in Kenya, the NP is either under-utilized or not systematically followed (MoH, 2010). Barriers relating to the nurses, patients and hospital facilities have been established by the studies conducted which tend to limit the effectiveness of the NPs. The barriers tend to be more pronounced in the mental health institution where the patients require specialized and individualized care. Herr, et al. (2015) established that inadequate knowledge of the nursing process is thus a key barrier to the implementation of the NP especially in the management of patient with mental disorders.

Keating, Thompson and Lee (2010) found out that most hospital facilities do not provide the needed support. Proper application of nursing process requires a clear understanding of the factors which undermine the implementation process. This therefore necessitated this study which was conducted at Mathari National Teaching and Referral Hospital. The study was able to establish the current situation of NP implementation in the facility and underlying factors.

# **1.7 Significance of the Study**

The study will benefit mental health nurses in Kenya, particularly Mathari National Teaching and Referral Hospital on the national and global standards set for the implementation of the nursing process in the care of patients. The recommendations made by the researcher aim at improving utilization of NP which will make the task of assessing and managing the mental disorders of patients to be systematic and organized. The management will also therefore be in a better position to formulate better policies and frameworks which will ensure that the barriers to the NP practice are minimized. This will act to greatly boost the overall effectiveness of the NP in the institution thus promoting better patient care. In addition, the research will encourage nurse educators to reexamine the psychiatric nursing syllabus and course of content. That will give them the opportunity to identify areas that need assessment to be at par with the current psychiatric nursing practice trends. The study will also form a basis on which further studies in the area will be conducted.

#### **CHAPTER TWO: LITERATURE REVIEW**

#### 2.1 Concept of Nursing Process

Historically, nursing was mainly concentrated on the underlying medical conditions rather than the person(s) receiving the medical care. The nursing care was therefore undertaken based on mere intuitions or following the physicians' instructors. But with the introduction of the nursing process in the early 60s, in the developed countries, this has changed drastically (Pokorski, Morae, Chiarelli, Costanzi and Rabelo, 2009). The nursing process was introduced by North American Nurses Diagnosis Association (NANDA) and provides a means of not only standardizing nursing care but also the maintenance of the autonomy of the profession (Ngao, 2015). Nursing Process is a well-structured method for facilitating rational planning and individualized Quality Nursing Care (QNC) (Ngao, 2015; Magare, et al, 2016; Rakuom & Wagoro, 2016). Similarly, Yildirim and Ozkahraman, (2013) state that NP is a tool used in planning and offering patient care which is well organized and tailored to meeting individualized healthcare requirements. Efficiency in the entire NP practice is evaluated by the nature of approach to patients by nurses, specific interventions made, documentation quality, increased reflective thinking and better patient outcomes. Abdelkader and Othman, (2017) further add that the NP may be assessed by the level of participation in care planning of patients and ensuring that the provided nursing care is specific to requirements of a patient within the entire group context. This will ensure patients' satisfaction, reduced workload as well as improved communication amongst the nurses.

# 2.1.1 Global Nursing Process

Nursing process in currently a globally accepted process which represents the experiences in nurses' patient care aimed at evaluation of the patient needs, proper planning, careful interventions and proper documentations (Ledesma-Delgado & Mendes, 2009). NP constitutes a series of steps which assist the nurse to use their theoretical knowledge in diagnosis and implementing therapeutic actions for attaining, maintaining and promoting optimal bio psychosocial functioning (Lindberg, 1998). Currently, the nursing process utilizes the ADPIE acronym which stands for assessment, diagnosis, planning, implementation, and evaluation. The relevance of the ADPIE is to enhance the

mental, emotional and physical health of patients through analysis, diagnosis, and treatment (Mamseri, 2012). Specifically, Afolayan, Donald, Baldwin, Onasoga, and Babafemi (2013) argued that international nursing process is made up of seven phases; assessment, diagnosis, identification of outcome, planning, intervention, implementation, and evaluation. Regionally, South Africa mental health hospitals use the 2007 international classification of nursing practice to determine the stages of the nursing process which include, assessment, diagnosis, planning implementation and evaluation (World Health Organization, 2013). Most hospitals dealing with patients with mental disorders in South Africa does not focus on problem-solving as a stage of the nursing process.

### 2.1.2 Kenya Nursing Process

The Kenya Nursing Process revised is revised to six steps and included documentation as the last phase due to the observation by nurse administrators that there was a problem with documentation in Kenya (Ngao, 2015, Rakuom & Wagoro, 2016; Magare et al, 2016). Kenyan nurses realized it's structural and processes challenges in nursing practice necessitated the documentation phase of nursing processes therefore it had to be treated separately. The structural obstacles were limited number of nurses, task shifting, and changing policies on care delivery system in nursing and inadequate finance. Conversely, process factors were the development of an interpersonal relationship with patients and methods of procedure performance to ensure trust and disclosure at the assessment time. The Kenya-NP is therefore unique due to; outcome identification is included as an activity within the planning phase, risk nursing diagnosis is revised into three parts instead of two parts as in the global concept, documentation is adopted as a last step instead of evaluation as in the global concept and implementation is within the context of categorisation of patients and team nursing (Wagoro & Rakuom, 2015).

The Nursing Council in Kenya recommends that the practice of nursing should be based entirely on the systematic application of the nursing process (Mangare, *et al*, 2016). KNP has been further emphasized in the current nursing procedure manual which holds that nursing process procedures should be able to ensure that the nurses deliver patientfocused care in an organized manner. Training curricula for both midwives and nurses have also incorporanted the NP as a framework in enhancing the nursing care. However, reports at the Ministry of Health still indicate that in most hospitals this framework is not used in the provision of nursing care and if used, the phases are not systematically followed (MoH, 2010). Wagoro and Rakuom (2015) stated that nurse educators should collaborate with the office of CNO to create a software that has a classification of nursing process terminologies to aid documentation. The Government's e-health program will be fundamental in the documentation process.

### 2.1.3 Benefits of Nursing Process

Nursing Process utilization ensures that there is comprehensive patient care whereby the nursing care plans are both administrative and enabling achievement of realistic patient goals (Butcher, Bulechek, Dochterman, & Wagner, 2018). It enables the nurse to make a meaningful evaluation of care, patients should be involved in their plan of care and that in-patient care there should be less writing and more action. The nursing process has two main impacts on clinical nursing practice, which is the emergence of managed care as the dominant force in health care financing and emphasis on quality of care (Butcher, *et al*, 2018). Through the NP, the nurses can gain confidence and facilitate their professional growth as well. Professional growth is facilitated through the implementation and development of nursing care plans which provide an opportunity of sharing knowledge and experience (Blais, Hayes, Kozier, & Erb, 2015). Moreover, good documentation quality, especially in cases where the nurses use structured language that has been agreed on make the reports clearer and patient care more efficient and effective.

# 2.1.4 Indicators of NP practice

Effective implementation of the nursing process translates in improved patient care and stimulates construction of both theoretical and scientific knowledge based on optimal clinical practices (Pokorski, *et al.*, 2009). This will ensure patients' satisfaction, reduced workload as well as improved communication amongst the nurses. Habermann and Uys, (2005), Wiscombe, (2001) cited that nursing process applied in clinical settings provides a basic framework that facilitates quality nursing care and patient management. This was further supported by Afolayan, et al. (2013) who found out that through nursing process, patient satisfaction and attainment of global standards of nursing was achieved. NP has

? also been established to improve communication among the nurses and provision of a system of evaluation of the nurse interventions with care. Yildirim and Ozkahraman, (2013) further found out that NP aims to encourage the participation of patients in care planning and ensure that the provided nursing care is specific to requirements of a patient within the entire group context. In Kenya, the Nursing Process has been adopted by the Ministry of Health (MOH) as a scheme of service in the nurse practice and key criteria for promotion. In addition to this, the training curriculum for all cadres of nurses in Kenya has incorporated the NP as a framework in developing of nursing care plans. This is aimed at enhancing how it is utilized in improving quality of nursing care in patient management (Wagoro&Rakuom, 2015). However, Mahmoud and Bayoumy (2014) established that the use of nursing process began and stopped while in another instances NP is fully not employed in the patient care. This could be due to the challenges that are experienced.

# 2.1.5 Implementation of NP in Mental Health Practice

The implementation of nursing process in Mental Health was first introduced in 1973 by the psychiatric and mental health practice of the American Nurses Association (ANA). This was brought about by the need to provide standard nursing care towards the mental health outcomes. It aims at integrating all the components of mental health and the factors influencing it which include; individual, social and institutional. The standard nursing practices were later revised in 1982, 1994, 2000 and 2007 (ANA, 2012). Thus, NP becomes central to the establishment of nursing care in mental health and aids the nurse to assume an autonomous position as a therapeutic agent, which consequently qualifies the provided nursing care and can also be understood as the nurse contribution to the singular therapeutic project. In South Africa, the mental health hospitals use the 2007 international classification of nursing practice to determine the stages of the nursing process which include, assessment, diagnosis, planning implementation and evaluation (World Health Organization, 2013).

However, many mental health hospitals in sub-Sahara Africa and other poor and developing nations still experience challenges such as shortage of adequate financial, material and human resources. Afoi, Emmanueul, Garba, Gimba and Afuwai (2012) observed that mental disorder was both rampant medical condition as well as increasingly disabling. The magnitude of the burden is because most people with such disorder do not get treatment from specialized mental healthcare systems. Others fail to get help because the problem is not acknowledged, the hospital lacks appropriate diagnosis procedures, or the nurses have high workloads. While in the United States, Queiroz, Sant'Ana, Oliveira, Moinhos, and Santos (2012) found out that the main barriers facing the nursing process was inability of some nurses to accurately diagnose the mental disorder and their failure to offer appropriate management due to limited resources, excess workload and lack of technical support from the department. WHO (2012) further adds that inadequate resources currently constitute the main challenge facing proper nursing practice in the mental health units.

## 2.2 Phases of Nursing Process

Development of nursing process requires nurses to be knowledgeable about health needs, information collection techniques, and methods of organizing data, care planning, propositional intervention and evaluation. The Nursing Process constitutes a series of steps which assist the nurse to use their theoretical knowledge in diagnosis and implementing therapeutic actions for attaining, maintaining and promoting optimal bio psychosocial functioning. The steps of the nursing process include assessment, diagnosis, planning, implementation, and evaluation and documentation.

#### 2.2.1 Assessment

Assessment describes the process through which the nurse collects information about the patient's health in a structured way through observation, examination, and interviews (Chabeli, 2007). Hamilton and Price (2013) argue that the assessment is a very crucial step through which the patient's need are identified and determines the effectiveness of the entire nursing process. It is an ongoing process in any nursing intervention. The data collected can either be subjective or objective or both (Kozier, Berman, Snyder, Lake &

Harvey, 2008). Subjective data is obtained mainly through documenting the patient's own words based on their experiences. Objective data on the other hand is obtained by the nurse through physical examination, diagnostic testing and/or observations. In psychiatric mental health nursing, this process is often referred to as a psychosocial assessment (Sreevani, 2016). The components of psychosocial assessment include interview with the patient and his family, history and physical examination, mental status examination, laboratory and psychological tests in addition to the other assessment data as observed in other general patients. According to Sreevani (2016) the history taking in psychiatry proceeds from identification and demographic data, presenting complaints and duration, history of present illness, past psychiatric history, family history, personal history and premorbid personality. The observation will entail inquiring the situation that enhanced the behaviour, what the patient was thinking the moment he or she fell sick, the sensibility of the behaviour in that context and if the conduct was adaptive or dysfunctional.

# **2.2.2 Diagnosis**

A diagnosis is the statement of the nursing problem of the patient that encompasses both adaptive and maladaptive responses to health problem which contribute to the stressors (Newfield, Hinz, Scott Tilley, Sridaromont, & Joy Maramba, 2007). The nursing problems entail the health aspect of the patient that requires intervention. The diagnosis may be an actual or a potential health problem regarding the situation (Yildirim & Ozkahraman, 2011). A diagnosis statement consists of health problem, contributing factors and defining characteristics. The defining features offer specified indicators the purpose of evaluating the results of nursing interventions as well as determining if the process meets the expected nursing goals. This differs from the medical diagnosis whereby; the nursing diagnosis focuses on an individual's health response to the health problem, while a medical diagnosis focuses on the health problem itself (Newfield, et al, 2007). Forming a correct nursing diagnosis demands critical thinking skills, scientific knowledge, social skills and multi-sided knowledge about the patient and his situation.

The diagnosis is accompanied by outcome identification where the nurse identifies the outcomes individualized to patients within the context of offering care and the main goal is to influence health outcomes and enhance the health status (Peate, 2013). The result, effectiveness, and efficiency of the intervention should be mutually identified with the patient. Prior to the identification of the expected outcomes, nurses must understand that patients usually seek treatment with personal goals and the clarification of goals is a vital step in a therapeutic process. Therefore, the relationship should be in connection with mutually acceptable goals. The goals should be in realistic terms, and they should describe what the nurse needs to accomplish within a specified span. The expected results and the short-term objectives should contribute to the expected outcomes that are long term.

