A GROUNDED THEORY OF
THE KENYA HUMAN INTERACTION MODEL
FOR MENTAL HEALTH NURSING PRACTICE

BY
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Prof. Preston Chitere

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DECLARATION

I declare that the Grounded Theory of the Kenya Human Interaction Model for Mental Health Nursing Practice is my original work and has not been presented in any other institution for the purpose of obtaining a degree or for any other award. I have acknowledged through references all resources and materials that I have used in the process of accomplishing writing this thesis.

Signature  

Date 19th August, 2016

Miriam C.A. Wagoro

WGRMIR001/1320911
DEDICATION

I dedicate this work to individuals whose lives have been affected by the effects of mental disorders and to nurses and other health professionals who are committed to improving the lives of clients who experience such illnesses. It is my hope that the conceptual model developed from this research will help improve mental health outcomes for these patients.
ACKNOWLEDGEMENTS

I am sincerely grateful to individuals and institutions mentioned for their contribution towards accomplishment of this PhD study.

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- Universities of Nairobi and Cape Town for the USHEPiA scholarship offered towards this PhD program.
- My family for their distinguished care and support
### ABBREVIATIONS/ACRONYMS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>BNI</td>
<td>British Nursing Index</td>
</tr>
<tr>
<td>CINAHL</td>
<td>Cumulative Index of Nursing and Allied Health Literature</td>
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<td>CNO</td>
<td>Chief Nursing Officer</td>
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<tr>
<td>DHHS</td>
<td>Department of Health and Human Services</td>
</tr>
<tr>
<td>DNS</td>
<td>Director of nursing Services</td>
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<tr>
<td>DoN</td>
<td>Department of Nursing</td>
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<tr>
<td>MoMs</td>
<td>Ministry of Medical services</td>
</tr>
<tr>
<td>MOH</td>
<td>Ministry of Health Kenya</td>
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<tr>
<td>MScN</td>
<td>Master of Science in Nursing</td>
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<tr>
<td>NCK</td>
<td>Nursing Council of Kenya</td>
</tr>
<tr>
<td>NCST</td>
<td>National Council for Science and Technology</td>
</tr>
<tr>
<td>NU-DIST</td>
<td>Non-numerical Unstructured Data Indexing Searching and Theorizing</td>
</tr>
<tr>
<td>QSR –NVivo</td>
<td>Qualitative data analysis Software for Researchers-NVivo</td>
</tr>
<tr>
<td>KIPPRA</td>
<td>Kenya Institute of Public Policy Research and Analysis</td>
</tr>
<tr>
<td>KNCHR</td>
<td>Kenya National Commission on Human Rights</td>
</tr>
<tr>
<td>UCT</td>
<td>University of Cape Town</td>
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<tr>
<td>UCT-HREC</td>
<td>University of Cape Town-Human Research Ethics Committee</td>
</tr>
<tr>
<td>UoN:</td>
<td>University of Nairobi</td>
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<tr>
<td>WMA:</td>
<td>World Medical Association</td>
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<tr>
<td>WHO:</td>
<td>World Health Organization</td>
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ABSTRACT

Background: Although mental disorders is of great public health concern among Kenyan populations, mental health services remain poor. Some of the reasons attributed to delivery of poor mental health services are unfavourable work environment and lack of policy guidelines including a conceptual model of nursing. Quality of mental health nursing care significantly impacts on general mental health services in Kenya since they are predominantly provided by nurses. Lack of a model to guide care and improve mental health services created the need to develop the Kenyan Human Interaction Model for mental health nursing practice.

Purpose: The purpose of the study was to discover and develop a Kenyan model for mental health nursing guided by two research questions, namely: What are the views of Kenyan mental health nurses with regards to human being, environment, mental health nursing and mental health: What is the appropriate model for mental health nursing practice in Kenya?

Methodology: Straussian Grounded Theory method was used in the study. Data were collected for 6 months through in-depth interviews with 33 registered mental health nurses selected by open, purposive and theoretical sampling methods. Inductive and deductive data analysis of the nurses’ description of their views and recommendations on the nursing metaparadigms were done

Findings: A substantive theory of the Kenyan Human Interaction Model for mental health nursing practice was developed. The four metaparadigm concepts of the discovered theory are:

1. Human being as a unique biopsychosocio-spiritual being and causal condition
2. Environment consisting of homely and hostile dimensions
3. Mental health nursing as a holistic care founded on human interaction
4. Mental health (consequence of holistic care) with optimum and illness dimensions.
Mental health nursing was discovered as the central phenomena interacting with its causal, contexts and intervening conditions to determine the mental health dimension of the human being. The quality of mental health nursing determines the mental health dimensions and is influenced by the environment and nurses’ characteristics as contexts and intervening conditions respectively. These interactions lead to consequences discovered as optimum mental health.

The Kenya Human Interaction Model for mental health nursing practice is customized to the Kenyan situation and contributes knowledge which is relevant to mental health nursing practitioners, students, educators and administrators.
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CHAPTER ONE: INTRODUCTION

1.1 Background to the study

Mental health problems which affect up to 25–40% of outpatients and inpatients in Kenyan health facilities are a cause of suffering to the Kenyan population (Jenkins et al, 2010; Mbwayo, Ndeei, Mutiso & Khasakhala, 2013). Despite the magnitude of mental health problems, mental health services continue to lag behind with poor quality of care delivered in debilitated infrastructure and no clear policy guidelines (Kenya National Commission on Human Rights [KNCHR], 2011). Jenkins et al (2010) observed that it is not possible to provide quality of mental health services in the current situation where only 1-2 mental health nurses look after up to 15,000 people with mental disorders. These reports support findings by and KNCHR (2011) that mental health nurses have high workload. It is therefore reasonable to assert that delivery of poor quality mental health services is majorly attributed to overburdened nurses, lack of clear policy guidelines and unfavourable work environment.

Improving quality mental health nursing care in Kenya will significantly improve mental health services since they are predominantly delivered by nurses. Initiating measures to obtain adequate supply of mental health nurses or to improve the debilitated institutions by the government are long term goals and are not entirely in the docket of the Director of Nursing Services previously known as Chief Nursing Officer (CNO). However, identifying a clear nursing policy and ensuring its implementation to improve mental health nursing care is within the mandate of the Director of Nursing Services and may take a comparatively shorter time.

Kenya currently lacks a conceptual model of nursing to guide practice that includes mental health nursing (Department of Nursing [DoN], 2009). Consequently, mental health nursing is
based on intuition that contributes to poor patient care as observed by DoN (2006, 2009). Introduction of conceptual models of nursing as a priority strategy by DoN (2009) to improve quality patient care including mental health nursing in Kenya is thus justified.

The DoN (2009) argues that conceptual models will help nurses in Kenya articulate nursing issues and provide a theory-based nursing care for evidence-based nursing practice. In mental health, where the services are predominantly delivered by overburdened mental health nurses, conceptual models will be useful as they enable nurses to organize an approach that maximizes use of nursing time, interventions and resources thereby improving patient health outcomes (Gawlinski & Rutledge, 2008; Parker & Smith, 2010).

Without conceptual models to guide mental health nursing practice, nurses in Kenya will continue to use intuition and medical models. These strategies are inappropriate for ideal professional mental health nursing practice because they limit nurses’ rational thinking and promote nurses’ dependence on physician/psychiatrist’s decisions. These strategies furthermore impact negatively on mental health nurses’ ability to make clinical judgment which is necessary for quality care resulting in poor quality mental health nursing care. Conceptual models of nursing, on the other hand, provide a framework for organization of quality mental health nursing care.

Conceptual models of nursing are defined as a set of concepts and assumptions that collectively provide a comprehensive theoretical frame of reference within which a stand point of members of the nursing discipline is determined (Fawcett, 2005; Parker & Smith, 2010). Additionally,
conceptual models of nursing provide nurses with a perspective of conceptualization of the four major metaparadigms namely; the human being, nursing, health and environment. These perspectives enable the nurse to focus on the whole person. In the next section, I present a description and analysis of conceptual models of nursing including the ones that were proposed by the DoN (2006, 2009). In addition, I present effective strategies for their implementation and explain reasons for developing the Kenyan model.

1.2 Rationale and Analysis of proposed conceptual models of nursing for Kenya by the Department of Nursing

1.2.1 Rationale for the proposed conceptual models

The Department of Nursing at the Kenya Ministry of Health headquarters in the “2008–2030 strategic direction toward Vision 2030” (DoN, 2009), observed that there had been progressive worsening health trends in the previous fifteen years. The worsening health trends included high maternal and infant mortality rates of 488 per 100,000 and 52 per 1,000 respectively which cause loss to individuals with negative impact on their mental health. Besides, there had been public concerns about the poor quality of nursing (including mental health nursing) services offered by rude nurses including mental health nurses. Furthermore, the Kenya media had highlighted the suffering of patients in public mental health institutions. Examples of such highlights include media reports by Rein (2013) on Al Jazeera about patients who rioted and escaped from Kenya’s national mental health institution over poor conditions and a documentary aired on Cable News Network (CNN) by McKenzie and Formanek (2011), on “Kenya's mentally ill, locked up and forgotten” in a Kenyan national mental health institution.
Vision 2030 is the Government of Kenya blueprint which aims to make Kenya a middle-class economy through various pillars. Health is within the social pillar which is concerned with comprehensive social interventions with the purpose to improve economic empowerment and quality of life for every person in Kenya. The Department of Nursing envisaged that without reversing the worsening health indices, Vision 2030 would not be achieved. Consequently, the Department of Nursing set out providing clear directions for delivery of focused quality nursing services as one of the strategies to reverse the trends. The Department of Nursing (2009) observed that the medical model that was being used across nursing specialties including mental health was responsible for poor quality of nursing care. Therefore the department recommended that attempts be made to introduce and implement conceptual models of nursing that would promote a shift from the current medical model to a more comprehensive nursing model. Consequently, the department identified and proposed a number of conceptual models from which nurses were mandated to select and apply in their practice to achieve quality nursing care including mental health. In the next section the conceptual models are presented and analyzed.