#### 2.2.3 Planning

According to (Doenges, Moorhouse, & Murr, 2008), planning contains setting the priorities, establishing goals, consideration of proper patient outcomes and determination of the necessary interventions to be made. The planning phase of the nursing process use problem-solving techniques in which strategies are developed to achieve the desired nursing outcomes. It consists of setting goals, writing nursing care plan and determining priorities. The nurse must involve the patient, the family, and the health team members. The next step is the outlining of plans to achieve the chosen goals, and on the analysis basis, the nurse must decide on the problems which require priority or immediate attention. Nurse planning is an ongoing process whereby the nurse collects new information each time (Chabeli, 2007). The chosen nursing approach is essential in meeting the goals or objectives in the management of patients with mental disorders. The nursing process offers systematic framework that helps care planning. (Leach, 2008).

#### **2.2.4 Implementation**

Implementation is termed as a specific nursing action which is designed to achieve an outcome to a nursing diagnosis, or medical action which the nurse is accountable (Saba, 2007). The key point of initiating nursing care plan is the implementation phase of the nursing process, and in that stage, the nurse still assesses the patient to determine if

interventions are effective. Nurses may choose interventions within their level of practice, for instance, counseling, self-care activities, case management and health maintenance to meet the needs of patients with mental disorders (Alfaro-LeFevre, 2010). Similarly, nurses require intellectual, interpersonal and technical skills to implement actions. Precisely, nursing actions are categorized into two types, for example, dependent nursing action, which is taken from the advice of the physician like administering medication. The second one is independent nursing actions which include nursing diagnosis, care plan and nursing of the patient to attain the expected goals. The implementation process is a bit cumbersome as it requires the equal involvement of all the involved stakeholders such as the nurses themselves, the hospital facilities and the patients' corporation as well (Saba, 2007;2012).

#### 2.2.5 Evaluation

The purpose of evaluation is to determine whether the patient centered goals were met, it is primarily directed at evaluating the outcomes of care, and not the plan of care or the care delivered. (Yildirim & Ozkahraman, 2011). This is a continuous phase in nursing processes because the management of patients is a dynamic activity that involves change in the health status of the patients from one time to another. That gives rise to new data, diverse diagnosis, and modification in the care plan. The nurse needs to review every previous stage of the nursing process and find out if they are meeting the expected outcomes when evaluating the care. Evaluation therefore act as a feedback mechanism for judging the quality of care given. Similarly, evaluation of the progress of a patient shows what the problems that the nursing process has solved (Hogston, 2011). It also indicates the issues that need reassessment, re-planning, implementation, and re-evaluation. Although intervention would not help patient, the knowledge from evaluating the intervention helps the nurses to develop care. Through evaluation, the patient's progress towards attainment of known outcomes and monitoring of the patient's reactions towards the preferred interventions is achieved (Carpenito, 2015).

# 2.2.6 Documentation

Documentation is a step by step activity in every phase of NP, but its addition as an independent stage offers room for compressive discussion. Besides, nurses will have the opportunity to examine the principles and techniques of documentation comprehensively and make it meet its crucial purpose in demonstrating NP implementation (Wagoro & Rakuom, 2015). Though documentation constitutes an activity crucial in each step, its inclusion as an independent step is essential in allowing its comprehensive discussion in terms of principles, definitions and techniques (Wagoro & Rakuom, 2015). Effective documentation is imperative in ensuring demonstration of proper nursing process.

# 2.3 Factors that influence Nursing Process Practice

#### **2.3.1 Structural Factors**

Structural factors relate to those attributes of health facility or resources which either facilitate or hinder the Nursing Process Practice. The main structural factors established to influence Nursing Process Practice include; the organization structure, support, culture, resources, Patient-Nurse Ratio and policies. The organization structure is how the entire hospital facility is organized from the top management to the staff. Having an appropriate organizational structure will imply that there are well set out policies and procedures are conducted, including the NP implementation (Rapetto and Souza, 2015). In this regard, operational difficulties will occur when the organizational structure neglects the nursing process implementation. This could be excessive task allocations, failure to clearly specify the roles of the nurses, and inadequate budgetary allocation. Hermida and Araujo, (2006; 2016) further add that failure to comprehensively understand the organization structure will act as the start to all the other implementation challenges in the nursing process.

Strong organizational support is essential in the facilitation of multidisciplinary and interdisciplinary learning opportunities which aid in the integration of the NP role in the health care (Jooste, Vanil & Vandyk, 2010). The support could be in terms of financial support, provision of training opportunities, close monitoring of the NP and ensuring that the nurses' needs are well catered for. Keating, Thompson and Lee (2010) however found

out that most hospital facilities do not provide this much needed support. The nurses are thus not fully aware of the value and role of the NP and how to address any barriers that may arise in using this process. For the nursing process to be well implemented it calls for proper dedication and commitment from the management/institution (Jooste *et al.*, 2010).

According to Prince, Coma-Herrera and Karagiannidou (2016), inadequate resources acts a main determinant to NP implementation especially in the developing states. These resources are in terms of insufficient finances, high workload, inadequate workforce and shortage of physical resources. This tends to limit how the nurses conduct their operations as most end up improvising leading to neglect of the NP entirely. Governments as well do not emphasize on the provision of adequate resources to the hospital facilities making it a critical obstacle to NP implementation and patient management in general.

The number of workforce dedicated to wards nursing and management of the patients also acts to greatly affect its level of implementation and sustainability (Marnseri, 2012). This is largely attributed to the fact that inadequate nurse staff will result in increased workload and pressure. Therefore, the nurses will not have the required time to fully implement the NPs. This acts to be merely an increased burden to the nurses as well as affecting the patients' opportunities to receive timely assessment and treatments (Queiroz,Sant'Ana, Oliveira,Moinhos and Sandos, 2012). Since most psychiatric facilities are understaffed, this therefore hinders greatly the implementation of NP fully.

#### **2.3.2 Process Factors**

Process factors tend to influence the extent to which the Nursing Process will be undertaken with regards to the procedure itself. This include; the nurses' competencies, experience and the patient compliance. Knowledge of the nursing process relates to the expertise and having the necessary trainings and skills to undertaking the NP and implementing it. In this regard, having knowledge deficiencies will result in the inability to master and systematically implement the nursing process (Fissehe, *et al*, 2014). This acts as a huge gap in the implementation as regardless of the provision of the necessary resources and support, being knowledge deficient will translate in ineffective implementation of nursing process. Florance and Adenike, (2013) confirm this by indicating that the more knowledgeable the nurses are, the more they will be able to use NP in patient management.

In a similar way, Herr, *et al*, (2015) established that inadequate knowledge of the nursing process is thus a key barrier to the implementation of the NP especially in the management of patient with mental disorders. They further indicated that lack of the professional knowledge was thus a main reason why the nurses avoided the implementation of the NP in the daily routine patient care (Herr, *et al*, 2015). Therefore, having the appropriate qualifications and skills will highly improve the implementation of NP while Lack of adequate training is thus an extensive barrier to the implementation of the NP in clinical environment and ought to be addressed.

On the other hand, Lack of previous experience entails previous exposure to the use and implementation of the nursing process (Brandalize *et al*, 2005). This tends to hinder NP in that the nurses may be reluctant in implementation of the NP as it may seem complex to them. Additionally, it will require more time and practice to be fully conversant with the nursing process. Lack of experience may also cause a negative attitude and perception to the nurse process. This tends to limit its feasibility in the daily nursing practice (Baraki, *et al*, 2017). According to Alburquerque-Sendín and Palacios-Ceña (2018), the lack of experience tends to hinder greatly the implementation of the NP especially on management of patients with mental disorders. This coincides with Agunwah, (2010) who also found out that lack of experience of practical use of the nursing process tends to negatively affect its utilization.

Huguchi, Dulburgen and Duff, (1999) also linked ineffective nursing process to lack of prior exposure to the framework. In addition, the patients may not be fully compliant or willing to corporate with the nurses resulting to patient related barriers as the entire NP is interfered with. The patient may not be completely willing to provide the necessary

information pertaining to their medical condition causing difficulties in the diagnosis (Yeboah, 2017). More specifically, the perception, nature, and course of diagnosis are the key factors that hinder people with mental illness from seeking appropriate medical attention thus acting as a barrier to implementation of NP (Fisseha, *et al*, 2014). Habermann and Uys (2006) further postulate that the NP may not only be time consuming, due to specialized needs of the patients but also interfere with the care of the patients' needs. This therefore shows that it is essential to first evaluate the patient needs before undertaking the NP.

# **2.4 Theoretical Framework**

This study was guided by the Nursing Process Theory and the Donabedian's theory. The Nursing Process Theory was formulated by Ida Jean Orlando's (Pelletier). The theory holds that effective interactions between patients and nurses will lead to effective interventions which will translate to better health outcomes (Parker & Smith, 2010). The theory focuses on improving the behavior of the patient based on their needs which are established through effective interactions with the nurse. Based on this theory, the need for nursing care is heightened more when one is not able to meet the needs that they have. Orlando's theory has been tested in various health care settings and the results support its' implementation to practice in various nursing fields (Schmieding, 2006). Zamanzadeh, et al, (2015) found out that Orlando's theory promoted stress reduction during admission to surgery. Peterson & Bredow (2009) argue that there is no simplicity in undertaking and adhering to the nursing guidelines but following this theory acts as a guideline. The importance of the theory is that it makes it easier for nurses to see a patient from a nursing perspective. This helps nurses function in a professional manner by using an established method and body of knowledge through provision of structured care to patients.

Donabedian's Theory on the other hand was introduced by Avedis Donabedian (1966) who proposed a structure-process-outcome framework used in determining the quality of health care. Incorporation of all these three components provides the necessary information for the exploration of quality care. This three-part approach of quality

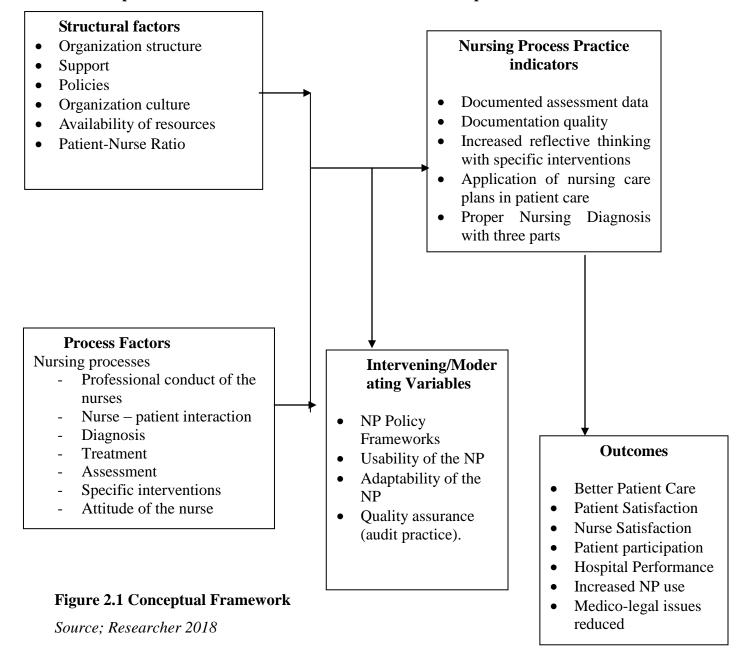
assessment is possible because proper structure increases the probability of good processes and good processes in turn translate to good outcomes.

# **2.5 Conceptual Framework**

The conceptual framework of the study is adopted from the theoretical framework as shown by Figure 2.1. The independent variables of the study are the factors influencing the implementation of the nursing process while the dependent variable is the nursing process practice and outcomes in Mathari National Teaching and Referral Hospital. The moderating variables the factors hindering the implementation of NP. The independent variables are depicted to have a direct influence on the dependent variable.

# **Independent variables**

#### **Dependent variables**



#### **CHAPTER THREE: METHODOLOGY**

#### 3.1 Research Design

This study adopted the mixed method research design. As explained by Setia, (2016) this research design incorporates both the qualitative and quantitative approaches. The qualitative approach was undertaken using the phenomenological research approach. This aided in the determination of the experiences with NP from the nurses' perspective. This research design therefore enabled in depth understanding of the study topic and was achieved using key informant interviews. Descriptive cross-sectional research design on the other hand was used in the quantitative approach. The cross-sectional research design enabled the researcher to measure the outcome of NP implementation and the exposures in the study participants at the same time. The relationship between the factors that influence the implementation of nursing process in management of patients with mental disorders was established.