1.2.2 Analysis of the proposed conceptual models of nursing

The Department of Nursing identified and proposed a total of six conceptual models of nursing from which the nurses would make their choice. These conceptual models are: Virginia Henderson’s needs model, Dorothea Orem’s Self-care model, Roy’s Adaptation Model, Roger’s Holistic Care Concepts model, Betty Neuman’s Health Care Systems Model and Hildegard Peplau’s Interpersonal Relationship Model. However, the department recognized that one conceptual model of nursing cannot be applied in all situations for all patients. The department therefore recommended that, in selecting an appropriate model, clinical nurse practitioners
should be guided by identified patient/client’s health problem and the prevailing environmental circumstances (DoN, 2008).

Many nurse scholars agree with the department’s recommendation that one conceptual model of nursing may not be applicable in all situations and circumstances. Güner and Pehlivan (2016), in support of the claims asserted that the importance of using a theoretical framework in mental health nursing is undisputed. However, what is in dispute is the appropriate theoretical framework to apply. In the subsequent paragraphs, the proposed conceptual models that are appropriate for mental health nursing are analyzed and the reasons why they may not be applicable in the Kenyan context are explained. Out of the six proposed conceptual models, Virginia Henderson’s needs and Dorothea Orem’s self-care models were identified as inappropriate for use in mental health nursing in the context of Kenya. Virginia Henderson emphasizes what the nurse should do for the patient and does not explain how the nurse should interact with the client, yet the interaction is a critical component of mental health nursing. Similarly, Dorothea Orem’s theory is reportedly disorganized, unnecessarily complex and clumsy while at the same time says very little about mental health nursing explicitly. Orem and Henderson’s conceptual models are therefore not analyzed.

1.2.2.1 Roy’s Adaptation Model

Roy’s conceptual model is derived from Henson’s (1964) adaptation theory, Bertalanffy’s (1968) general systems theory, Selye’s (1936) concepts of stress and most significantly, Dorothy Johnson’s model for behavioral systems (McEwen, 2011). The theories on which Roy’s model is based underpin mental health nursing and therefore it is relevant for mental health nursing care.
Roy argues that the goal of adaptation to which all human responses contribute, is survival, growth, reproduction and mastery. Nurses’ role is to promote successful adaptation of individuals to contribute to health. Thus, nurses’ roles become necessary when the person cannot foster successful adaptation (Roy & Andrews, 1999; Alligood & Tomey, 2006; Daniels, 2004; Patton, 2004; Phillips, 2010).

There are four main strengths of Roy’s adaptation model when applied in mental health nursing. Firstly, it directs nurses in focused and individualized patient observations and interviews during comprehensive assessment. Secondly, it advocates for the use of the common or typical form of the nursing process. Thirdly it focuses on concrete observable behaviours thereby increasing individualized nursing assessment and care planning. Fourthly, it has been reported that the sequence of concepts follow in a logical manner and contains a thread of adaptation that helps maintain integrity throughout the presentation of each of the key concepts.

However, Roy’s model is criticized for lack of parsimony. Fawcett and Madeya (2013) and Walker and Avant (2011) assert that a parsimonious theory should be made up of few concepts and propositions necessary to convey its meaning clearly despite its broad contents. Critics of Roy’s model contend that for the nurse to effectively apply the model, she or he will require a lot of time, effort and general commitment which may not be possible in low-resource country such as Kenya. Application of Roy’s model is time-consuming because of the several elements, systems and sub-systems, structures and multilevel concepts and sub-concepts. These characteristics of Roy’s model make its application difficult and inappropriate in emergency situations requiring prompt action (Basavanthappa, 2007). It is also argued that each individual
responds differently to stimuli and therefore adaptive responses in some individuals can take longer time compared to others. Another weakness cited in Roy’s model is failure to discuss explicitly how nurses should intervene for clients who present with ineffective responses in the course of their adaptation process. The main point of Roy’s model is that nurses should promote adaptation, but does not explain how to prevent and resolve maladaptation.

Although Roy’s adaptation model has been applied in mental health settings in other countries, in Kenya it may not be applicable because of three reasons. The first reason is that most of the nurses in mental health nursing practice are prepared at diploma level where theoretical basis of nursing is rarely taught and therefore the nurses may be confused with the multiple concepts and sub-concepts within Roy’s adaptation model. Mental health nurses in Kenya are already overburdened with a ratio of 1 nurse to over 1000 patients as reported by Jenkins et al (2010). Roy’s model which has been described as time-consuming and of little use in emergency situations may not be applicable in the Kenyan situation with overburdened mental health nurses.

1.2.2.2. Roger’s Holistic Care model

Martha Roger’s (1994) model is known as the Science of the Unitary and Irreducible Human Beings. Rogers conceptualizes a person as a unified whole who has the quality of integrity and displays characteristics that are more than and different from the sum of all its parts. According to Rogers, a person has life processes that are always moving forward in a non-reversible way. These life processes move across dimensions along the space–time continuum (Rogers, 1970). In addition Rogers (1994) stated that the human being and environment are constantly exchanging matter and energy with each other. She therefore contends that the central focus for nursing is the
interaction and mutual processes between the human being and the environment rather than focusing only on health and illness.

Basavanthappa (2007), McEwen and Willis (2011) assert that Roger’s model holistically addresses psychological, social, environmental and physiological aspects of humans as individuals and groups and is therefore applicable to mental health nursing. Basavanthappa (2007) in addition argues that Roger’s model focuses on evolution and therefore has the potential to contribute to mental health nurses’ understanding of the families, groups and community systems when providing mental health care. Rogers’ emphasis on supportive psychotherapy (Cullen-Drill, and Prendergast, 2011) which is a major treatment modality in mental health care further justifies its suitability in mental health nursing. Rogers’ model is credited with holistic unitary human beings approach that differentiates a nurse psychotherapist from other psychotherapists.

Although McEwen and Willis (2011) report that Roger’s model is relatively parsimonious, some nurse scholars (Parker & Smith, 2010) find it abstract with complex terminology. For instance, Heggie, Garon, Kodiath, and Kelly (1994) and Reed (2008) found that implementing the model in practice settings was challenging and complex. Some researchers have also argued that it is difficult to understand the concepts in the model. Further, lack of operational definitions and instruments for the proper evaluation pose challenges in its application to nursing practice.

Although Rogers’ emphasis on psychotherapy and holism make it a suitable model for mental health nursing, it was found inappropriate for application in the Kenyan situation for three
reasons. Firstly, Rogers’ terminology is abstract and complex. Secondly, Rogers claimed that nursing exists to serve people, yet she does not explicitly define the roles that nurses should play when serving the clients. Thirdly, Rogers asserts that the main goal of nurses is to promote health and well-being for all human beings irrespective of the practice environment. However, Rogers does not concretely provide the definition of a health state. Mental health nurses in Kenya need a model that is parsimonious, less abstract and gives clear directions on the roles of the nurse to improve quality mental health nursing care. Clear direction is necessary in the Kenyan situation where one of the reasons advanced by the Department of Nursing for poor quality of care is lack of clear guidelines for nursing practice. In addition, the goal of nursing is to help patients achieve optimum mental health. Without a concrete definition of Health, nurses would not have a clear goal for what clients should achieve.

1.2.2.3. Betty Neumann’s Health Care Systems Model
The Neumann Systems Model views the client as an open system who is influenced by environmental stressors. According to her, the client is a system consisting of a basic or core structure protected by lines of resistance. McEwen and Willis (2011) describe, Neumann’s model as systems approach that is focused on the human needs of protection or relief from stress. The concern of nursing according to Neumann’s model is to maintain client system stability. This is done by accurately assessing risk factors for stress in the client’s environment and other sources after which the individual is helped to adapt in order to maintain optimal wellness (Parker & Smith, 2010; McEwen and Willis, 2011; Fawcett and Madeya, 2013). In Neumann’s model, nurses’ actions occur within the three prevention strategies. Namely the primary prevention which refers to nurses’ actions that aim to stop the stressor from invading the system; secondary
prevention which are nurses’ actions that occur after the system has reacted to the invading stressor; and tertiary prevention which are nurses actions that are carried out after secondary prevention. Tertiary prevention are actions that aim at establishing reconstitution.

Neuman is credited with presenting an approach that is considered as comprehensive and systematic. Her model also has a big strength because it has organized nursing phenomena that is based on tested scientific findings from multiple disciplines. The model is characterized by flexibility that allows for its use in all areas of nursing although its original focus was on teaching community mental health. Furthermore, emphasis on prevention and health promotion which are specific to this model specify the function of the nurse within a community health setting. By viewing the client as a multidimensional being with physiological, psychological, sociocultural, developmental and spiritual components, the Neumann Systems Model (Neuman, 1989) provides a holistic approach to mental health nursing care.

Critics of the model, however, argue that some terminologies such as interpersonal and extra personal stressors as well as three lines of defense need to be clearly differentiated and delineated more. Neumann’s model is also criticized for applying the concept of entropy which denotes a closed system to the human being yet she conceptualizes the same human being as an open system that is influenced by environmental stressors. In this regard, the use of entropy is seen as contradictory and therefore an example of inconsistencies that require clarification together with terminologies mentions above. Despite Neuman and Fawcett (2002), developing intermediate diagrams to clarify the interactions among parts of the model and facilitate its use, McEwen and Willis (2011) argue that the model lacks parsimony.
A weakness that may render the model inappropriate for use in Kenya is that it advocates for the use of nursing process with three steps that includes nursing diagnosis, nursing goals and nursing outcomes (Heyman & Wolfe, 2012). The Kenya nursing process advocates for six steps which are assessment, diagnosis, planning, implementation, evaluation and documentation as the framework with which conceptual models should be applied. Applying a model which proposes three steps-nursing process that is inconsistent with the Kenyan six steps nursing process will confuse the mental health nurses. Furthermore, the complex terminology used by Neumann such as interpersonal and extra personal stressors as well as three lines of defense may be confusing to the Kenyan mental health nurses most of whom are at the level of diploma and without deep theoretical basis of nursing.