# 3.2 Study Setting

The study was conducted at Mathari National Teaching and Referral Hospital which its primary function is to offer services to individuals with mental disorders. The hospital is situated on Thika super highway opposite Muthaiga police station, about six Kilometers north of Nairobi City Centre as per appendix I. The hospital was established in 1910 by the colonial government. The hospital has several wards which include six male wards, four female wards, an amenity ward, infirmary ward and a drug rehabilitation center. Its core services include giving pharmacological, psychological and electroconvulsive treatment. The services are either on outpatient or inpatient basis. The outpatient services cater for the patients with mental disorders requiring review and/or have a mild illness. The inpatient service caters for the seriously sick patients, patients dangerous to self or to others or patients who lack insight and hence require hospital supervision in taking of medications. The facility has a bed capacity of seven hundred (700) yet the inpatient population is at nine hundred and ninety seven (997), indicating some patients shared a single bed. Due to the high population of patient, one nurse takes care of approximately 90 patients at night a ratio way above global standards of one nurse to six patients which necessitated the study

#### **3.3 Study Population**

The study population comprised of nurses involved in the management of in-patients with mental disorders. All the nurses who are in direct care of patients with mental disorders were legible for the study. The key informants for the interview were nurse managers and departmental heads at the facility.

#### 3.3.1 Inclusion Criteria

All nurses working as clinical nurse practitioners, managers or nurse educators in the mental health units/institutions, or nursing services unit/ward managers at the time of study who consented to participate in the study.

## **3.3.2 Exclusion Criteria**

Nurses working in the outpatient clinics were excluded from the study as they do not spend adequate time with the patients to completely undertake the nursing process implementation. The nurses on study or annual leave and those who did not consent were excluded from the study as well. Also, the post basic students of RN/MH were excluded in the study.

# **3.4 Sample Size Determination**

The sample size for the study was determined using the Fisher *et al* (1999) formula. This Sample Size Determination technique is termed to be the most appropriate for the study as it yields a representative sample for proportions (Chow, *et al*, 2017).

$$n = \frac{Z^2 pq}{d^2}$$

Whereby n is the sample size desired, z entails the normal standard deviation based at the 95% confidence interval (1.6), whereas p entails the prevalence of those with knowledge of NP who have the desired characters in the study and d is the standard error at 95% confidence interval while p was assumed to be 50% since the prevalence is not known.

q is (1-p) which is 1-0.5=0.5

Therefore  $n = \{(3.24)^2 \ 0.05 \ 0.5\} / \ 0.05^2$ 

n= 384

Due to the population being not more than 10,000 the alternative formula was employed;

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

Whereby *nf* is the sample size being desired (population not more than 10, 000); n is sample size desired (population exceeding 10,000) and N is the population estimate which is 250 nurses

Hence;

$$nf = \frac{384}{1 + 384/250}$$

This translates to 151 respondents who were selected using stratified random sampling as shown below;

Ward	Proportion of	Total
	Respondents	
Female wards	<u>90</u> x 151	54
	250	
Male wards	<u>108</u> x 151	66
	250	
Infirmary Ward	<u>22 x 151</u>	13
	250	
Drug Rehabilitation Center	<u>30</u> x 151	18
	250	
TOTAL		151

Table 3.1 Sampled Nurses according to Wards

For the qualitative study, the sample size for the key informants was defined using data saturation where by approximately 12 to 30 respondents are involved (Polit and Beck, 2012). This involved concurrent sampling, data collection and data analysis until no new themes on Nursing Process emerged. The saturation thus is used as a criterion through which data collection/analysis is discontinued whereby failure to attain saturation impacts on the research conducted. Use of the concept of data saturation is supported by proponents of qualitative research such as Merriam, (2015) and Cope, (2014).

#### **3.5 Sampling Technique**

For the quantitative study, simple random sampling technique was used. The random sampling technique ensured every subject meeting the inclusion criteria is randomly selected until the desired sample of 151 respondents achieved (Mathieson, 2014). Random sampling is preferred as it minimizes biasness in the responses as it ensures equal representation of the entire study population. Simple random technique was undertaken without replacement as each nurse who met the inclusion criteria had the same probability of being selected.

The researcher wrote **Yes** and **No** on small pieces of paper which were then folded, placed in a basket, shaken and each nurse allowed to pick one. All the nurses on each working shift were requested to pick a paper randomly from the basket. Those nurses who picked Yes were then included as the sample size while those who picked No were excluded from the study. For qualitative study, purposively sampling was used whereby the nursing service unit managers were selected. The main goal of purposive sampling was to focus on particular characteristics of a population of interest, which was best enabled to answer the research questions. As such, total of 12 respondents were purposively selected to participate in qualitative study.

### **3.6 Data Collection Instruments**

#### **3.6.1 Questionnaires**

The questionnaire was structured into sections; each section addressing a specific research objective as per appendix IV. The questionnaire contained both open ended and close ended questions to ensure comprehensive data collection. The questionnaire was preferred as it is the most widely used data collection method and was the most efficient way of collecting responses from a large sample prior to analysis. The questionnaire was developed after the researcher reviewed the relevant literature pertaining to the study.

#### **3.6.2 Interview Guide**

The interviews aided in the collection of qualitative data. The interview was structured using leading questions directed towards each of the specific objectives of the study as per appendix V. The use of interview was preferred as it enabled the respondents to express in detail the study phenomena. The key informants for the interview were nurse managers and departmental heads at the facility. This enabled the study to be subjective to obtain institution's perspective concerning the study topic. Interview responses were audio recorded.

## 3.6.3 Checklist

The researcher used a checklist with indicators of nursing process to extract data from the patient's files. The checklist had items on work environment, comprehensive assessment, completion of patient charts and utilization of the nursing care plan as per appendix VI. The information was extracted from patient's files and only for the files of patients who have been in the hospital for a period of not less than 48 hours. This was enough time to have allowed interaction of the nurse and patient thus enabling utilization of nursing process in patient care. The Importance of the observation checklist was to enable capture information on the phenomenon understudy from the researcher's point of view as well as complementing the interviews and questionnaires. This is essential in any particular research as the respondents may not be able to fully indicate all aspects of the study. The files were protected from unauthorized personnel and locked up in a cabinet for security purpose.

#### **3.7 Data Collection Procedure**

The questionnaires were administered directly to the respondents with the aid of two research assistants. The research assistants underwent training to be well equipped with adequate knowledge on how to approach and handle the respondents and to ensure comprehensive data collection. The researcher and research assistants distributed the copies of questionnaire for nurses. The respondents were asked to complete and return the questionnaire to the researcher or the research assistants. The questionnaire copies were serialized to ensure respondent anonymity.

Qualitative data on the other hand was collected using interviews which enabled the researcher to acquire information on perspectives of the nurses. The interviews on the other hand were conducted by the researcher and took approximately 20-30 minutes per interviewee. This enables the researcher to acquire in depth information which would not be possible if a questionnaire alone was used (Polit and Beck, 2012). The data collected was audio recorded using tape recorders which was then transcribed. Privacy was ensured by conducting the interview in an enclosed place or in any other place the respondent felt comfortable with. Once this process was complete, the original tape-recording and the transcribed interview were stored in a secure place and only accessible to the researcher.

#### **3.8 Data Quality Management**

Quality research refers to the scientific process encompassing all aspects of study design and protection against systematic bias, non-systematic bias, and inferential error (Patten & Mildred, 2016). To assure data quality, training and orientation were given to the research assistants by the principal researcher. The data collection instruments were pretested on 5% of the participants one week prior to the actual data collection in MNTRH. These respondents selected for the study however were not part of the actual study. The importance of the pre-test is to enable the researcher to familiarise themselves with the study and access the efficiency of the data collection instruments (Mugenda & Mugenda, 2012). The outcomes of the pre-test were used in assessing the reliability and validity of the data collection instruments. Necessary corrections and adjustments were then considered. During data collection, the data was checked for completeness and missing information at each point. Data was also checked during entry and compilation before commencement of analysis. The results of the reliability test obtained as shown by Table 3.2 implies that all the variables had Cronbach Alpha of greater than 0.7 hence implying that the research instruments were reliable in carrying out the study.

#### **Table 3.2 Reliability Analysis**

	Cronbach's	No of	
Variable	Alpha	Items	Decision
Nurse-Related Factors			Cronbach Alpha>0.7,
	0.754	8	acceptable
			Cronbach Alpha>0.7,
Patient-Related Factors	0.776	7	acceptable
			Cronbach Alpha>0.7,
Hospital-Related Factors	0.702	4	acceptable
Nursing Process			Cronbach Alpha>0.7,
Implementation	0.706	4	acceptable

#### 3.9 Data management and analysis

#### **3.9.1 Data Management**

Data sources for the study included questionnaires, interview transcripts and checklist notes. All the collected data were stored in a research file in the computer for data storage purposes and access only restricted to the principal researcher. To protect the respondents' confidentiality, all the identifying information were removed and replaced with a text identification label which was used to represent individual participant. The collected data will be securely stored for a period of 5 years before being permanently destroyed.

#### 3.9.2 Data Analysis

The data collection instruments yielded both quantitative and qualitative data. Quantitative data were analysed using descriptive statistics which included measures of central tendency such as frequencies, percentages, means and standard deviations. After the completion of the data collection process, the collected questionnaires were first examined for completeness. The questionnaires were then coded. Categorical data were then subject to inferential statistics using Pearson's' Chi Square test to determine possible relationships between the factors influencing NP implementation and the predicted estimates and P values of 0.05 or less were considered significant.

The data were then presented in tables, graphs, and charts. Quantitative data from the observation checklist on the other hand were analysed through noting of similar trends and presented in summary form. Qualitative data were from the recorded information from interview sessions. The recorded audio tapes were listened to several times, transcribed and then interpreted independently. This was followed by thematic analysis. The qualitative data were presented in narrations. Discussion were then done which integrated both the qualitative and quantitative data which enabled valid conclusions to be made thereafter.

# **3.10 Operationalization of Variables**

Operationalization involves finding measurable, quantifiable, and valid indent for the entire research variable and the independent and dependent variables that will aid in the analysis of study findings. The operationalization of the study variables is shown by Table 3.3

Variable	Indicator	Measuring of Indicators	Tools of analysis	Type of analysis
Independent	Structural Factors	<ul> <li>Organization structure</li> <li>Support</li> <li>Policies</li> <li>Resources</li> </ul>	Percentages Frequencies	Descriptive statistics
Independent	Process Factors	<ul> <li>•Nurses'</li> <li>Competencies</li> <li>• Nurses' Experience</li> <li>•Attitude</li> <li>• Perceptions</li> <li>• Nursing processes</li> </ul>	Percentages Mean score	Descriptive statistics
Independent	Factors hindering NP	<ul> <li>Policy Frameworks</li> <li>Usability of the NPs</li> <li>Adaptability of NPs</li> <li>Acceptability of NP</li> <li>Patient Compliance</li> </ul>	Percentages Mean score	Descriptive statistics
Dependent	Nursing Process Practice	<ul> <li>Approach to patients including assessment data(history taking. p/e, and investigations done)</li> <li>Documentation quality</li> </ul>	Percentages Mean score	Descriptive statistics
		<ul> <li>Increased reflective thinking with appropriate specific interventions</li> <li>Formulation of care</li> </ul>		
		plans with seven components •Proper Nursing Diagnosis with minimum of three cues and three parts		

# Table 3.3: Operationalization of Variables

### **3.11 Ethical Considerations**

The researcher ensured that participant's autonomy was maintained. To protect the rights and welfare of participants and minimize risk of discomfort, harm or dangers from research procedures, ethical clearance was sought from KNH and UoN Research Ethics Committee. The researcher also obtained permission from the management of the MNTRH. Consent form was explained and signed prior to the collection of data. Subjects were allowed to leave the study at any point or not to participate at all if they so wish. Absolute confidentiality and anonymity of the participants was maintained throughout the study. Participants did not require to indicate their names or any other identifying details.

The researcher ensured that participant's autonomy was maintained. Information was not obtained through coercion, deception or use of incentives. The study sought consent for voice recording and make the respondents fully aware of its relevance. Since the study was aimed at getting insight about a given phenomenon, there was neither anticipated nor actual risks of harm to the study participants. The rights and concerns of the subjects were given priority and confidentiality was maintained during the research. Neither incentives nor compensation were given the nurses participating in the study as it was conducted based on their normal routines. All information obtained during the study was treated with outmost confidentiality.

## **3.12 Study Limitations**

The major limitation in the study was the sample size as the entire population was not used for the study. The responses obtained were limited to only the opinion of a proportion of the participants. The study was only able to describe the selected factors influencing NP implementation which may not be an exhaustive list of the available factors. The researcher however ensured that the data collection instruments were reliable and valid in collecting all the required information. Additionally, the study was only conducted at Mathari Teaching and Referral Hospital thus giving a picture of only one Hospital. Despite this limitations, the researcher ensured comprehensive data collection through ensuring that the data collection instruments were both valid and accurate which enabled generalizability of the findings of the study.