1.2.2.4. Hildegard Peplau’s Interpersonal Relationship Model

The core of Peplau’s (1952) theory is the nurse-patient dynamic interaction processes especially the ones that contribute to maturing relationships between patients and nurses and are commonly referred to as the therapeutic nurse-patient relationship (McQuiston, & Webb, 1995). According to Peplau (1952), nursing is conceptualized as both informative or teaching process and maturing force with a purpose to promote growth of the personality in the direction of creativity, constructive, productive and personal as well as community living. Nurses develop interpersonal therapeutic relationships with clients through which clients are assisted to achieve healthy levels of anxiety intrapersonally and interpersonally while promoting client’s health status and progress.

Peplau’s theory has been credited for its emphasis on the nurse-patient therapeutic relationships that lead to development of therapeutic interventions. It also reflects dynamic nurses’ roles that
demonstrate typical character of clinical mental health nursing in most situations. In addition, the phases of nurse-patient relationships advanced by Peplau are described in a simple easy to follow manner and provide explanation on how the nurse-patient therapeutic relationship progresses with nurses’ roles at each phase of interaction leading to growth and adaptability.

However, the model is criticized for its emphasis on psychological growth and interaction between the nurse and the patient with little regard to other aspects of the patient. For instance, its applicability with unconscious patients or those requiring physiological assistance as well as withdrawn patients is perceived as limited. Yet in mental health and psychiatric nursing, there are situations when the patients present in stuporous states of catatonia or depression that mimic unconsciousness. Because of the limitations given, this model may not be applicable in the Kenyan situation.

1.3. Description of nursing models for mental health not proposed by Department of Nursing

In my experience with mental health nursing and literature reviews, many conceptual models used in mental health are not specific to mental health nursing. In the United Kingdom, Barker’s (1998) Tidal model is the only known model that was developed specifically for mental health nursing practice and is the preferred approach to mental health care recommended by the Department of Health in “From Values to Action: The UK Chief Nursing Officer’s Review of mental health nursing (2006)”. The Tidal Model proposes an emphasis on utilitarian approach to identify the patient’s problems and provide individualized dignified care that recognizes each patient as a singular and unique person (Barker & Buchanan-Barker, 2005).
Application of the Tidal Model is critical to provision and maintenance of credible standards of quality mental health nursing care (Wilkin, 2002; Clay, 2004). However, Tidal Model is reportedly not applicable in nursing resource-limited hospitals with a nurse to patient ratio of 1:>10. The high work load experienced by the nurse in such circumstances may not provide sufficient time for nurses to be with each patient for the required time and to perform recommended interventions. In a low resource country such as Kenya with a nurse to patient ratio of 1: > 1,500 at the regional hospitals and 1: >10 at the national hospital, it is imperative to consider a conceptual model that would take into consideration the unique context of mental health nursing practice within the Kenyan experience. This model is further discussed in chapter three.

1.4 Description of conceptual models of nursing in general

A conceptual model is generally defined as a set of concepts, with propositions that describe and express the relationship between them and set forth its basic assumptions. (Malone, 2010; Mensik, Martin, Scott, & Horton, 2011). In the hierarchy of nursing knowledge, Fawcett (2005) ranks conceptual models of nursing as the third component of the structural holarchy of contemporary nursing knowledge and are more abstract than the theories.

Conceptual models provide nurses with a perspective of conceptualization of the four major metaparadigms namely; human being, nursing, health and environment. These perspectives enable the nurse to focus on the whole person. In addition, the perspectives form the basis for nursing assessment, planning, interventions and evaluation of its effects on patient health outcomes (Willis, Grace, & Roy, 2009; Parker & Smith, 2010). Thus, the goal of a conceptual
model applied to mental health nursing is to facilitate evidence-based practice so as to improve
nursing care and consequently health and quality of life for clients whom nurses serve
(Gawlinski & Rutledge, 2008). Additionally, conceptual models improve care by giving nurses a
sense of identity and helping them understand unique contribution that they make to health care
services (Willis et al, 2008).

Despite the development of many conceptual models of nursing to improve quality of care and
growth of the profession, very few nurses utilize them to guide clinical practice (Parker and
Smith 2010). For example, many researchers (McAllister and Moyle, 2008; Pridmore et al, 2010;
Carlyle, Crowe & Deering, 2012) contend that mental health nursing practice is dominated by
medical models which constrain nurses from making decisions on interventions. Even where a
range of psychosocial approaches to mental health nursing care are well developed,
implementation of these approaches in practice remains problematic. For instance, Carlyle et al
(2012) observed that, nurses in mental health practice used a psychodynamic framework for
understanding causes of mental distress yet they described nursing interventions from a stance of
medical model of care. McAllister and Moyle (2008) also observed that most nurses who were
asked about the recovery model of mental health nursing supported it because it is patient-
centred. However, they were not able to explicitly explain the nursing model of care on which
their nursing practice was based.

A range of barriers have been observed to hinder the practical application of conceptual models
in many countries. The barriers include the complex nature of the models and the language used
(McRae, 2012). Examples of complex language used in some of the models include Newman’s
‘expanding consciousness’ (1994) and the ‘dynamic energy fields’ of Rogers (1970). A conceptual model should comprise clear terminology, concepts, processes and goals to facilitate its application. Contemporary nurse authors and theorists (Chinn & Kramer, 2011; McEwen & Willis, 2011), are consistent on the need to evaluate conceptual models to determine their applicability.

In this study, it was necessary to analyse the proposed conceptual models by the Department of Nursing to identify their suitability for mental health nursing in the Kenyan context and need for refinement or development of a new theory to guide practice. From the analysis (1.2.2.1-1.2.2.4) it was reasonable to conclude that the conceptual models identified and proposed for use in Kenya by the Department of nursing had been successfully used in other countries. However, they could not be applicable in the Kenyan situation and thus the need to develop a Kenyan contextualized conceptual model for mental health nursing practice. Furthermore, the Department of nursing recognized the gap and requested me to develop a model that would be used to improve mental health nursing in Kenya (Appendix F, page 251) A study to explore the worldview of Kenyan mental health nurses with regards to the major metaparadigm concepts was deemed necessary to develop a conceptual model of mental health nursing practice that is contextualised to the Kenyan circumstances. The four major metaparadigm concepts to be explored and contextualized to mental health nursing were nursing, human being as the client of care, environment and health.
1.5 The context of mental health care services in Kenya

The 2014 Kenya Demographic and Health Survey describes the geographic location of Kenya as situated on the Eastern part of the African continent lying between 5 degrees north and 5 degrees south latitude and between 24 and 31 degrees east longitude. Kenya borders Ethiopia to the North, Somalia to North East, Tanzania on the South, Uganda to the West, and South Sudan to North West. The country covers an area of 582,646 Sq.Km. with a population estimated at 45 million in 2014. Administratively, Kenya is divided into 47 counties. Eight of the counties were previously the regions or provinces of Kenya. Mental health services at the county levels are under the county Governments headed by Governors.

The Kenya mental health policy (2016) reported that the prevalence of mental and behavioral disorders in Kenya is of public health concern. The mental health policy framework, estimated that up to 25% of outpatients and 40% of in-patients in health facilities suffer from mental conditions with the most frequent ones being depression, substance use, neurotic stress-related and anxiety disorders. Further statistics indicate that the prevalence of psychosis in Kenya is at an average of 1% of the population who are not seen in any hospital.

Formal mental health nursing services started in Kenya when a small pox unit was converted to the current Mathari National Referral and Training Hospital, the biggest national mental health institution. Until 1961 when decentralization of mental health services started in Kenya, Mathari National Referral and Training Hospital was the only hospital for people with mental disorders. Currently mental health services are available across all counties in Kenya although at a smaller capacity. The care in Mathari National Referral and Training Hospital was mainly custodial and
sharply contrasts the current practice that is based on therapeutic community concepts. The hospital structures have also improved from the jail-like physical appearance at its inception (Ndirangu, 1982; Nyangena, 2006, Oywer, 2011) to a fairly ultra-modern hospital with other general medical and dental services.

The training of mental health nurses in Kenya has evolved from “on the job” to a formal systematic training. The current levels of mental health nurse training range from the 3-years basic Kenya Registered Nurse with mental health (KRN/MHN), one year post basic diploma or Kenya registered mental health nursing (KRPN) and MScN (mental health and psychiatric nursing) for nurses with BScN (Nyangena, 2006; Oywer, 2011).

Mental health nursing in Kenya is practiced under two laws. The Nurses Act Chapter 257 of the laws of Kenya and mental health Act Chapter 248 of the laws of Kenya. Quality of mental health care has also comparatively improved with consequent reduction of in-patient population. For example in the 1970s patient population in Mathari hospital was 1,200 - 1,500 with the bed capacity of 735 (KNCHR, 2011). Today the patient population is below 700. Besides, other general health services are also offered on outpatient basis. These include dental services, general medical services, comprehensive care services for individuals with HIV/AIDS and maternal child health and family planning services.

Introduction of general health services in the mental health facilities helps to achieve two objectives. Firstly, it improves accessibility of health care services to the mentally sick. Secondly, availability of general health care services attracts other patients to the health facility
and therefore reduces isolation and stigmatization of mental illness that has persisted over the years (Jenkins, Kiima, Njenga, et al., 2010)

The reduced number of in-patients in mental health facilities is one of the indicators in the shift of nursing towards community-based mental health nursing from hospital –based mental health nursing although nurses still operate from the hospitals when providing community mental health services. Current state of mental health nursing in Kenya takes into consideration few facilities and shortage of human work force. This is because mental health nurses do not work in isolation, but in collaboration with other members of the health care team.