# **3.13 Dissemination Plan**

The result will be disseminated to the University of Nairobi, mental health unit of MTRH and the Ministry of health. Further dissemination shall be through publications and report prints.

## **CHAPTER FOUR: RESULTS**

# **4.1 Introduction**

This chapter presents the results of the data collected, analysed and interpreted by the researcher organized by specific research objectives. The aim of the research was to establish the factors that influence implementation of the nursing process in the management of patients with mental disorders in Mathari National Teaching and Referral Hospital. It comprises of the socio-demographic characteristics of the respondents, utilization of NP at MNTRH and finalizes with the structural and process factors influencing the implementation of NP at MNTRH. Out of the 151 questionnaires that were issued out, 112 questionnaires were duly filled and returned translating to a response rate of 74%.

# 4.2 Socio-Demographic Characteristics

# 4.2.1 Gender of Respondents

As shown by Figure 4.1, 81% (n=91) were female while 19% (n=21) were male. This implies that there was a higher female dominance among the nurse's respondents that took part in the study. However, there were responses from both genders hence no biasness in the findings obtained.

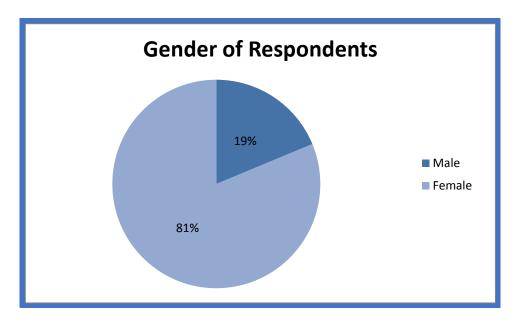


Figure 4.1 Gender of Respondent

# **4.2.2 Age of Respondents**

Most the respondents 31% (n=34) were between the ages of 51-60 and only 11% (n=12) were less than 30 years as shown in Figure 4.2. This implies that majority of the respondents 58% (n=65) were above 40 years indicating that they were mature hence provided reliable information.

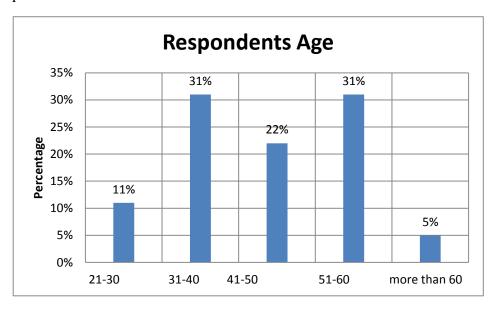


Figure 4.2 Respondents Age

# 4.2.3 Marital status of Respondents

As shown by Figure 4.3 indicated that majority of the respondents 66% (n=74) were married with only 5% (n=6) either widowed or divorced.

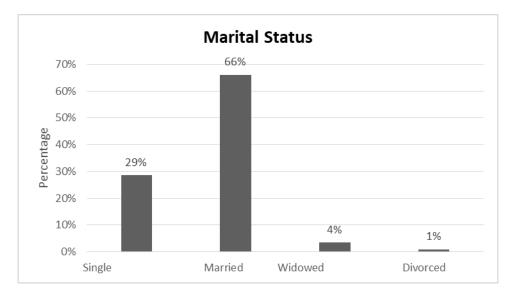


Figure 4. 3 Marital Status of Respondents

# 4.2.4 Academic qualification(s) of Respondents

The academic qualification of the respondents was measured by the highest education levels attained. As shown by Table 4.1, most of the respondents 50% (n=56) had Bachelor degree in Nursing and only 10% (n=11) had Diploma in Community Health nursing. This implies that majority of the respondents 78% (n=87) had either bachelor degree or higher diplomas in mental health and psychiatric Nursing hence well qualified for their respective positions at MNTRH.

Highest Education Level	Frequency	Percentage
Bsc Nursing	56	50%
Diploma in Community Health Nursing	11	10%
Diploma in Mental Health /Psychiatric Nursing	14	13%
Higher Diploma in Mental health/Psychiatric		
Nursing	31	28%
Total	112	100%

## 4.2.5 Work experience of Respondents

As shown by Table 4.2, majority of the respondents 55% (n=61) had work experience of over 15 years while only 27% (n=30) had under 10 years' experience as per Table 4.2. This implies that the respondents had worked for a considerable length of time hence well conversant with the study topic on Nursing Process implementation.

 Table 4.2 Work experience of Respondents

Years Worked	orked Frequency			
Below 5 years	22	20%		
5-10 years	8	7%		
11-15 years	21	19%		
16-20 years	29	26%		
21-25 years	10	9%		
26-30 years	13	12%		
Above 30 years	9	8%		
Total	112	100%		

#### **4.2.6 Designation(s) of Respondents**

As shown by Table 4.3, most of the respondent 49% (n=55) were registered nurses while 13% (n=14) were principal nursing officers. This implies that there majority of the respondents were registered nurses and senior registered nurses 61% (n=69) hence affirming the respondents' appropriateness for taking part in the study.

Designation	Frequency	Percentage
Registered Nurse	55	49%
KRCHN	24	21%
Senior Registered Nurse	19	17%
Principal Nursing Officer	14	13%
Total	112	100%

Table 4. 3 Designation(s) of Respondents

# 4.2.7 Respondents Duties

This section aimed at determining the respective duties in which the respondents were involved in. As shown by Figure 4.4, majority of the 55% (n=62) took part in patient care and only 13% (n=14) took part in administration activities. This indicates that there was representation of respondents involved in patient care, care planning and also administration hence facilitating comprehensive data collection on the nursing process implementation phenomenon at MNTRH.

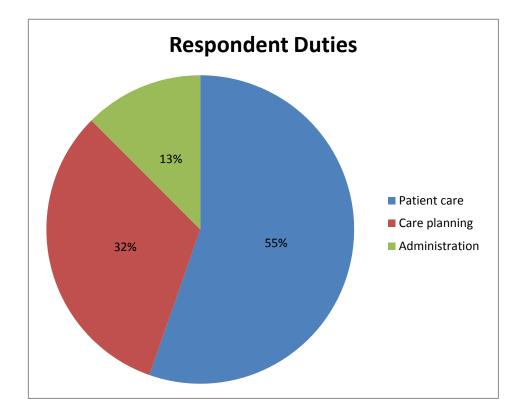


Figure 4.4 Respondents Duties

## 4.3 Utilization of nursing process in management of patients

The study sought to determine the level of utilization of nursing process in management of patients with mental disorders in Mathari National Teaching and Referral Hospital. This was undertaken by observing the patient files on whether NP had been utilized in delivery of patient care. From the interview responses, the NP stages followed at MNTRH were indicated to be assessment, formulation of nursing diagnosis, planning, implementation, evaluation and documentation. However, other respondents argued that they can't remember the exact systematic sequence of NP which indicated low knowledge levels of NP stages. While others argued that not all the stages of NP were fully completed with stages such as interventions, documentation and evaluation not being comprehensively done

The observation checklist was further utilized in determining utilization of NP in management of patients having mental disorders at MNTRH. Specifically, three aspects were used in determination of NP utilization namely; patient assessment, availability of a nursing care plan and proper documentation. Presence of 50% and above of the items in the checklist was indicative of NP utilization. The main

indicators of assessment investigated by the study included identification and demographic data, history taking, presenting complaints and duration, history of present illness, past psychiatric history, family history, personal history and premorbid personality. Out of the 30 patient files examined, only 18 had at least 50% of the assessment measures investigated. This translate to a 60% assessment level which implies an above average extent of utilization as shown by Table 4.4.

Availability of a nurse care plan (NCP) was used in assessing the utilization of the other phases of NP. A nurse care plan describes the nursing diagnoses listed in order of priority, goals and outcome criteria, plan of action /intervention, implemented action and evaluation. Out of the 30 patient files examined only 12 of them had complete nursing care plans translating to 40% which is a very low extent of utilization of nurse care plans as shown by Table 4.4. The interviewees further pointed out NP implementation at MNTRH was not fully successful with the only approximately 25-40% success levels.

Documentation on the other hand was measured using appropriate completion of patient charts, fluid flow sheets, nurse's cardex and NCP for inclusion of all relevant information stated as implemented in the NCP. Out of the 30 patient files investigated only 16 of them were found out to have proper and complete documentation. This translates to a frequency percentage of 53% implying a moderate extent of documentation of the NP as shown by Table 4.4. Most the constructs were observed to be missing and only present in few files showing that completion of NP documentation by the nurses at MNTRH was still relatively low.

Nursing Process Phase Utilization	Number of files	Frequency	Percentage
	Examined		
Availability of Patient Assessment	30	18	60%
Availability of a nurse care plan	30	12	40%
(NCP)			
Proper Documentation	30	16	53%

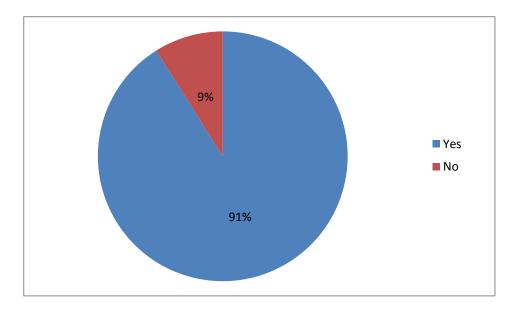
Table 4. 4 Utilization of nursing process in management of patients

# 4.4 Structural factors influencing the implementation of nursing process in management of patients with mental disorders in Mathari National Teaching and Referral Hospital

The study aimed in establishing the structural factors influencing the implementation of nursing process in management of patients with mental disorders in Mathari National Teaching and Referral Hospital. The study found two main structural factors influencing nursing process implementation namely patient-related factors and hospital-related factors.

#### 4.4.1 Hospital-related determinants to NP implementation

Four measures of hospital related factors were investigated by the study this included; recognition of the NP framework by the hospitals, support of NP implementation, monitoring of the NP process and monitoring of the NP process. On recognition of nursing process as a framework of nursing care delivery by the hospital, majority of the respondents 91% (n=102) agreed while only 9% (n=10) disagreed as shown by Figure 4.5. This is an indication that the hospital was aware of the need and importance of nursing process in delivery of good patient care.



### Figure 4. 5 Recognition of NP by Hospital Management

On the Hospital administration support towards the implementation of NP, 57% (n=64) of the respondents disagreed while 43% (n=48) agreed as shown by Figure 4.6. This means that there was minimal support provided by the hospital administration towards the implementation of NP at MNTRH. The interviewees

unanimously agreed that the hospital administration provided minimal to no support at all to the implementation of NP. This was indicated to result in no motivation among the nurses to continuously implement NP in the daily routines in the patient management care.

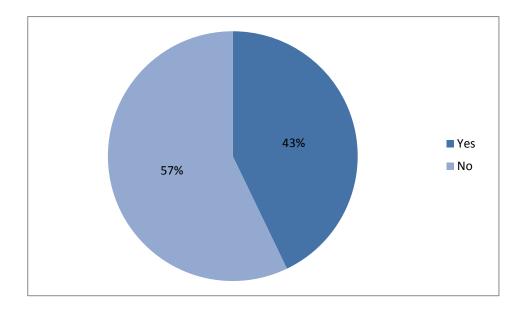


Figure 4. 6 Support of NP Implementation by Hospital Administration

On monitoring of implementation of nursing process by hospital administration, the findings obtained as shown by Figure 4.7 indicated that 64% (n=72) of the respondents disagreed with 36% (n=40) negating the statement. This implies that there was low monitoring geared towards ensuring effective implementation of NP at MNTRH.

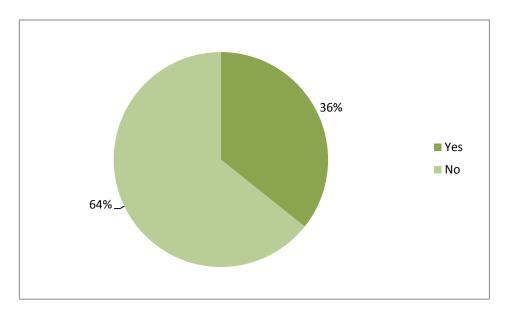


Figure 4.7 Monitoring of NP Implementation by Hospital Administration

A Likert Scale was further employed in establishing the extent hospital-related factors that influence NP implementations at MNTRH. The findings obtained as presented by Table 4.8 indicate that majority of the respondents 77% (n=86) agreed on no follow up by the authorities, having a mean of 4.02. On failure of the hospital administration to prioritize the NP formulation and implementation plans, majority of the respondents 77% (n=86) also agreed with a mean of 4.17. Majority of the respondents 86% (n=96) also agreed on there is no adequate budgetary and financial allocation towards the NP implementations with a mean of 4.37. The respondents 48% were neutral on the nurses not being well trained and developed with a mean of 3.54. However, majority of the respondents disagreed 59% (n=66) on neglect being given towards the psychiatric nurses as compared to the general nurses having a mean of 2.49. The respondents also disagreed 47% (n=53) on the hospital ruling on non-implementation of NP with a mean of 3.18.