Reports by MOH (2014) and Jenkins, et al (2010), indicate that mental health nursing services are majorly Government funded and provided alongside the rest of all health care services that are broadly structured into six levels as follows: The national referral hospitals (level 6): Currently Mathari National Training and Referral Hospital is the biggest and only level 6 mental health facility in Kenya with approximately 400 members of staff and a total bed capacity of 700. The staff consists of 7 working psychiatrists and 140 nurses of whom 70 are trained mental health nurses. Other members of staff include social workers and occupational therapist. The reports indicate that there are no clinical psychologist or psychotherapist in this national mental health facility and recommends that the ministry of health needs to address this gap.

Regional general hospitals (level 5): the mental health units within these regional hospitals have the capacity of 20-25 beds but often cater for twice the capacity. District general hospitals (level 4): Some of these district hospitals are referred to as high volume and categorized as level 5
hospitals. With regards to mental health services, a few of them have mental health units with a capacity of 20-25 patients while some have units with a capacity of 10-15 patients. Health centers (level 3), dispensaries (level 2) and volunteer community health workers (CHWs) (level 1). Mental health services provided at levels 1-3 are mainly preventive. They include community outreach, home visits and identification and referral of clients with mental health problems. A report by Jenkins et al (2010) and KNCHR (2011) indicate that mental health services in Kenya are mainly provided by mental health nurses. Since there are hardly any other mental health professionals at level 1-4 health care facilities, mental health nurses run community outreach services, outpatient clinics and inpatient mental health /psychiatric services (MOH, 2014). Currently, nurses do not have any conceptual model to guide care (DON, 2009) yet they can benefit from such guidance given that they are the main mental health care providers in regional and lower level health institutions.

A report by Jenkins et al (2010) indicated that there are approximately 500 trained registered mental health nurses in Kenya of whom only 250 are currently deployed in mental health service delivery areas. Approximately 70 are in Mathari National Hospital, thus leaving 180 for deployment in the 8 regions (former provincial hospitals and over 40 districts in Kenya). In this, scenario, it is estimated that at maximum, there is one mental health nurse per district translating to nurse patient ratio of 1: 1,500 people with psychosis and 1: 15,000 people with common mental disorders (Jenkins, 2010; KNCHR, 2011). The shortage of mental health nurses is attributed to natural attrition such as death and retirement and also to emigration to other countries with better working conditions (KNCHR, 2011; Oywer, 2011). Besides, some mental health nurses have joined NGOs where they work as trauma and HIV counsellors (KNCHR,
While many mental health nurses are leaving the workforce, the numbers of new nurses registering for the course are significantly reducing compared to other areas of nursing specialization (Oywer, 2011; Wagoro et al, 2008). This phenomenon is likely to see a decline in mental health nursing workforce for a long time.

We assert that although mental health nursing care in Kenya has made progress, it still lags behind compared to other general health services. Nurses are mostly blamed for poor mental health services in Kenya, yet the entire mental health system in Kenya requires synergistic efforts from all mental health team members if quality mental health nursing is to be realized. Mental health nurses are the majority mental health care providers which may explain why they are blamed when services are poor. To improve quality of mental health services, nursing services will need to improve.

A conceptual model for mental health nursing is therefore needed to guide and focus the limited nursing resource for quality mental health nursing practice and improved mental health outcomes for the Kenyan population.

1.6. Statement of the Problem

Mental health nursing practice is a critical component of nursing practice in Kenya where 20-25% of outpatients and 40% inpatients (Jenkins et al, 2010) in any Kenyan general health facility have an identifiable mental health problem (KNCHR, 2011). However, there is currently no conceptual model guiding mental health nursing in Kenya. Consequently, mental health
nursing care is practiced by intuition, with no explicit explanation or rationale to what is done or managed (DoN, 2009). Absence of a conceptual model to guide mental health nursing practice creates confusion and dilemmas that make decision-making on nursing issues difficult and results in poor quality of health care services. Mental health nursing care lacks uniformity and varies across institutions and therefore fails to meet both consumer’s needs and professional practice standards. Consequently, there has been public outcry about the poor nursing care including mental health nursing (Ojwang’et al; 2010; KNCHR, 2011).

Introduction of conceptual models of nursing practice to improve the quality of nursing care was proposed by Department of Nursing in 2009 but has not been implemented. These conceptual models were identified from reviewed literature and included Peplau’s model, Roy’s model and Rogers’ model among others described in sections 1.2.2.1-1.2.2.4. However, analysis of the identified conceptual nursing models indicated that they originated from high and middle income/Westernised countries and did not take into consideration the Kenyan and African context, as well as the beliefs and values of African mental health nurses with respect to human beings, nursing practice, environment and health which are the four main concepts of any nursing model. Furthermore, the conceptual models were limited in various aspects pointed out in 1.2.2.1-4 and are not therefore applicable to mental health nursing in the Kenyan context.

Lack of a conceptual model to guide mental health nursing, where poor quality of the services is recognized and the Director of nursing services in Kenya had identified the need for a conceptual model to improve mental health nursing care, necessitated a study to explore the Kenyan mental health nurses’ views and recommendations on the four metaparadigm concepts that are the
building blocks of a conceptual model of nursing. We envisaged that conceptual models developed and customized to the Kenyan mental health nurses’ context would be more acceptable and utilized for quality mental health nursing care than the westernized models.

1.7 Significance of the study

One of the reasons advanced for non-use of existing conceptual models of nursing is that, they are not customized to the African situation. The conceptual model being developed in the current study is based on nurses’ views and is customized to the Kenyan situation. It will be more acceptable to Kenyan nurses. Use of a conceptual model may improve quality of mental health nursing care and hence patient’s health outcomes. The conceptual model has also generated new knowledge in nursing. The Kenyan Human Interaction Model of mental health nursing practice adds new knowledge to the Kenyan mental health nurses on mental health nursing, human being, environment and optimum mental health.

1.8 Purpose of the study

The primary purpose of the study was to discover and develop a Kenyan mental health nursing model for quality mental health nursing practice.

1.9 Research Questions

The researcher aimed to answer the following questions;

1. 9.1: What are the views of Kenyan mental health nurses with regards to mental health nursing, the human as the client of care environment and mental health?

1.9.2: What is the appropriate model for mental health nursing practice in Kenya?
1.10 Study objectives

The objectives of this study were framed from the four major metaparadigms which are cornerstones of the nursing theory. They include the human being (patient or client of care), environment, health and nursing as follows:

1.10.1. To explore and describe the views of mental health nurses on mental health nursing.

1.10.2. To explore and describe the views of mental health nurses on the human being (patient).

1.10.3. To explore and describe the views of mental health nurses on the environment of mental health care and in which a patient lives.

1.10.4. To explore and describe the views of mental health nurses on health within the mental health perspective.

1.10.5. To develop a Kenyan mental health model for mental health nursing practice

1.11 Operational Definitions

Metaparadigm concepts: A group of statements that identifies phenomena which encompass a series of philosophical assumptions and beliefs, and also guides the approach to those assumptions. In nursing it has four interrelated major concepts which are human being, Environment, Health, and Nursing. A metaparadigm serves to underpin the entire conceptual universe of the nursing profession. The researcher in this study seeks to understand how Kenyan mental health nurses define these metaparadigms.
Mental health nurse: A nurse who has undergone the mental health nursing training prescribed by the Nursing Council of Kenya and has been given the licence to practice under the title “Registered or Specialist mental health Nurse”. The training is at post basic or post graduate levels

Nurses’ views: The overall lens from which the nurse interprets the meaning and defines the concepts of human being, environment, nursing and health. The meaning encompasses nurses’ values and beliefs about these concepts and the goal of their existence. The nurses’ views underlie the nursing processes in health care.

Nurses’ Characteristics: Special qualities or properties of a mental health nurse that make her / him different from others and influences her / his professional mental health nursing practice.

Prolonged engagement: Refers to sufficient time that the researcher spends in the field to learn or understand the social setting or phenomenon of interest. In the context of this study, the researcher will spend time in the mental health units /hospitals and developing relationships and rapport with the mental health nurses.

1.12 Organization of the thesis

This thesis is organized as follows:

Chapter 1: This chapter introduces the reader to the background of the study, the significance of the study, the main research questions and why now in Kenya.

Chapter 2: The second chapter discusses the researcher’s theoretical and philosophical background which influenced the selection of the study focus, methodological choices, and research decisions.

Chapter 3: The third chapter discusses literature review relevant to the current study including
different perspectives on the use of literature in Grounded Theory research.

**Chapter 4:** This chapter presents the methodology of the current research, including the study setting, reason for choice of the methodology, data collection and management processes as well as audit trail of the study.

**Chapter 5:** In this chapter, procedures that were used in the analysis of data are discussed. Although presented in linear relationship with methodology chapter, data collection and analysis in qualitative research occur simultaneously and the independent presentation is only for technical purposes only.

**Chapter 6:** This chapter presents the findings of the study including the substantive Kenyan mental health nursing theory that was developed from empirical data obtained from the nurses.

**Chapter 7:** Discussions, strengths and limitations of the study, conclusions, recommendations, and implications of the study as well as the researcher’s reflection on the research process are presented in this chapter.

**List of references:** This contains all sources of information referenced as acknowledgement of such sources and serves as sources for further reading.

**Appendices:** These are materials that were relevant in the development of the research project some of which could not be exhaustively explained within the chapter sections.
CHAPTER TWO: THEORETICAL FRAMEWORK

2.1. Introduction

This chapter forms a critical section of the current study as it contains the theoretical framework that provides what Grant and Osanloo (2014) describe as a grounding base for the study. Theoretical framework relates to the philosophical basis of research and thus influences the research process. The importance of a theory-driven thinking described in the theoretical framework has been emphasized by many authors including Grant, and Osanloo (2014) who concur that sound study findings and conclusions cannot exist in atheoretical studies not justified by a theoretical framework.