Overall, Hospital-related factors of NP implementation had an average mean score of 3.79 and standard deviation of 0.8463 which implied a large extent (mean>3.75) of influence on NP implementation at MNTRH. The results of the Chi square test of significance as shown by Appendix VII further indicated that hospital-related factors had a p-value of 0.000<0.05 which implies it had a positive and significant influence on implementation of Nursing Process at MNTRH as the p-value was less than 0.05. Therefore a unit change in these hospital-related factors will translate in a unit change in the level of NP implementation at MNTRH.

Hospital related Factors	S	D	Ν	A	S	Μ	Std.
	D				Α	ea	Dev
						n	
No follow up by the authorities	4	7	13	34	42	4.0	0.89
	%	%	%	%	%	2	14
Hospital rules in non-implementation of NP	1	47	16	30	5	3.1	0.97
	%	%	%	%	%	8	78
Failure to priorities the NP formulation and	4	7	11	22	55	4.1	1.12
implementation plans	%	%	%	%	%	7	99
The nurses are not well trained and developed	4	7	48	24	16	3.5	0.62
	%	%	%	%	%	4	24
Neglect is given towards the psychiatric nurses	30	29	20	13	8	2.4	0.24
as compared to the general nurses	%	%	%	%	%	9	11
There is no adequate budgetary and financial	1	5	8	28	58	4.3	1.21
allocation towards the NP implementations	%	%	%	%	%	7	48
Mean Score						3.7	0.84
Mean Score						3.7 9	0.84 63
						,	

#### Table 4. 5 Hospital-related determinants to NP implementation

SD=Strongly Disagree, D=Disagree, N=Neutral, A=Agree and SA=Strongly Agree

## 4.4.2 Patient-related determinants to NP implementation

The study investigated the various patient-related factors which influenced NP implementation including the patient-nurse ratio, patient compliance and variation of NP outcomes amongst patients. From the interviews, it was found out that the patient-nurse ratio ranged from 1 nurse: 20 patients to 1 nurse to 30 patients with the number increasing at night. This shows a high workload regarding the number patients to be attended to. The interviewees stated that patient-nurse ratio is a huge determinant on the amount of time spent per patient as well as the extent of individualized treatment

provided. It was also noted that patient compliance was one of the major factors determining the implementation efficiency of NP at MNTRH. Patient compliance refers to the willingness and corporation of the patient towards assistance or medical intervention by the nurses. Without patient compliance, the respondents unanimously agreed that NP implementation was not possible. It was therefore indicated that prior to the start of the NP it was essential for the nurse to establish a rapport with the patient and gain their trust failure to which they would experience difficulties in executing all the phases of the nursing process.

On the variations of NP outcomes amongst patients, 27% (n=30) stated an above moderate extent, 33% (n=37) stated a moderate extent while 40% (n=45) stated a below average extent as shown by Table 4.6. This shows that there was still inconclusiveness on the exact extent of NP outcomes amongst patients from the respondent's perspective.

Extent	Frequency	Percentage
Very great extent	12	11%
Great extent	18	16%
Moderate extent	37	33%
Small extent	16	14%
Very small extent	29	26%
Total	112	100%

 Table 4. 6 Variation of NP outcomes amongst patients

A Likert Scale was further employed in establishing the extent patient-related factors that influence NP implementations at MNTRH. The findings obtained as presented by Table 4.7 indicate that majority of the respondents 53% (n=59) strongly agreed on evaluation of the patient could be difficult to perform if the steps of the nursing process are not well followed with a mean of 4.35. On a high number of patient causing a challenge in ensuring adequate time allocation for the NP implementation, 42% (n=47) of the respondents agreed and 35% (n=39) strongly agreed having a mean of 4.12. On every patient being unique and needing an individualized care plan thus causing problems in the NP implementation, 29% (n=32) of the respondents agreed and 43% (n=48) strongly agreed having a mean of 4.04. On difficulties in collecting and recording all the patient's information 30% (n=33.6) of the respondents agreed and 31% (n=34) strongly agreed having a mean of 3.77.

On barriers in evaluating progress towards goals, 32% (n=35) of the respondents agreed having a mean of 3.25. On patients do not make progress because NPs are not well implemented, 32% (n=35) of the respondents agreed and 16% strongly agreed having a mean of 3.51. However, on patient refusal to cooperate, 46% (n=51) of the respondents were neutral. Overall, the patient related factors were established to have a large extent of influence (mean >3.75) on the implementation of nursing process at Mathari National Teaching and Referral Hospital having a mean of 3.76 and standard deviation of 0.7271. The results of the Chi square test of significance as shown by Appendix VII further indicate that patient-related factors had a p-value of 0.000<0.05 which implies it had a positive and significant influence on implementation of Nursing Process at MNTRH as the p-value was less than 0.05.

Patient Related	S D	D	Ν	Α	S A	M ea n	Std. Dev
Difficulties in collecting and recording all the patient's information	6 %	4 %	2 9 %	3 0 %	3 1 %	3. 77	0.67 46
Every patient is unique and will need an individualized care plan, causing problems in the NP implementation	1 %	8 %	2 0 %	2 9 %	4 3 %	4. 04	0.86 59
Patients do not make progress because NPs are not well implemented.	2 %	1 0 %	4 0 %	3 2 %	1 6 %	3. 51	0.57 62
High number of patient causes a challenge in ensuring adequate time allocation for the NP implementation	0 %	0 %	2 3 %	4 2 %	3 5 %	4. 12	0.85 81
Patient refusal to cooperate	5 %	1 2 %	4 6 %	2 3 %	1 4 %	3. 29	0.53 02
Evaluation of the patient could be difficult to perform if the steps of the nursing process are not well followed	0 %	0 %	1 8 %	2 9 %	5 3 %	4. 35	1.09 91
Barriers in evaluating progress towards goals	1 1 %	1 3 %	3 1 %	3 2 %	1 3 %	3. 25	0.48 52
Mean Score						3. 76	0.72 71

 Table 4. 7 Patient-related determinants influencing NP implementation

SD=Strongly Disagree, D=Disagree, N=Neutral, A=Agree and SA=Strongly Agree

#### Theme: Structural factors influencing NP implementation

Based on the responses from the interview, the main structural related factors that influenced NP implementation at MNTRH were grouped into the following subthematic areas which included patient-nurse ration, patient compliance, varying patient needs and corporation with the patient family members, hospital administration, under staffing of the nurses, inadequate resources and lack of appropriate frameworks for monitoring and evaluation of NP implementation.

#### Sub-theme: Patent-Nurse Ratio

From the interviews, it was found out that the patient-nurse ratio ranged from 1 nurse: 20 patients to 1 nurse to 30 patients with the number increasing at night. This shows a high workload regarding the number patients to be attended to. The interviewees stated that patient-nurse ratio is a huge determinant on the amount of time spent per patient as well as the extent of individualized treatment provided. An interviewee further added that;

"The high patient-nurse ratio at MNTRH tends to discourage most of the nurse from utilizing the NP in patient care. This is attributed to the fact that the large number of patients required to be attended to make it impossible to follow all the steps of NP at all the times. Though the number reduces substantially when there are RN/MH students around, the number is still high. This results in only the steps of NP which are perceived to be most 'beneficial' being followed by the nurses." (Respondent 2)

#### **Sub-theme: Patient Compliance**

It was noted that patient compliance was one of the major factors determining the implementation efficiency of NP at MNTRH. Patient compliance refers to the willingness and corporation of the patient towards assistance or medical intervention by the nurses. Without patient compliance, the respondents unanimously agreed that NP implementation was not possible. It was therefore indicated that prior to the start of the NP it was essential for the nurse to establish a rapport with the patient and gain their trust failure to which they would experience difficulties in executing all the phases of the nursing process.

#### **Sub-theme: Varying Patient Needs**

From the interviews, it was established that the patient have varying medical needs based on the degree and severity of the medical conditions. An interviewee indicated that;

"Some patients require very minimal medical interventions due to their medical conditions being less severe. They therefore tend to be less demanding medical wise which makes it easier for the nurses to extensively utilize the NP in coming up with the appropriate medical diagnosis. However, others may have complicated or more demanding medical condition which require prompt interventions with the NP not being able to provide any fast assistance." (Respondent, 10)

#### Sub-theme: Corporation with the Patient Family Members

The respondents further argued that some of the family members of the patients may not be willing to cooperate with the nurses in ensuring prompt recovery of the patients. As such, it was noted that;

"Family members of some patients may tend not to provide no additional support to the family members. They see the role of patient management to be the sole responsibility and do not perceive any relevance in providing assistance. In this regard, they do not offer to do basic activities such as advising the patient to be compliant to the nurse's interventions, bringing the patient to the facility in time and ensuring completing of the recommended treatment which tends to be a huge drawback towards NP implementation." (Respondent, 7).

### **Hospital Administration Support**

The interviewees unanimously agreed that the hospital administration provided minimal to no support at all to the implementation of NP. This was indicated to result in no motivation among the nurses to continuously implement NP in the daily routines in the patient management care. Specifically, an interviewee noted;

"When Nursing Process was first introduced at MNTRH, the management was willing to fully support its implementation in whichever way possible. However, as the time progresses the support given towards NP has diminished substantially which acts a discouraging factor for both the nurses and the nursing officers as its relevance in improving patient care is not fully appreciated." (Respondent, 6)

#### Sub-theme: Staffing of Nurses

The respondents all agreed that the number of nurses recruited and deployed into the wards for patient management and care was a huge contributing factor for the success of NP implementation. This was argued to be largely because it determines not only the attention given to each patient but also the nurses' output and burnout. Low staffing was therefore established from the interviews to be a great barrier but yet a common occurrence at MNTRH which acts to reduce effectiveness of NP implementation. An interviewee indicated that;

"The number of nurses employed by the national government is really small compared to the huge patient number. This has been going on for several years now (since when I joined the hospital in 2010) with most of the nurses constantly complaining. Due to the low number of nurses present, most of the nurses tend to forego the NP and adopt 'shortcuts' which enable them serve more patients within a shorter time. Also others practice the NP minimally so as not to tire out faster and prevent themselves from being overwhelmed by their duties." (Respondent, 2)

## **Sub-theme: Resources Provided**

From the interview responses it was revealed that the amount of resources provided or channeled towards the nursing process implementation is a huge contributor towards the extent of implementation. An interviewee explained that;

"Equipment such as stationary for the documentation process and adequate drugs for patient treatment are one of the most basic requirements for NP implementation to take place. However, in most cases, these resources are not always provided by the hospital administration. Even in instances when they are provided, it's in only limited quantities and only for a short period of time. The question then that rises among us nurses is that if the hospital is really interested in achieving high and effective implementation of the nursing process, why is there no adequate provision of resources despite funds being allocated by the Ministry of Health?" (Respondent, 1)

#### Sub-theme: Monitoring and Evaluation of NP

The researcher also found out from the interviews that the extent of monitoring and evaluation of NP was also another main factor influencing the implementation of the process. Monitoring and evaluation entail the process of not only ensuring that the NP was implemented but also accessing whether the intended outcomes of NP are attained. An interviewee argued that;

"Regarding Monitoring and Evaluation of NP, there is minimal monitoring and supervision towards the process. Even if happens, it is always periodically after a very long time. This results in reluctance among the nursing staff to always adhere to the NP as they perceive to face no dire consequences if they don't strictly follow it. Without proper monitoring and evaluation it is hard to tell whether Np has been comprehensively implemented at MNTRH and whether it has had any positive significance to patient care and outcomes." (Respondent, 5).

# 4.5 Process factors influencing the implementation of nursing process in management of patients with mental disorders in Mathari National Teaching and Referral Hospital

The study sought to determine the process factors influencing the implementation of nursing process in management of patients with mental disorders in Mathari National Teaching and Referral Hospital. Specifically, the study investigated nurse related factors which included the respondents' understanding of NP, training on NP and general attitude of the staff on NP.

## 4.5.1 Respondents understanding of NP

On the respondents' understanding of NP, the findings obtained indicated that only minority of the respondents 28% (n=31) indicated an above average extent of understanding of NP with 46% (n=52) stated a below average extent of understanding as shown by Table 4.8 This implies that most of the respondents at MNTRH were yet to fully understand the relevance and application of NP in patient management and care.