This chapter, thus presents, exposes and justifies my philosophical worldview from which the study was conceptualized epistemologically, ontologically, methodologically and analytically. This exposure is necessary as a form of bracketing to provide the reader with an insight and basis for understanding, interpreting and evaluating the nature of knowledge generated in this study. Consequently, the reader can make informed judgment about credibility and transferability of the research findings (Holloway & Wheeler, 2002). Furthermore, by detailing the theoretical framework, I am making the basis of research findings transparent without which Wilson and Stutchbury (2009) and Snape and Spencer (2003) argue that the research rigour will be put to question. The theoretical framework of the study has been described in five sections that form the chapter. They are the paradigm of inquiry, epistemological and ontological perspectives, theoretical underpinnings and methodological approaches.
2.2. The Paradigm of Inquiry

The term paradigm is used by different researchers to mean a standpoint by a community of researchers to generate knowledge (Levers, 2013). Fossey, Harvey, McDermott et al (2002) refer to a paradigm as a set of assumptions, research strategies and criteria for rigour that are shared by the respective community. These definitions are consistent with Duma, Mekwa and Denny’s (2007) assertion that a paradigm provides the researcher with sets of principles and rules for conducting research. A research paradigm is comprised of three elements, namely, a belief about the nature of knowledge, a methodology and criteria for validity (Rolfe and Siraj-Blatchford, 2001) which is similar to Neuman’s (2000) and Creswell’s (2003) epistemology, ontology and research methodology.

The paradigm stance, of a researcher may take a positivist, post-positivist, constructivist or interpretivist, etc. perspectives (Yanow & Schwartz-Shea, 2011; Thanh and Thanh, 2015). Levers (2013) further advises that researchers must select a paradigm that is consistent with their beliefs about the nature of reality if they are to ensure a strong research design.

For this study, I used the interpretivist paradigm of inquiry which fits within the Straussian Grounded theory philosophical perspectives. Levers (2013) argues that Glaser and Strauss’ (1967) original version of Grounded theory is post-positivist paradigm, Charmaz’s (2006) version on the other hand is constructivist paradigm, while Corbin and Strauss’s (2008) version fits within the interpretivist paradigm. In the subsequent sub-section, I have described the interpretivist paradigm of inquiry and the rationale for its use in this study.
2.2.1. The interpretivist paradigm of inquiry

Interpretivist researchers understand the world of human experience and strive to discover reality through the participant’s views, perceptions and experiences (Yanow & Schwartz-Shea, 2011; Thanh & Thanh, 2015). The interpretivist researcher uses participants’ experiences that are reflected in their answers to the research questions to interpret and understand the gathered data. Therefore, the context of the research setting becomes critical to the interpretation of data (Willis, 2007).

Interpretivism accepts and practices iterative and emergent data collection techniques. This explains why the interpretivist adopts more personal and flexible research structures which are receptive to capturing meanings in human interaction and make sense of what is perceived as reality (Carson et al., 2001; Black, 2006). This approach by the interpretivist contrasts with the positivist approach which adopts a more rigid structural framework.

The interpretivist researcher begins a study with some prerequisite knowledge on the context of the study which is assumed inadequate to be used for developing a fixed research design due to complex, multiple and unpredictable nature of what is perceived as reality (Hudson and Ozanne, 1988). The aim of interpretivist research is to develop an understanding and explain meanings or answer questions to the “why” of behaviour. This approach is important for uncovering reality rather than generalizing and predicting causal factors and effects by use of numbers and statistics advanced by the positivist (Hudson and Ozanne, 1988; Neuman, 2000).

Interpretivist researchers study real-world situations as they unfold naturally without
manipulation and are therefore referred to as naturalistic (Tuli, 2010; Tubey, 2015). In order to explore understandings of participants, the interpretive researcher conducts research in a context that allows for examination of what the participants in the study have to say about their experiences and this makes it more subjective than objective.

The interpretivist advocates for acceptance of multiple viewpoints from different individuals or groups of participants. Consequently, the data obtained are more inclusive and often leads to better understanding of the situation being investigated (Morehouse, 2011; Thanh, 2015). Interpretivism paradigm is significant for researchers who need insight or in depth information rather than numbers by statistics from a population. The interpretivist researcher is therefore more likely to use qualitative research methods which give rich reports for full understanding of contexts and allow interpretation to emerge from data (Willis, 2007; Thanh & Thanah, 2015).

In the current research there was need to explore the views of the mental health nurses in the context of mental health nursing in environments where they have been working and interacting with patients. Coming from the interpretivist paradigm, I believe that in the process of interacting with clients, nurses have formed relationships. I argue that nurses together with their clients in the hospital or community, participate in forming an environment which they are part of. The relationships formed in the course of interaction influence the view of nurses in the four nursing metaparadigms that were the focus of the study. Therefore, to get information, I needed in-depth to hold interviews so as to interpret the nurses’ experiences. As such, interpretivism paradigm was the most suitable approach in the current study.
2.3. Epistemological perspectives

Epistemology is described as the theory or philosophical study of knowledge that is concerned with the grounds upon which we believe something to be true (Oliver, 2010; Levers, 2013). By implication, epistemology is what counts as scholarly knowledge and how it is obtained (Sharp, 2009). There are two opposing epistemological standpoints known as objectivism and subjectivism. Objective epistemology is associated with critical realism and proposes that knowledge is often used to explain, predict, and control events (Grant & Giddings, 2002; Lever, 2013). However, subjective epistemology assumes that knowledge is always filtered through the lenses of language, gender, social class, race, and ethnicity (Denzin & Lincoln, 2005). It implies that knowledge is influenced by an individual’s reflections and interpretations.

As Grix, (2004) and Maxwell (2006) explain, in subjectivism epistemology, meaning is the product of interaction between the subject and the object. It uses an Inductive approach which aims to explore, discover, and understand phenomena through the process of social interaction (Ulin, Robinson and Tolle, 2004). The subjective epistemologist sees the world as interpreted and therefore applies the interpretive paradigm of inquiry which aims to understands a particular phenomenon without generalization of findings (Farzanfar, 2005; Maxwell, 2006).

I believe that what nurses know about their clients and views on the metaparadigms influence their interactions and nursing processes which in turn impact on recovery outcomes. Based on this belief, I adopted the subjective epistemology for this current study. I also assumed that prolonged interaction with clients in an environment would influence nurses’ views on the metaparadigms of nursing and consequently how they offer care. Moreover, I needed to collect
data from the nurses in their natural work and care environment without any manipulation as the goal of the research was to understand how nurses view the human being (as the client of care), mental health, environment and mental health nursing and allow emergence of a Grounded Theory from the data.

2.4. Ontological perspectives

Jackson (2013) defined ontology as the philosophical study of the nature of reality. Ontology beliefs focus on the questions that seek to find nature and origin of knowledge or reality (Guba and Lincoln, 1994). There are two perspectives in ontology. The relativist ontologist believes that reality is a finite subjective experience (Denzin and Lincoln, 2005) and differs from person to person (Scotland, 2012). On the other hand, the critical realist ontologist assumes that reality exists independent of the human mind regardless of whether it is comprehensible or directly experienced (Letourneau & Allen, 2006). The purpose of science from a critical realist perspective is to identify phenomena and develop agreement regarding the description of events to produce predictable causal and effect results (Bergen, Wells, & Owen, 2010).

In the context of nursing research, ontology can be termed as the philosophical study of the nature of nursing realities and how there may be different perceptions of what is known in nursing. From a relativist ontological perspectives, the researcher uses subjective epistemology and qualitative research methodology. For instance, from a relativist ontological perspective, the researcher assumes that individual’s world is an experienced, reality based on social or individual human conception (Greener, 2011). This perspective shapes the methodological
decision-making towards a qualitative approach to encompass a subjective, interpretative study (Sikes, 2004). Consequently qualitative data may be obtained through in-depth interview (Oliver, 2010).

In the current study, my ontological perspective of the metaparadigms being a human construction, created through the relationship between the experiences of nurses interacting with the clients of mental health nursing care resonates with a relativist ontological and subjective epistemology stance of obtaining nurses’ views through interpretative paradigm. Besides, from this perspective, I perceive knowledge as relative to particular circumstances such as an experience with looking after clients with mental disorders. Thus in the current study, knowledge is assumed to exist in multiple forms and representations as interpreted by individuals. It focuses on recognizing and narrating the meanings of human experiences. This explains why in the current research, sampling method initially followed purposive and open methods with subsequent theoretical sampling.

2.5. Theoretical perspectives

A theoretical perspective may be defined as the philosophical standpoint that informs the research methodology and provides a context for the process and grounding its logic and criteria (Mackenzie & Knipe, 2006; Wedege, 2009). In the context of this study, I chose to use symbolic interactionism theoretical perspective that is compatible with my interpretivism paradigm standpoint. In line with symbolic interactionism, the interpretive approach adopts the position that people’s knowledge of reality is a social construction by human actors (Oliver, 2012). In the
context of this study human actors and actions referred to the interaction between nurses and their clients as well as to my interaction with the nurses as my participants. In the next subsection, symbolic interaction and the rationale for its choice as the theoretical underpinning in the current study are detailed.

2.5.1. Symbolic Interactionism

Symbolic interactionism is a micro-level theoretical perspective in sociology that addresses how society is created and maintained through repeated interactions among individuals (Carter & Fuller, 2015). A number of scholars including Cooley, James and Mead are credited with founding Symbolic Interactionism (Denzin 2004). However, Mead (1934) is regarded as the originator of this theoretical perspective although he did not coin the term symbolic interactionism. Blumer reportedly advanced Mead’s original work and subsequently established Symbolic Interactionism as a research approach (Blumer, 1969).

Symbolic interactionism is favoured as a theoretical underpinning for interpretivism paradigm and therefore qualitative design especially Grounded Theory because of its basic tenets which are succinctly summarized by Aldiabat and Navenec (2011) and Carter and Fuller (2015) as:

- Meanings: This assumption proposes that meanings emerge from interactions with other individuals and society and are continuously created and recreated through interpreting processes during interaction with others. This implies that meaning is not immutable but is fluid and open to reappraisal (Charon, 2007). This assumption was applicable to the qualitative design that I selected in two ways. Firstly, it justified participants’ eligibility criteria of six years to capture their dynamic nursing experiences over the years. Secondly, it
allowed for ascribing meaning to data during open coding and subsequent constant comparative analysis.