Extent of understanding	Frequency	Percentage
Very good	12	11%
Good	19	17%
Average	29	26%
Poor	37	33%
Very poor	15	13%
Total	112	100%

Table 4. 8 Respondents understanding of NP

# 4.5.2 Respondents training on NP

On whether the respondents had undergone trainings on nursing process, majority of the respondents 60% (n=67) were affirmative while only 40% (n=45) negated as shown by Figure 4.8. This shows that a considerable number of the respondents were well equipped in NP training. The trainings were stated by the respondents to be undertaken during their course work studies, on job trainings, and workshops.

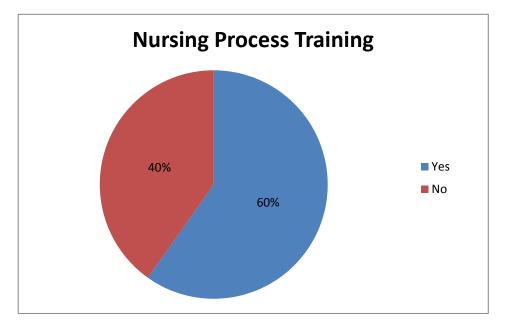


Figure 4. 8 Nursing Process Training

# 4.5.3 General attitude of the nurse staffs towards NP

Regarding the general attitude of the nurse staffs towards NP the results obtained revealed that only a small proportion of the respondents 33% (n=34) had a good and very good attitude towards the NP while 47% (n=53) had poor and very poor attitude towards NP as shown by Table 4.9. From the responses from the interviews, it was

revealed that majority of the nurses at MNTRH portrayed negligence towards NP implementation which had a negative adverse effect.

	Frequency	Percentage
Very good	12	11%
Good	22	20%
Average	25	22%
Poor	33	29%
Very poor	20	18%
	112	100%

Table 4. 9 Attitude of the nurse staffs towards NP

# 4.5.4 Nurse-related Factors that influence NP implementations

This section sought at determining the nurse-related factors that influence NP implementations at MNTRH. To achieve this, a Likert Scale analysis of 1-5 was employed in rating the responses whereby; 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree and 5=Strongly Agree. The findings obtained are presented by Table 4.10.

Nurse Related		D	N	А	SA	Mea n	Std. Dev
Care plans are not usually discussed with the patient		9%	6%	36 %	43 %	4.00	0.935 9
Formulating nursing diagnosis should not be mandatory		20 %	45 %	18 %	9%	2.98	0.470 9
In patient care there should be less writing and more action.		11 %	7%	25 %	13 %	2.50	0.328 5
Nursing care plan should be drawn for the very sick patients only		19 %	23 %	17 %	12 %	2.63	0.181 4
Nursing instructions on a care plan often bear very little relation to what the nurse actually does		29 %	21 %	19 %	17 %	2.94	0.267 1
Nursing process is cumber some	8%	11 %	6%	21 %	54 %	4.02	1.091 8
Nursing process is not be applied to all patients	20 %	9%	14 %	21 %	36 %	3.45	0.671 2
The care plan plays no significant part in the provision and evaluation of care.		29 %	11 %	21 %	9%	2.50	0.226 9
The nurses have adequate expertise to undertake the NP		30 %	38 %	19 %	10 %	3.03	0.408 4
There has been well acceptance of the NP practices		10 %	53 %	29 %	2%	3.11	0.708 2
Use of nursing care plans enables a nurse to establish priorities of care		11 %	7%	28 %	47 %	3.97	0.970 0
Writing a care plan is a burden	4%	9%	20 %	30 %	38 %	3.87	0.755 9
Mean Score						3.25	0.548 7

# Table 4. 10 Nurse-related Factors influencing NP implementation

# SD=Strongly Disagree, D=Disagree, N=Neutral, A=Agree and SA=Strongly Agree

As shown by Table 4.10, majority of the respondents 54% (n=60) strongly agreed on the nursing process being cumbersome with a mean of 4.02. On Care plans not usually being discussed with the patient, 36% (n=40) of the respondents agreed while 43% (n=48) strongly agreed with a mean of 4.00. On use of nursing care plans enables a nurse to establish priorities of care, 28% (n=31) of the respondents agreed

while 47% (n=53) strongly agreed with a mean of 3.97. On writing care being a burden, 30% (n=33) of the respondents agreed while 38% (n=42) strongly agreed having a mean of 3.87. On the Nursing process not being applied to all patients, 21% (n=24) of the respondents agreed and 36% (n=40) strongly agreed having a mean of 3.45.

The respondents were neutral on nurses having adequate expertise to undertake the NP, there has been well acceptance of the NP practices, nursing instructions on a care plan often bear very little relation to what the nurse actually does and formulating nursing diagnosis should not be mandatory having means of 3.03, 3.11, 2.94, and 2.98 respectively. On in patient care there should be less writing and more action, 45% (n=50) of the respondents strongly disagreed, On Nursing care plan should be drawn for the very sick patients only, 29% (n=32) of the respondents strongly disagreed and 19% (n=21) agreed with a mean of 2.63.

While on care plan plays no significant part in the provision and evaluation of care 30% (n=33) of the respondents strongly disagreed and 29% (n=32) disagreed with a mean of 2.50. Overall, nurse-related factors were established to have a moderate effect (mean>3.0) on nursing process implementation at MNTRH having a mean of 3.25 and standard deviation of 0.5487. The results of the Chi square test of significance as shown by Appendix VII further indicate that nurse-related factors had a p-value of 0.035<0.05 which implies it had a positive and significant influence on implementation of Nursing Process at MNTRH as the p-value was less than 0.05.

#### **Theme: Process factors influencing NP Implementation**

Based on the responses from the interview, the main nurse-related factors which influenced nursing process implementation at MNTRH was organized into four sub-thematic areas including, experience of the nurses, attitude and perception, negligence of NP and Nursing Process Training.

### Sub-theme: working experience of the nurses

The working experience of the nurses was noted to be a main determinant on the nurses' knowledge ability, ease of use and applicability of the nursing care in patient management. It influenced the frequency of use of NP and the patient outcomes obtained. An interviewee argued;

"The more experienced nurses are more familiar with the NP and therefore will tend to more frequent utilize it to the latter without the need for any references. As compared to the less experienced and recently graduated ones who though may have the NP knowledge in most instances are not able to fully implement it. However, the experienced nurses due to long durations of practice, may perceive some of the steps of NP to be more important than others, hence tend to give more priority and time towards these steps." (Respondent, 3).

# Sub-theme: Attitude and perceptions of Nurses towards NP

According to the respondents, the attitude and perception of the NP was also another main factor contributed towards implementation of NP. This is attributed to the fact that a positive perception towards the NP due to the benefits accrued from the process was indicated to translate to higher levels of NP implementation. On the contrary, poor attitude and bad perception towards NP was argued to lead in minimal utilization and avoidance of the NP translating to low implementation levels of the NP at MNTRH.

## Sub-theme: Negligence of NP by Nurses

From the responses from the interviews, it was revealed that majority of the nurses at MNTRH portrayed negligence towards NP implementation which had a negative adverse effect. Specifically, an interviewee described;

"Some of the nurses tend to neglect the NP and its importance at MNTRH. This may occur either intentionally or non-intentionally based on the situation. Intentional negligence occurs when the nurse refrains from utilizing the NP such as when they are fatigued while the unintentional negligence mostly occurs when there is a high number of patients that ought to be attended to hence to save time. Also due to their minimal support and supervisor on the NP implementation by the hospital management, the nurses may see an avenue to avoid from using it in patient care." (Respondent, 12).

# **Sub-theme: Nursing Process Training**

On the influence of nursing process training on nursing process implementation at MNTRH, it was indicated that;

"The importance of Nursing Process cannot go unnoticed. It not only helps the nurses understand the relevance of the nursing process in patient management but also be aware with best ways to execute all the stages of NP. Though majority of the nurses have undergone training of NP at one point of their careers, others still remain not to be fully trained especially those who began the practice before the introduction of the NP in the nursing curriculum. It is therefore important that more additional training, workshops and seminars on NP to be frequently undertaken." (Respondents 1, 11, 3 and 8).

#### **CHAPTER FIVE: DISCUSSION**

# 5.1 Utilization of nursing process in management of patients

The study sought to determine the utilization of NP in management of patients with mental disorders in Mathari National Teaching and Referral Hospital. Specifically, three aspects were used in determination of NP utilization namely; patient assessment, availability of a nursing care plan and proper documentation. Out of the 30 patient files examined, only 18 had at least 50% of the assessment measures investigated. This translate to a 60% assessment level which implies an above average extent of utilization of NP which tends to contradict Barasa, et al, (2017) who conducted a study on nursing process in county hospitals in Kenya and established that patient assessment was very low at less than 40%.

Availability of a nursing care plan (NCP) was used in assessing the utilization of the other phases of NP including diagnosing, planning, implementing, and evaluation. The patients had been in the wards for a period of not less than 48 hours. Out of the 30 patient files examined only 12 of them had well completed nursing care plans translating to 40% which is a very low extent of utilization of nurse care plans. Information on goal setting/outcome identification, evaluation data and incomplete assessment cues were missing in most of the patients files. This compares with Ndambuki, (2015) who studied NP implementation in Msambweni district hospital, Kwale County and found out that practice of NP was still very low.

The interviewees further pointed out NP implementation at MNTRH was not fully successful with the only approximately 25-40% success levels. This compares with Aseratie, Murugan, and Molla, (2014) who assessed the Factors Affecting Implementation of Nursing Process among Nurses in Selected Governmental Hospitals, Addis Ababa, Ethiopia. They found out that utilization of NP in patient's care using NCP was still low in most of the government hospitals. This confirms that most public hospitals were still faced with a challenge in NCP use.

Documentation on the other hand was measured using appropriate completion of patient charts, flow sheets and NCP for inclusion of all relevant information stated as implements in the NCP. Out of the 30 patient files investigated only 16 of them were found out to have proper and complete documentation. This translates to a frequency

percentage of 53% implying a moderate extent of documentation of the NP. Most the constructs were observed to be missing and only present in few files showing that completion of NP documentation by the nurses at MNTRH was still relatively low. Similarly, Mahmoud and Bayoumy (2014) established that the proper documentation was a challenge still facing most nurses in implementing NPs in the hospitals.

## 5.2 Structural factors influencing the implementation of nursing process

The study aimed in establishing the structural factors influencing the implementation of nursing process in management of patients with mental disorders in Mathari National Teaching and Referral Hospital. The study found two main structural factors influencing nursing process implementation namely patient-related factors and hospital-related factors.

#### **5.2.1** Patient related factors influencing implementation of nursing process

The study found out that high patient-nurse ratio, patient compliance and variation of outcomes among patients were huge determinant of the utilization and implementation of NP at MNTRH. Similarly, Mahmoud and Bayoumy (2014) in their study observed most nurses complained that high patient workload was the most significant barrier to NP implementation. These patient related factors were established to have a large extent of influence (mean >3.75) on the implementation of nursing process at Mathari National Teaching and Referral Hospital having a mean of 3.76 and standard deviation of 0.7271. This was supported by the results of the Chi square test of significance where patient-related factors had a p-value of 0.000<0.05 was obtained which implies it had a positive and significant influence on implementation of Nursing Process at MNTRH as the p-value was less than 0.05.

The positive influence is supported by Fisseha, et al, (2014) who indicated that the patient's compliance and corporation are the key factors to implementation of NP and its success. In a similar way, Yeboah, (2017) in his study established that some patients, may not be completely willing to provide the necessary information pertaining to their medical condition causing difficulties in the diagnosis. Habermann and Uys (2006) further established a significant effect and postulates that the NP may not only be time consuming, due to specialized needs of the patients but also interfere with the care of the patients' needs.

#### **5.2.2 Hospital-Related Factors influencing implementation of nursing process**

The study found out that on the Hospital administration support towards the implementation of NP, 64(57%) of the respondents disagreed while 48(43%) agreed implying that there was minimal support provided by the hospital administration towards the implementation of NP at MNTRH. This concurs with Munroe, Duffy and Fisher (2010) also identified lack of administrative support as one factor affecting the NP implementation. The study also found out that there was inadequate monitoring and resource allocation geared towards NP implementation which was considered as a huge barrier to the success of the implementation. Prince, Comas-Herrera, and Karagiannidou (2016), also found out that the shortage of resources, inadequate support from the hospital management and high workload among nurses are among the critical obstacles to NP implementation in the management of patients with mental disorders.

Overall, Hospital-related factors of NP implementation had an average mean score of 3.79 and standard deviation of 0.8463 which implied a large extent (mean>3.75) of influence on NP implementation at MNTRH. This was supported by the Chi square test of significance that indicated that hospital-related factors had a p-value of 0.000<0.05 which implies it had a positive and significant influence on implementation of Nursing Process at MNTRH as the p-value was less than 0.05.

In a similar way, studies conducted have also established a positive effect of hospital related factors on nursing process implementation. Provi Brown, Wickline, Eccof and Glaser (2009) in their study discovered that organizational barriers such as lack of nursing autonomy were top barriers to the use of evidenced base practice while knowledge factor is a facilitator. This is similar to Schaefer (2010) who studied nursing process and its determinant factors and established that the number of workforce dedicated to wards nursing and management of the patients also acts to greatly affect its level of implementation and sustainability (Marnseri, 2012). While according to Prince, Coma-Herrera and Karagiannidou (2016), inadequate resources acts a main determinant to NP implementation especially in the developing states. These resources are in terms of insufficient finances, high workload, inadequate workforce and shortage of physical resources.

#### 5.3 Process factors influencing implementation of nursing process

The study sought to determine the Process factors influencing implementation of nursing process in management of patients with mental disorders in Mathari National Teaching and Referral Hospital. Findings of the study revealed that the main process factor influencing NP implementation was the nurse related factors. The study found out that most of the respondents at MNTRH were yet to fully understand the relevance and application of NP in patient management and care. Regarding the general attitude of the nurse staffs towards NP the results obtained revealed that only a small proportion of the respondents 34(33%) had a good and very good attitude towards the NP while 53(47%) had poor and very poor attitude towards NP. This indicates that not all the nursing staffs fully accepted and had a positive perception of NPs at MNTRH.

The experience of the nurses was noted to be a main determinant on the nurses' knowledge, ease of use and applicability of the nursing care in patient management. It influenced the frequency of use of NP and the patient outcomes obtained. According to Alburquerque-Sendín and Palacios-Ceña (2018), the lack of experience tends to hinder greatly the implementation of the NP especially on management of patients with mental disorders. This coincides with Agunwah, (2010) who also found out that lack of experience of practical use of the nursing process tends to negatively affect its utilization. This tends to limit its feasibility in the daily nursing practice (Baraki, et al, 2017).

The respondents all agreed that the number of nurses recruited and deployed into the wards for patient management and care was a huge contributing factor for the success NP implementation. This compares with Agunwah (2006) who concluded that the shortage of nurses influenced the utilization of the nursing process. In a similar way, Fernandez-Sola et al. (2012) also reported that the high work overload was recognized as one of the main obstacles encountered by the nurses, while implementing the nursing process. The findings from this current study are in line with those of Bjorvell, Wredling and Thorell-Eksstrand (2008), who reported lack of time as a major issue in relation to documenting and updating the nursing-care plan.

Overall, nurse-related factors were established to have a moderate effect (mean>3.0) on nursing process implementation at MNTRH having a mean of 3.25 and standard deviation of 0.5487. The results of the Chi square test of significance as shown by indicated that nurse-related factors had a p-value of 0.035<0.05 which implies it had a positive and significant influence on implementation of Nursing Process at MNTRH as the p-value was less than 0.05. The positive effect of nurse related factors on implementation of nursing process concurs with Agyeman-Yeboah, et al, (2017) who found out that clinical utilization of the Nursing Process at clinical settings was influenced by lack of clear understanding on the Nursing Process and Care Plans. Also Huguchi, Dulburgen and Duff (2012) in their study on the factors associated with the utilisation of nursing diagnoses found that the lack of knowledge on the nursing diagnosis prevented nurses from effectively using these nursing diagnoses. While Florance and Adenike, (2013) confirm this by indicating that the nurses significantly determined the use NP in patient management.

### CHAPTER SIX: CONCLUSIONS AND RECOMMENDATIONS

### **6.1** Conclusions

# 6.1.1 Utilization of nursing process in management of patients with mental disorders in Mathari National Teaching and Referral Hospital

The study findings revealed that though there was awareness of nursing process among the nurses and recognition of nursing process as a crucial tool in patient management, utilization of nursing process in patient assessment, NCP and documenting in Mathari National Teaching and Referral Hospital was still low. The study therefore concludes that Mathari National Teaching and Referral Hospital is yet to fully attain complete implementation of NP in management of patients with evidence of nursing process implementation gaps in the facility.

# 6.1.2 Structural factors influencing the implementation of nursing process in management of patients with mental disorders in Mathari National Teaching and Referral Hospital

Findings of the study revealed that the main structural factors included the hospital related factors and the patient-related factors. These hospital related factors were found out to determine the support offered to NP implementation, resource allocated and supervision of NP implementation. The patient related factors on the other hand were found to influence the time spent on each patient and compliance towards NP. The study thus concludes that structural factors have a positive and significant effect on NP implementation in MNTRH. These factors are concluded to either enhance or hinder the NP implementation based on their effectiveness.

# 6.1.3 Process factors influencing implementation of nursing process in management of patients with mental disorders in Mathari National Teaching and Referral Hospital

The study findings revealed out that the main process factors influencing NP implementation was nurse related factors which included the nurses' experience, attributes, perceptions, training and perceptions regarding nursing process. The nurse-related factors were established to a have a strong positive effect on nursing process implementation. The study therefore concludes that nurse-related factors influence the level and extent of implementation of NP at MNTRH. Hence, the perceived benefits of the NP by the nurse as well as their skills and attributes are concluded to affect NP utilization and application.

### **6.2 Recommendations**

### **6.2.1 Recommendation for Practice**

It is recommended that the management at MNTRH to highly prioritize implementation of nursing process as a key function of the hospital. The management should formulate better policies and frameworks which will ensure that the barriers to the NP are minimized. There should be periodic workshops and seminars on the nursing process, in order for nursing tutors to equip them with the needed skills and confidence to value and teach the nursing process. There should also be regular inservice training on to continually update knowledge and skills on the nursing process.

The nursing process committees and the nurse managers at MNTRH should conduct routine supportive supervision on NP. This is recommended to be conducted either after two weeks or monthly so as to provide direction and motivation of the nursing staff on the utilization of nursing process. This will make the task of assessing and managing the mental disorders of patients to be systematic and organized. Therefore, proper implementation of the NP will ensure that the patient needs are all catered for with a good patient outcome.

### **6.2.2 Recommendation for Policy**

It is also recommends that the National Government to employ more nursing staff so as to reduce the poor nurse-patient ratio that was established to be present in the hospital facility.

The Ministry of Health, regional health bureau, zonal health desks and other Non-Governmental partners should ensure that the institutions are well empowered on importance of nursing process. The Ministry of Health should also strengthen national policy frameworks and interventions aimed at improving nursing process training and implementation at clinical setting in Kenya. This will act to greatly boost the overall effectiveness of the NP in the institution thus promoting better patient care.

### **6.3 Suggestion for further research**

The study has provided a starting point for further research on the factors influencing implementation of nursing process in patient management in hospital facilities. However, there are certain areas which have emerged from the study necessitating further research to be conducted. The study was limited by the methodology used whereby it was institutionalized focusing entirely on Mathari National Teaching and Referral Hospital. This may not be actual representation of the nursing process implementation phenomenon in other hospitals. Further studies are thus suggested on other hospitals in other regions of the country to enable comparison and generalizability.

The study also investigated only three factors influencing the implementation of NP namely patient-related factors, nurse-related factors and hospital related factors which is not an exhaustive list of the available factors. Its therefore suggested further studies be conducted on factors other than these so as to enable generalization of the study findings. In addition, further studies are suggested on the barriers and enhancers of NP implementation in details to facilitate comprehensiveness of the findings. A similar study should be also conducted at a different time frame so as to determine whether there would be any changes on the extent of NP implementation.

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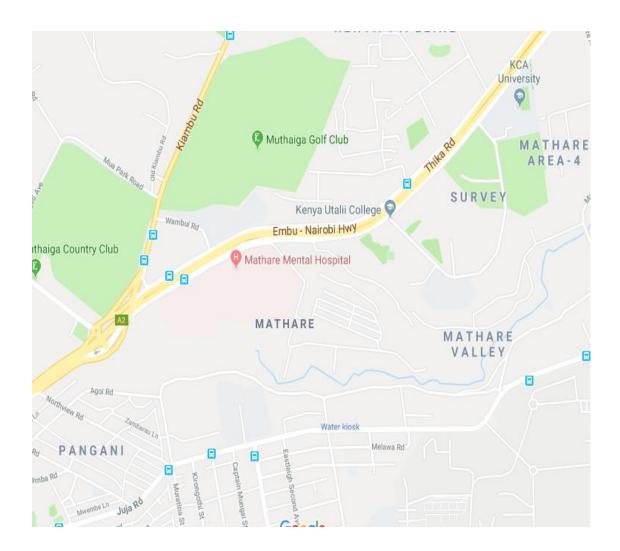
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# **APPENDICES**



# APPENDIX I: MATHARI TEACHING AND REFERRAL HOSPITAL MAP

Source; Google Maps 2018

Duration in Months	May	Jun	July	Aug	Sep	Oct	Nov
	2018	2018	2018	2018	2018	2018	2018
Problem Identification							
Proposal Writing							
Seeking consent from							
Ethical committees							
Recruitment and							
training of research							
assistants							
Pre-testing and							
administration of tools							
Data cleaning and							
analysis							
Report writing and							
presentation,							
Compilation of final							
report and							
dissemination							

# APPENDIX II: TIME FRAME (GANTT CHART)

# **APPENDIX III: BUDGET**

Item	Unit cost	Quantity	Cost	Total cost
HUMAN RESOURCE				
Training of research assistants	1000	2	2,000	
(a)Pre-testing of questionnaire				
Principal researcher	2,000	1	2,000	
Research assistants(2)	1,000	2	2,000	
(b)Data collection				
Principal researcher	20,000	1	20,000	
Research assistants(2)	10,000	2	20,000	
Data analysis and production			25,000	
Sub-total				71,000
MATERIALS AND SUPPLIES				
Biro pens(1 dozen)	180	1	180	
Field books	65	3	195	
Folders	100	3	300	
Sub-total				675
PROPOSAL AND THESIS				
Photocopying final report (5 copies)	3	250	750	
Proposal typing and printing (50	35	50	1750	
pages)				
Research result book binding	600	5	3000	
(5copies)				
Sub-total				5500
Total				77375
Contingency	10% of total			7737.50
Grand TOTAL				85,112.50

# APPENDIX IV: PARTICIPANT INFORMATION SHEET AND CONSENT FORM

Introduction:

This study is a Master's thesis by Mary Mueni Isika, a mental health and psychiatric nursing student under the supervision of Dr. Irene Mageto and Dr. Mirriam C.A Wagoro of Nairobi University.

The purpose of this information is to give you details about the study that will enable you to make an informed decision regarding your participation. You may ask questions to clarify any doubt about what we will discuss in this information and consent form. I will also ask you questions regarding the study before you sign the consent form to ascertain your understanding of the information provided.

**Background and objective:** The purpose of this study is to *"Explore factors influencing implementation of nursing process in Mathari National Teaching and Referral Hospital."* 

**Significance:** Findings from this study could be used for furthering knowledge about how implementation of the nursing process could be utilized in improving patient care and management among patients with mental disorders.

**Participation:** The participation in the study will involve answering of questions which will be administered through a semi-structured questionnaire.

**Benefits:** There is no direct monetary benefit in participating in this study. However, the results of the study will be useful in facilitating the understanding of the importance of nursing process and underlying factors to its implementation.

**Risks:** The study poses no physical or economic risks. You may skip any questions which you may not be in a position to provide answers to. The researcher will also be present for approximately 20-30 minutes to enable the data collection process to proceed.

**Confidentiality:** The study will maintain outmost confidentiality with the information provided to be used solely for academic purposes. Additionally, anonymity of the respondents will be maintained with no form of name or identification required.

**Voluntary participation:** Participation in the study is entirely voluntary and refusal to participate will not attract any negative consequences. In case you may not be comfortable in providing answers to any particular question, feel free not to answer.

**Compensation:** The study provides no form of compensation for participation in the study.

**Conflict of interest**: The researcher and the supervisors confirm that there is no conflict of interest amongst them.

# **CONSENT FORM**

If you agree and fully consent to participate in this study, please sign below;

I hereby offer my consent to undertake this study. The nature of the study, potential risks and benefits have been fully explained to me. I am also aware that my participation is on voluntary basis and may choose to withdraw from the study at any particular time without any consequences or explanations. I have also been assured that anonymity will be maintained and all the information provided will be strictly confidential. I confirm that all my concerns pertaining to the study have been adequately addressed and understood.

Participants Signature
Date

I consent that have fully explained the nature and contents of the study in details and the participant has voluntarily agreed to participate without any form of pressure or coercion.

Investigator Signature......Date.....