- **Action and Interaction:** This assumption proposes that interaction occurs within a particular social and cultural context in which physical and social objects (persons), as well as situations, must be defined or categorized based on individual meanings. In the context of this study, in depth interviews were useful in obtaining information about nurses’ views on metaparadigms. This is because individual nurses construct their own views depending on their experiences and interactions with clients. The assumption also resonates with Grounded Theory methodology of concurrent generation and analysis of data with consequent theoretical sampling which requires the researcher to constantly interact with participants and data.

### 2.6. Methodological Approaches

According to Tubey (2015), methodology is a research strategy that translates ontological and epistemological principles into guidelines that show how research is to be conducted (Sarantakos, 2005). Methodology also describes the principles, procedures and practices that govern research (Marczyk, DeMatteo and Festinger, 2005). Qualitative methodology is underpinned by interpretivist paradigm, subjective epistemology and relativist ontology. It is a form of social inquiry that focuses on the way people interpret and make sense of their experiences and the world in which they live. This position resonates with Tubey (2015) and Creswell (2009) position that qualitative research is a means for exploring and understanding the meaning individuals or groups ascribe to a social problem.
In this current study where the focus was to seek understandings and experiences of a group of nurses with regards to their views on the four nursing metaparadigms, qualitative method was the best-suited one. Use of qualitative method allowed me to select rich-data sources and conduct in-depth interviews with mental health nurses in naturalistic settings. This method was relevant to the broad research questions which were designed to explore, interpret or understand the social context within which the mental health nursing processes took place.

2.7. Research Implications

From the arguments and discussions in this chapter, it is reasonable to conclude that, the ontological and epistemological stance I hold influenced the type of research methodology selected and subsequently the research design and data collection methods. In the context of this study my standpoint of the relativist ontology and subjective epistemology means that the researcher and the participant construct their own reality and knowledge that will be studied contextually and holistically. The interpretivist paradigm that I opted to adopt based on my ontological and epistemological perspectives guided the choice of qualitative methodology, a flexible design, in which data collection, theoretical sampling and analysis were conducted concurrently. The interpretivist paradigm led to in-depth interview data collection methods with non-numerical data analysis techniques following non-probability sampling procedures.
CHAPTER THREE: REVIEW OF RELATED LITERATURE

3.1. Introduction

This chapter discusses literature review that was conducted towards the development of the Kenyan Human Interaction Model for mental health nursing Practice. It provides information on the previous research about conceptual models of nursing which includes their evolution, nature and the debate about their usefulness in mental health nursing practice. This information is intended to provide the reader with insight on why it was necessary to conduct the current research and develop the Kenyan model. The chapter in addition presents literature review in qualitative research in general and Grounded Theory (GT) in particular to provide justification of the research process to the development of the current model.

To set the context of literature review in this chapter, I have first presented its meaning, purpose, types and strategies that relate to the current study. Setting the context for literature review is necessary so that the worth of a thorough literature search in the current study is appreciated. As Cronin, Ryan and Coughlan (2008) explain, literature review should be thorough and demonstrate critical analysis of the relevant available research though written in summary. Furthermore, it is now acceptable in GT methodology that the researcher needs to engage with and use literature in all phases of research (Corbin and Strauss, 2015). The purpose of a thorough literature review was necessary to gain comprehensive understanding of the conceptual models of nursing used globally including reasons for their application and non-application in clinical practice compared with the Kenyan situation. The comparison was necessary for me to refine my research questions, select a suitable methodology for my study and compare nurses’ views.
A variety of literature sources were searched to obtain information about conceptual models of nursing, quality of mental health nursing care, mental health nursing in the Kenyan context and suitable methods for developing conceptual models. As recommended by Labaree (2013), careful selection of literature sources was an important undertaking to obtain credible information. I used both electronic and alternative data bases to access scholarly articles in journals, dissertations, text books and other research reports with information on conceptual models of nursing, models and theory development and Grounded Theory methodology. The examples of data bases included BNI, CINAHL, Cochrane, Emerald, FQS, Google Scholar, MedLine, PLOS, Science Direct, Scopus and PubMed, obtained through both the home University of Nairobi and University of Cape Town university libraries.

During literature review, care was taken to avoid any personal biases so as to report objective and critical analysis of the relevant information in a systematic manner. This chapter is, organised in four sections to facilitate clarity. In section one, an overview of literature review is presented to include types, strategies, functions and the debate about its place in qualitative and Grounded Theory research. Section two describes the conceptual models of nursing in general and mental health nursing in particular. Additionally, conceptual models’ evolution debate, development strategies, usefulness and gaps in practice that necessitated the development of the Kenyan model are discussed. Finally, the chapter concludes with critical summary in the literature review.
3.2. The Literature Review

3.2.1. The concept of literature review

Literature review in the context of this study is a description of previous work on the conceptual models of nursing, qualitative research methodology generally and Grounded Theory methodology in particular, as well as sources explored to extract the information. This description is important because it demonstrates to the readers how the current research fits within a larger methodologies with regards to the development of conceptual models of mental health nursing. This is in line with Labaree’s (2013) argument that literature reviews should provide an overview of sources that were explored while researching a particular topic and to demonstrate to readers how the research fits within a larger field of study.

Cronin, Ryan and Coughlan (2008), assert that literature review should help the researcher clarify his/her ideas and develop their methodology rather than merely collecting and compiling facts for the research being undertaken. In the current study, description of literature review takes the reader through its relevance in enabling the researcher in the current study to systematically identify, locate and analyze information about the research problem as well as constant comparison during data analysis and theory emergence. In the context of the current study, the research problem refers to the development of an appropriate Kenya Human Interaction Model for mental health nursing practice that reflects the views of Kenyan mental health nurses. Acceptability and application of the model is expected to improve quality of mental health nursing specifically and by extension mental health services for better client health outcomes.
Although many nurse researchers find literature review a time consuming and daunting task (Cronin et al., 2008), its several benefits make it worth the time and effort (Tummers & Karsten, 2012; White, 2013). For instance in the current study, firstly, literature review enabled me to determine previous works on conceptual models of nursing in order to gain insight on their evolution and acceptability so as not to duplicate the development of another conceptual model with similar characteristics of those that have not worked. Secondly, literature review enabled me to discover strategies and specific data collection approaches that were successful or failed in previous similar studies as well as authorities in conceptual model development to be consulted. Thirdly, I used knowledge gained from reviewing literature about data analysis principles by Strauss and Corbin (1990) Corbin and Strauss (2008) to perform data analysis and integrate my research findings with the existing body of knowledge.

Reviewing of policy documents of the Department of Nursing and goals to improve quality of nursing, enabled the researcher in the current study to identify the six conceptual models that were proposed by the Department of nursing. Further literature search was conducted to explore and analyze the proposed conceptual models. Consequently, it was possible to identify the mental health nursing related models which upon further analysis were found to be inappropriate for the Kenyan mental health nurses situation. This helped me to identify the research question based on the knowledge that applicability of a conceptual model of nursing majorly depends on its appropriateness and acceptability among nursing population or consumers. Thus, an appropriate model that would be relevant to the Kenyan mental health nurse became the question of focus. The use of literature review as a source for refining the research question in the current
study is also consistent with White’s (2013) argument that research questions are not asked in a haphazard manner, but in relation to what is already known about the topic of interest.

3.2.2. Types, sources and steps of literature review

Many authors, in describing literature review consistently imply that types and sources of literature that the researcher reviews determine the quality of information obtained and therefore has impact on the quality of the research produced. For instance, Hewitt (2007), asserted that critical evaluation of primary sources of data will provide quality information. Hewitt also explained that source of literature may either provide updated or old/ non-updated information that negatively impacts on credibility of research. Similarly, Labaree (2013) cautions that while argumentative approach to analyzing literature can be a legitimate and important form of discourse, it can also introduce bias in the research outcome.

Based on the above considerations, I used types and sources of literature that would provide quality information for my research. For example, old sources of literature published in the 1950s and 1960s such as Peplau (1952) and Glaser and Strauss (1967) were used to obtain primary literature on the origin of conceptual models of nursing and Grounded Theory methodology respectively. Argumentative type of literature review recommended by Labaree (2013) was also used to obtain information on critical aspects that required to be compared such as a comparison between Glaserian, Straussian and Constructivist Grounded Theory methodologies (Kenny and Fourie, 2015) to identify and select the most appropriate method for the current study. To avoid author bias as cautioned by Labaree (2013), primary sources of data for the three Grounded Theory methods (Glaser & Strauss; 1967; Strauss and Corbin, 1990;
Charmaz, 2006) were reviewed to compare the Grounded theorists’ with Kenny and Fourier’s views.

Besides, a range of secondary sources of data recommended by Hall (2004) served as the key reference resources for identifying relevant and primary sources of literature. The most notable of these, also used by Hall, were the Web of Science databases from which cited publications and sources of the citations were accessed. Additionally, citation pearling that was used led to result in accessibility of significant proportion of the publications selected for analysis. Useful publications were found in the literature of several academic papers of conceptual models of nursing and research studies in which Grounded Theory methodology was applied. They included nursing education, research, clinical practice and administration/management papers as well as psychology, education, engineering ,strategic management which mostly took the form of research papers.