For any Clarification, please contact

# Mary Mueni Isika, Researcher

# H56/81829/2015

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# Or

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# **APPENDIX V: RESPONDENTS' QUESTIONNAIRE**

Questionnaire Serial Number Questionnaire Status (1=complete; 2=
partially complete)
Interviewer ID Date of Interview//2018
Introduction
You are hereby invited to participate in a questionnaire for a study on 'Explore
Factors Influencing the Implementation of Nursing Process (NP) In Management
of Patients with Mental Disorders in Mathari National Teaching and Referral
Hospital'. Be honest, free and active in your participation in responding to the
questions given. Please tick or write in the spaces provided.
SECTION A: SOCIO-DEMOGRAPHIC CHARACTERISTICS
1. Please indicate your gender
Male [ ] Female [ ]
2. Please indicate your age bracket
Less than 20 [ ] 21-30 [ ] 31-40 [ ]
41-50 [] 51-60 [] more than 60 []
3. Please indicate your marital status
Single [] Married []
Widowed [ ] Divorced [ ]
Others [ ] Specify
4. Please list your academic qualification(s)
5. How many years of work experience do you have?
Below 5 [ ] 5-10 [ ] 11-15 [ ] 16-20 [ ]
21-25 [ ] 26-30 [ ] Above 30 [ ]
6. Please indicate your designation(s)

7. Which activity are you mainly involved in?

Patient care [] Care planning [] Administration [] Others []

Specify.....

8. Are you aware of Nursing Process (NP) initiatives in the hospital?

Yes [ ] No [ ]

# PART B: PROCESS FACTORS INFLUENCING NP IMPLEMENTATIONS

# a) Nurse-related Factors

9. How do you rate your understanding of NP?

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

10. Have you ever been trained on NP?

Yes [ ] No [ ]

If yes where? Please specify .....

11. How do you rate the general attitude of the nurse staffs towards NP?

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

12. Using a scale of 1-5, where 1 is strongly agree, 2 is agree, 3 is neutral, 4 is disagree and 5 is to a strongly disagree, please rate the following in relation to Nurse-related Factors that influence NP implementations.

Statement	1	2	3	4	5
Care plans are not usually discussed with the patient					
Formulating nursing diagnosis should not be mandatory					
In patient care there should be less writing and more action.					
Nursing care plan should be drawn for the very sick patients only					
Nursing instructions on a care plan often bear very little relation to what the nurse actually does.					
Nursing process is cumber some					
Nursing process is not be applied to all patients					

Statement	1	2	3	4	5
The care plan plays no significant part in the provision and evaluation of care.					
The nurses have adequate expertise to undertake the NP					
There has been well acceptance of the NP practices					
Use of nursing care plans enables a nurse to establish priorities of care					
Writing a care plan is a burden					

# b) Patient-Related Factors

13. What is general effectiveness of NP towards patients' outcomes?

Very effective [ ] Effective [ ] Moderate [ ]

Minimal effect [ ] Not effective [ ]

14. To what extent is the variation of NP outcomes amongst patients?

 Very great extent []
 Great extent []
 Moderate extent []

- Small extent
   [
   ]
   Very small extent [
   ]
- 15. Please rate the following statement that relate to the patient-related factors to NP implementation using a scale of 1-5, where 1 is strongly agree, 2 is agree, 3 is neutral, 4 is disagree and 5 is to a strongly disagree.

Statement	1	2	3	4	5
Difficulties in collecting and recording all the patient's					
information					
Every patient is unique and will need an individualized					
care plan, causing problems in the NP implementation					
Patients do not make progress because NPs are not well					
implemented.					
High number of patient causes a challenge in ensuring					
adequate time allocation for the NP implementation					
Patient refusal to cooperate					

Statement	1	2	3	4	5
Evaluation of the patient could be difficult to perform if the					
steps of the nursing process are not well followed					
Barriers in evaluating progress towards goals					

# PART C: STRUCTURAL FACTORS INFLUENCING NP IMPLEMENTATION

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

.....

. . . . . .

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

Yes [ ] No [ ]

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

Yes [ ] No [ ]

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

------

.....

. . . . . . . . . . . . . . . .

19. Does the management monitor implementation of nursing process?

Yes [ ] No [ ]

If yes how does the administration monitor the implementation of NP?

.....

20. Please rate the following statement that relate to the hospital-related factors to NP implementation using a scale of 1-5, where 1 is strongly agree, 2 is agree, 3 is neutral, 4 is disagree and 5 is to a strongly disagree.

Statement	1	2	3	4	5
No follow up by the authorities					
Hospital rules in non-implementation of it					
Failure to priorities the NP formulation and implementation plans					
The nurses are not well trained and developed					
Neglect is given towards the psychiatric nurses as compared to the general nurses					
There is no adequate budgetary and financial allocation towards the NP implementations					

21. To what extent would you rate the level of implementation of NP in the institution?

Very great extent [ ] Great extent [ ] Moderate extent [ ]

- Small extent
   []
   Very small extent
- **22.** Please rate the following statement that influence the implementation of NP negatively using a scale of 1-5, where 1 is strongly agree, 2 is agree, 3 is neutral, 4 is disagree and 5 is to a strongly disagree.

Statement	1	2	3	4	5
Lack of proper NP Policy Frameworks					
Inadequate hospital guidelines on NP use					
Poor perception on the usability of the NPs					
There is minimal monitoring and follow ups towards NP implementation					
Some nurses experience problems in adaptability of NP					
There is low acceptance of NP by the nurses					

23. Are there any other factors that negatively influence implementation of nursing process in the Hospital?

24. In your opinion, which measures should be put in place so as to mitigate these factors that negatively influence implementation of nursing process?

Thank you for your cooperation

### APPENDIX VI: KEY INFORMANT INTERVIEWS GUIDE

Dear participant,

You are hereby invited to participate in a Key Informant Interview for a study on **Factors Influencing Implementation of Nursing Process (NP) In Management of Patients with Mental Disorders in Mathari National Teaching and Referral Hospital.** Be honest, free and active in your participation in responding to the questions given for due response. Participation will be guided by use of Key Informant Interviews Guide. There will be an observer, moderator and note taker for your Key Informant Interview information. Recordings will also be made by use of tape recorders to store information as presented. All information gathered will be held under strict confidentiality and will be used only for purposes of the research.

### Questions

- 1. Are you aware of NP in Mathari National Teaching and Referral Hospital?
- 2. Briefly describe the stages adopted in the NP used
- 3. What are the benefits accrued in the utilization of NP?
- 4. In your opinion, has the NP implementation in Mathari National Teaching and Referral Hospital been successful?

5. Which factors have hindered/facilitated NP implementation in Mathari National Teaching and Referral Hospital

6. What measures should be undertaken so as to ensure successful implementation of NP in Mathari National Teaching and Referral Hospital?

7. Do you have additional regards as pertains to the entire NP at Mathari National Teaching and Referral Hospital?

# Comments Work environment Floors cleanliness Patient hygiene Hygiene of patient lockers/ incubators Availability of patient linen Presence of caretakers **Comprehensive assessment** Identification data History of presenting illness Current health state/treatments Data on physical examination Summary of investigations ordered and done Appropriate nursing diagnosis with three parts Appropriate completion of patient charts/records Identification data TPR & BP charts Fluid charts Nurses cardex Nursing care plans Others

# **APPENDIX VII: OBSERVATION CHECKLIST**

	NP Implementation	Nurse Related Det.	Patient Related Det.	Hospital-Related Det.
Chi-	$7.288^{a}$	45.469 <sup>b</sup>	61.937 <sup>c</sup>	57.469 <sup>d</sup>
Square				
df	54	30	25	22
Asymp.	1.000	.035	.000	.000
Sig.				

APPENDIX VIII: TEST STATISTICS FOR STUDY VARIABLES

a. 55 cells (100.0%) have expected frequencies less than 5. The minimum expected cell frequency is 1.2.

*b.* 31 cells (100.0%) have expected frequencies less than 5. The minimum expected cell frequency is 2.1.

*c*. 26 cells (100.0%) have expected frequencies less than 5. The minimum expected cell frequency is 2.5.

*d.* 23 cells (100.0%) have expected frequencies less than 5. The minimum expected cell frequency is 2.8.

### **APPENDIX IX: KNH-UON ERC APPROVAL LETTER**



UNIVERSITY OF NAIROBI COLLEGE OF HEALTH SCIENCES P 0 B0X 19676 Code 00202 Telegrams: varsity Tel:(254-020) 2726300 Ext 44355

#### Ref: KNH-ERC/A/341

Mary Mueni Isika Reg. No.H56/81829/2015 School of Nursing Sciences College of Health Sciences University of Nairobi



KNH-UON ERC Email: uonknh\_erc@uonbi.ac.ke Website: http://www.erc.uonbi.ac.ke Facebook: https://www.facebook.com/uonknh.erc Twitter: @UONKNH\_ERC https://witter.com/UONKNH\_ERC



KENYATTA NATIONAL HOSPITAL P O BOX 20723 Code 00202 Tel: 726300-9 Fax: 725272 Telegrams: MEDSUP, Nairobi

20th September 2018

#### Dear Mary

RESEARCH PROPOSAL – EXPLORE FACTORS INFLUENCING IMPLEMENTATION OF NURSING PROCESS IN MATHARI NATIONAL TEACHING AND REFERRAL HOSPITAL (P420/06/2018)

This is to inform you that the KNH- UoN Ethics & Research Committee (KNH- UoN ERC) has reviewed and approved your above research proposal. The approval period is 20<sup>th</sup> September 2018 – 19<sup>th</sup> September 2019.

This approval is subject to compliance with the following requirements:

- a) Only approved documents (informed consents, study instruments, advertising materials etc) will be used.
   b) All changes (amendments, deviations, violations etc) are submitted for review and approval by KNH-UoN
- ERC before implementation.
   c) Death and life threatening problems and serious adverse events (SAEs) or unexpected a
- c) Death and life threatening problems and serious adverse events (SAEs) or unexpected adverse events whether related or unrelated to the study must be reported to the KNH-UoN ERC within 72 hours of notification.
- d) Any changes, anticipated or otherwise that may increase the risks or affect safety or welfare of study participants and others or affect the integrity of the research must be reported to KNH- UoN ERC within 72 hours.
- Clearance for export of biological specimens must be obtained from KNH- UoN ERC for each batch of shipment.
- f) Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. (Attach a comprehensive progress report to support the renewal).
- g) Submission of an <u>executive summary</u> report within 90 days upon completion of the study. This information will form part of the data base that will be consulted in future when processing related research studies so as to minimize chances of study duplication and/ or plagiarism.

For more details consult the KNH- UoN ERC website http://www.erc.uonbi.ac.ke

Protect to discover

Yours sincerely,

THE PROF. M. L. CHINDIA SECRETARY, KNH-UoN ERC

c.c. The Principal, College of Health Sciences, UoN The Director, CS, KNH The Chairperson, KNH-UON ERC The Assistant Director, Health Information, KNH The Director, School of Nursing Sciences, UoN Supervisors: Dr. Irene Mageto, Dr. Mirriam C.A. Wagoro

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# APPENDIX X: REQUEST FOR APPROVAL TO CONDUCT A STUDY

Mary M. Isika

SCHOOL OF NURSING SCIENCES

UNIVERSITY OF NAIROBI

#### 20/09/2018

THE MEDICAL SUPERINTENDENT

MATHARI NATIONAL TEACHING AND REFERAL HOSPITAL.

P.O BOX 40663

NAIROBI

### Dear Sir,

# **REF: PERMISSION TO CARRY OUT A RESEARCH IN YOUR INSTITUTION**

I am a student at the University of Nairobi Undertaking a course for the conferment of a master's degree in Mental health and psychiatric Nursing.

I am seeking approval to conduct a study on exploring factors influencing implementation of nursing process in Mathari National teaching and referral Hospital.

The study findings will be communicated to the management and they will greatly boost the overall effectiveness of the nursing process in the institution thus promoting better patient care. This will translate to better patient outcome, patient satisfaction, nurse satisfaction and improve hospital performance.

I hereby commit to abide with the rules and regulations of the hospital.

I therefore look forward for your approval to proceed with the study as indicated.

Yours Faithfully,

Mary M. Isika

# APPENDIX XI: MATHARI HOSPITAL APPROVAL LETTER

### **MINISTRY OF HEALTH**

Telegraphic Address: "MEDICAL", Nairobi Telephone Nairobi 3763317 When replying please quote:

REF: CMED 2018



Mathari National Teaching & Referral Hospital P. O. Box 40663 <u>NAIROBI</u> <u>Email:matharireferral@gmail.com</u>

Date:28/9/2018

### CLEARANCE TO UNDERTAKE RESEARCH AT MATHARI HOSPITAL

#### TO: ALL WARD INCHARGES

This is to inform you that (name/no. of students)

#### MARY MUENI ISIKA - REG No H56/81829/2015

From (Name of training institution)

#### UNIVERSITY OF NAIROBI

Has/have been cleared by the office of the Medical Superintendent to undertake research at Mathari hospital from 28/09/2018 to 28/10/2018. Please accord them/him/her the necessary support.

#### DECLARATION

I MARY MUENI ISIKA commit myself to bring back a final copy of the research to Mathari National Teaching and Referral Hospital.

SIGNATURE:

PERS

In-Charge C.M.E.D

REFE 0. Box 400