In the theoretical type of literature review, theories that underpin Grounded Theory methodology were established and justification for their use was verified. Symbolic interactionism explained in section 2.6.1 of chapter 2 was identified as the most used theoretical perspective in Grounded Theory methodology. Theoretical literature review was also used in analyzing extant conceptual models of nursing especially those that were proposed by the Department of Nursing for use in Kenya. This analysis helped establish a lack of appropriate conceptual model for mental health nursing. The use of theoretical literature review in this study confirmed its purpose as identified by Labaree (2013)
Conducting literature review requires a lot of multiple reading tasks and can be confusing and frustrating without a well thought out approach or plan. The steps in literature review advanced by Offredy and Vickers (2010) and Pautasso (2013) were useful to avoid this confusion. My first step in literature review was selection of a research topic. Selection of conceptual models of nursing was based on the knowledge I already had during MScN course on the contribution of theoretical basis of nursing to quality and professional nursing practice. Focusing the topic, to conceptual models in mental health nursing was guided by three considerations that are consistent with Cronin, Ryan, Coughlan (2008) and Pautasso, (2013) ideas as follows:

- Interest in improving mental health nursing in Kenya: There had been a lot of public outcry about mental health services in Kenya as explained in sections 1.1 and 1.2.1 of Chapter one. This public outcry about poor mental health services made improving mental health services through the use of conceptual models of nursing in mental health nursing practice an area of concern for the researcher in the current study.

- A mental health condition or problem as an important public health problem was another consideration. As reported in chapter one, 25% of all outpatients and 40% inpatients in general health institutions suffer from a mental health condition. The need to ensure that patients’ access quality mental health care was considered important and therefore an area of interest.

- Conceptual models for nursing care are a well-defined issue with a lot of available literature indicating their contribution to quality nursing care that includes mental health Nursing.

Once the topic was selected, the rest of the steps were followed with ease. The second step was identification of search terms while the third step was determination of literature databases.
through the university of Cape Town and home libraries. The last step involved filtering collected literature according to credentials of authors as well as according to significance of contribution of the text to the development of the research area.

3.2.3. Literature review in qualitative research

There has been a long standing debate about the place of literature review in qualitative research. Holloway and Wheeler (2010) observed that early researchers were discouraged from conducting literature review prior to data collection as it arguably invalidated research study. A notable view was that of Fernández (2004), who recommended removal of literature review chapter in qualitative research terming it methodologically unsound and a distractor from the true role of literature review. Similarly, Glaser (1992) advocated for tabula rasa approach in Grounded Theory research which means that the researcher should enter the field without having any preconceived ideas on the area of study. Glaser therefore advises against literature review until data analysis is almost complete and the substantive theory is developed. Details of Glaser’s views are discussed in section 3.2.4 of this document.

While acknowledging the overall advantages of literature review in qualitative research, Tummers and Karsten (2012), expressed reservations about its use in all phases because of the potential disadvantages. They argued that an extensive literature review in the initial research stage may make a researcher impose predetermined existing frameworks on the investigation with consequent flawed data collection methods. Tummers’ and Karsten’s views are held by many researchers (Carpenter, 2011) who recommend a cursory but not extensive literature review at the beginning of the study to help focus it (Creswell, 2003).
The proponents of the use of literature review in all phases of the research process explain the critical part played by literature in identification of what is already known in the area of interest, identification of research gaps, clarification of the research problem, and contextualizing findings (Carpenter, 2011). However, opponents of the use of literature review insist that it should be conducted after data analysis as it causes bias when done earlier. But they do not explain what should inform the researcher’s selection of the research topic without duplication of studies that have already been done on the topic or how to supplement the functions of the literature review beyond causing bias. This gap will continue to remain as long as some authors insist on literature review only after data analysis.

Being a novice researcher in qualitative methodology, it was critical to consider functions of literature review in totality before deciding the side of the debate to favor. I found myself starting to review literature to understand functions of literature review besides having a clear understanding on how to apply its principles in research. This therefore influenced my position which is exposed in 3.2.5 of the document.

### 3.2.4. Literature review in Grounded Theory research

The critical contribution of literature review in Grounded Theory research is not in question among researchers. Like in any other qualitative research, the big question in Grounded Theory is the stage at which literature review should be conducted during the research process (Cronin, Ryan & Coughlan, 2008; Tummers & Karsten, 2012; Nagel, Burns, Tilley and Aubin, 2015). While some Grounded Theory proponents advocate for limited literature review prior to
data collection, opponents argue that such a move will contaminate the researcher’s view. Glaser and Strauss (1967) who are the founders of Grounded Theory argued against literature review on the substantive area under study before commencement of data collection. Glaser and Strauss instead recommended literature review in the later stages of research as they argued that prior literature review would hinder the emergence of the theory from data.

However, Glaser (1992) later, while still maintaining his initial “tabula rasa” concept, clarified his stance by explaining that the literature related to the researched area should only be reviewed in the later stages of a study after data collection and analysis have been completed. To facilitate understanding of his argument, Glaser classified literature into three types. He labelled the first classification of data as non-professional which comprised popular and pure ethnographic descriptions. The second type is professional and unrelated to the substantive area under research while the third type is professional and related to the area under study.

Strauss and Corbin (Strauss & Corbin, 1990; Corbin & Strauss, 2015) in their later writings differed with Glaser’s views. They recognized that researchers have inherent personal and professional experience as well as knowledge acquired from literature that might include the intended area of inquiry. Strauss and Corbin therefore argued that literature reviewed prior to data collection could not necessarily interfere with emergence of the theory. Furthermore, they recommended engagement with literature in all phases of research as it could help the researcher identify important issues in the developing theory provided that the researcher watched against imposing literature on the theory (Strauss & Corbin, 1990).
It appears that the view held by Strauss in the later writings is favoured by many researchers who argue that some literature review prior to data collection and throughout the research process is necessary (Rodrigo, Peter, Peter & Karen, 2015). For instance, Thornberg (2012) observed that the idea is not to disregard existing knowledge, but to engage with it critically. Thornberg’s argument is supported by several authors (Strauss & Corbin, 1990; Cutcliffe, 2000; Charmaz, 2006; Dunne, 2011) who assert that a researcher always reviews literature whether technical or nontechnical as labelled by Strauss & Corbin, (1990) or, professional or non-professional as referred to by Glaser (1992) before beginning data collection and analysis. Furthermore, it is likely that this previous review will independently guide the choice of the area under research and its methodology.

Many authors who hold a stand point contrary to that of Glaser (1978) and Fernández (2004) term their argument as a narrow view of literature review. They posit that their stance of literature review does not consider the general functions of literature review beyond hindering emergence of the theory in a study. The authors argue that it is very unlikely that even without conducting a literature review specifically oriented to the researched area, a researcher will commence any study without some knowledge about it.

Some authors have also challenged Glaser’s tabula rasa concept as being in conflict with the principle of theoretical sensitivity in Grounded Theory research (Strauss & Corbin, 1990; Holloway & Wheeler, 2002; Duma et al, 2007). Theoretical sensitivity requires the Grounded Theory researcher to differentiate between the significant and non-significant data and having insight into their meanings which is not possible without the review of technical literature. To
support literature review with some caution, Morse (2001) believes that an initial literature review combined with bracketing prior worldviews provides novice researchers with knowledge about the concepts that they can then utilize in comparing with their categories as they emerge. He argues that this is a necessary compromise since avoiding a literature review prior to commencing a study will not necessarily eliminate any preconceived ideas and adds that if the phenomenon under study is related to the researcher’s own practice then knowledge and experience of the phenomenon is inevitable.

Although the debate still goes on, it is reasonable to conclude that the decision to or not to undertake an initial review and how much literature to access is a matter for professional judgment and the version of Grounded Theory being used by the researcher. This conclusion considers that it is the researcher's active, ongoing, and deliberate commitment to prioritize the emerging data over any other input that matters. Additionally, the debate of when to or not to review literature and its use in the emerging theory is an epistemological position (Nagel, et al, 2015; Rodrigo, et al 2015). Therefore it is important that the researcher using Grounded Theory methodology carefully explores and honestly acknowledges his/her epistemological position in the initial stages of research, as it is this positioning that ultimately frames the usefulness and potential impact of literature reviewed at initial stages of research. My position about literature review in Grounded Theory research is explained in 3.2.5

3.2.5. Literature review in the current study

I acknowledged the controversial views by expert researchers for and against initial literature review in qualitative research. The dilemma of which side to support motivated me to read even
more literature to gain better understanding before making a decision. Being a novice qualitative researcher, it was critical to consider functions of literature review in both qualitative and Grounded Theory methodology before deciding the side of the debate to favour. This in itself influenced my thinking about the importance of literature review and made me question the logic in delaying literature until data analysis. Secondly, it was necessary to develop a clear understanding of the methodologies for developing conceptual models or theories which required a thorough literature search. From the literature research I learnt about the three versions of Grounded Theory methodology. I needed to identify and select an appropriate one from ontological and epistemological positions of each Grounded Theory version. This again required literature search.

Besides literature review on the appropriate methodology, I needed to clarify my understanding of conceptual models of nursing, their evolution and why they don’t work in Kenya. I also had to develop a clear understanding of mental health nursing in the Kenyan context in order to identify gaps and come up with a statement of the problem. All these activities required extensive literature review.

Therefore, despite the views held by some expert qualitative and Grounded Theory researchers that reviewing literature in the early stages of the research process curtails inductive analysis and should be avoided (Gay, Mills & Airasian, 2006), I found initial literature review inevitable and therefore disagreed with views held by these experts. From the explanations in the previous paragraphs, it is evident that I automatically began the research with review of literature contrary to the views held by Glaser and Strauss (1967), Glaser (1992) and Fernández.
(2004). My experience with literature review is in line with Strauss, in her later writing with Corbin (Strauss & Corbin 1990) and other researchers (Rodrigo, et al, 2015; Thornberg, 2012) who advocated for reviewing the literature in all the phases of the research process. I take the position that when functions of literature review as enumerated by Gay et al (2006) are considered, then literature review becomes critical in the entire research process. Such functions include:

- Literature review as a source of information for the research area of interest: literature review generates knowledge for the researcher that serves to demonstrate to the proposal reviewers that the researcher is knowledgeable about the area of research and that research is justified. In PhD studies such as the current one, literature review was a requirement (Nagel, Burns, Tilley, & Aubin, 2015) for me to demonstrate knowledge in the field of conceptual models of nursing and their usefulness in improving quality of nursing care, provide evidence about the existing poor quality of mental health nursing care and justify the need to develop a conceptual model for mental health nursing in Kenya. It would be impossible for me to demonstrate such knowledge without literature review.

- Literature review provides the researcher with broader picture of the existing knowledge on the research area and enables him/her identify existing gaps that the proposed study will generate knowledge to fill and thus contribute to the existing body of knowledge. From review of policy documents by the Department of Nursing at the Ministry of Health of Kenya, it was possible to identify the conceptual models that had been proposed for introduction in Kenya. This identification gave direction on the models to analyze. Consequently their weaknesses that made them inappropriate for the Kenyan use was identified. Thus the gaps that required development of a customized conceptual model and its
methodology were identified. This action is consistent with the views of Bluff (2005) who argues that researchers have to be pragmatic. He observed that studying the selected phenomenon and appropriate methodology requires some form of literature review.

- Other functions of literature review that were identified in the current study included its usefulness in refining the research questions, comparing research findings and contextualizing them as well as identifying previous similar work and guiding organization of current report.

In preparation for the current study and during the entire research process, I searched several data bases using key terms on or related to conceptual models of nursing and Grounded Theory methodology. I already had some insight of what to look for based on the knowledge of advanced nursing practice course taken at MScN level and the public outcry on poor nursing services that consistently appeared on the media. Literature search was extensive. However three major categories need mention. The first category was literature on nursing services and mental health nursing in Kenya. Under this category, I wanted to understand the reasons underlying public outcry on the poor quality of mental health services. Both electronic and print literature sources were used. The Kenya Ministry of Health Policy documents on health agenda, nursing, mental health and health in general were studied for this purpose.

The second category was literature on theory based nursing practice. In this category, I studied literature on theoretical basis of nursing practice with particular focus on conceptual models and theories of nursing to understand their evolution, development, analysis and effective application in nursing practice. The third category of literature was on methodologies that are used in
development of theories or conceptual models. Under this category, both quantitative and qualitative research methods were studied initially before I focused on qualitative in general and Grounded Theory methodology specifically.

Examples of key terms I used in the literature search included the following: conceptual models or frameworks of nursing, nursing theories, developing or evaluating nursing theories or conceptual models/frameworks, literature review research, Grounded Theory, Straussian Grounded Theory, data analysis in Grounded Theory, etc. Only abstracts in English were considered for review. The content of the abstracts was evaluated to determine if the article was worth reading to completion.

3.3. The Conceptual Models of Nursing

In this section, I present information on conceptual models of nursing that was extracted from literature review. An analysis of the proposed conceptual models and the justification for developing a Kenyan one is presented in chapter 1.

3.3.1. Defining Conceptual models of Nursing

Conceptual models for nursing practice, are defined as a set of concepts and assumptions that together provide a comprehensive theoretical frame of reference within which the world view of nurses is determined (Fawcett, 2005; Parker & Smith, 2010; Rycroft-Malone, 2010; Mensik, Martin ,Scott, & Horton, 2011). According to Fawcett (2005), conceptual models of nursing constitute the third component of the structural holarchy of contemporary nursing knowledge and provide nurses with a perspective of conceptualization of the four major metaparadigms namely;
human being, nursing, health and environment (King and Fawcett, 1997; Parker and Smith, 2010; Parse, 2001). These metaparadigms form the basis for holistic care reflected in client assessment, diagnosis and planning interventions that are implemented, evaluated and documented (Newman, Smith, Dexheimer-Pharris & Jones, 2008; Parker & Smith, 2010; Willis, Grace, & Roy, 2009).

3.3.2. Evolution of conceptual models for nursing

Conceptual models of nursing in their current conceptualization originated from the United States in the 1960s at a critical period during which nurses wanted to demonstrate the body of knowledge specific to nursing (Murphy, Williams and Pridmore, 2010). Otherwise conceptual models have existed since Nightingale first advanced her ideas about nursing although at that time they were considered informal (Parker, 2005; Parker & Smith, 2010). The goal of conceptual nursing models was to move nursing away from the heavy influence and dictatorship of medicine (Pearson, Vaughan & Fitzderald, 2005). The use of conceptual models of nursing as argued by Pearson et al, (2005), would be more suitable for patient care as well as give credibility to nurses who were at the time advocating to gain independence from medicine by explicitly demonstrating differences between (Homes, 1990).

However, Wimpenny (2002) observed that divergent and ambivalent views on the impact and relevance of conceptual models of nursing have characterized the 21st century. Wimpenny (2002) noted that the near complete irrefutable application of conceptual models of nursing that occurred in the 1970s had since changed as nurses started to question their value and expressing a lot of doubt about their purpose, implementation and contribution to nursing science. For example Cash (1990) and Biley (1992), argued that conceptual models are too general in nature
and redundant in the evolution of nursing science. Murphy et al (2010) also reported how Tierney (1998) and Roper, Logan and Tierney (1980) models were heavily criticized and seemed to have fallen out of favour in the past 10 years.

The criticisms of conceptual models of nursing could be categorized at intrinsic and extrinsic levels. Intrinsic criticisms stem from terminologies in the nursing models which Kenny (1993) and Hodgson (1992) described as full of jargon and complex concepts. For instance, Murphy et al (2010) contended that the use of complex terms such as intra, inter and extra-personal stressors affecting the system with a central core, lines of resistance and two lines of defense when referring to the human being in Neuman’s model renders the models inaccessible. Miller (1984) also argued that the conceptual models of nursing were ideals and were not relevant to practical issues of nursing and therefore contributed to the gap realized between learning theoretical basis of nursing in class and actual practice.

Extrinsic criticisms according to Murphy et al (2010) stem from factors that are external to the conceptual model. Such factors include the strategy applied in implementing the model, negative perceptions towards change and failure to understand the reason behind development of the conceptual model. Kenny (1993) implied that when the methods used to introduce conceptual models from the policy makers to the nurses is not all inclusive, nurses feel left out, with no sense of ownership and therefore fail to adopt or apply the model in their practice. Kenny (1993) in addition, argued that some nurses are not only resistant to change, but lack training on how to apply the models as well. Kenny asserted that these two factors also contribute to failure to apply the models in practice. Hodgson (1992), unlike Kenny argued that the main reason why
nurses fail to use the conceptual models in practice is because they do not believe that their use improves patient care. Nurses instead perceive that the use of the models is basically to improve professionalization of nursing. Despite the own going criticisms, Aggleton and Chalmers (2000) appealed to nurses to embrace nursing practice based on theory, objectivity and identified dynamic client needs. Aggleton and Chalmers argue that theoretical based nursing practice will enable nurses to provide care that is systematic, individualized and based on the client’s needs. Although they acknowledge challenges with the models, Aggleton and Chalmers, viewed the models as having the great ability of bringing nurses together thereby contributing to growth of the nursing profession. Their view is shared by McKenna (1994) who advocated for the use of conceptual models as structures for providing care.

Currently there is renewed interest in conceptual nursing models. It is now widely recognized that theory-based nursing practice that includes conceptual model is essential to the continuing evolution and recognition of the discipline of nursing. Furthermore, recognition of nursing is dependent on its justified visibility in contributing to patient health outcomes. Newman, Smith, Dexheimer-Pharris and Jones (2008) Roy and Jones (2007); and Willis, Grace, and Roy (2009) are all in agreement that if nurses do not learn and practice based on the knowledge of their discipline, they may be submerged into the practice of other disciplines.

**3.3.3. Structure of conceptual models**

Fawcett (2005), Tomey and Alligood (2006) and McEwen and Wills (2011) are consistent that conceptual models of nursing consist of concepts and relational statements that are also called
assumptions and often represent its principle beliefs and values. These usually act as guides for nurses during application of the theory in practice and are used to determine the extent to which the conceptual model is consistent with philosophies and values of the organization. Fawcett (2005) describes conceptual models as the third out of the five constituents of the structure of holarchy for nursing knowledge. Fawcett further describes conceptual models as more abstract than theories but less abstract than the nursing metaparadigm concepts.

Conceptual models focus on the phenomena of concern to the discipline such as the human being as adaptive systems, self-care deficits, unitary human beings, human becoming or health as expanding consciousness (Fawcett, 2005; Parker, 2005; Parker and Smith, 2010). Conceptual models of nursing originate from generalizations that nurse scholars make based on long standing experiences and ideas derived from multiple studies. Conceptual models are also developed by inductive methods by formulating generalizations about specific observations. Conceptual models of nursing consist of four major metaparadigm concepts that are common to all of them. They are the person or human being, health, environment and nursing. Although the four concepts are the cornerstones of each model and share basic principles, every nurse theorist has their own areas of emphasis that differentiates one conceptual model from another. The area of emphasis varies with the different theorist’s philosophy and consequently, the purpose of nursing and required competencies may then vary. In this chapter, I have discussed the basic general metaparadigm concepts of conceptual models. Discussion of the specific details for each conceptual models that differentiate them from one another are not included. In the subsequent paragraphs, the concepts are discussed.
Human Being: This is the first basic concept. The human being is the recipient of care. The human being or person represents an individual person, family, community or a group. Each human being is made up of many components that cumulatively make him whole. The components include psychological, social-cultural, physical and spiritual areas of a person's life. These components are of importance to individual client, family or community. The unique perspective on nursing that is essential to care is the conceptualization of the client of care as being more than the medical diagnosis that caused him/her to seek health care services.

Environment: The second basic concept is the environment. The environment can be external and internal and is described as consisting of all internal and external conditions, circumstances, and influences affecting the human being. The external environment includes the surrounding in which a person lives in most of the time including the socio-economic components as well as the social networks within their environment. The internal environment consists of the physiologic, spiritual and psychological subsystems of the person. The environment has determinants of disease and support systems that influence a person’s health and recovery from illnesses. For instance, an individual who regularly accesses quality health care services is in a better position to go through screening for many diseases such as cancer during their asymptomatic stages. Early detection and interventions for such diseases are likely to lead to better health outcomes.

Health: The third fundamental concept is health. Fawcett (2005) defines health in the context of concepts in nursing models as the wellness or illness state of the recipient or degree of wellness or illness experienced by the person. Nurses are encouraged to constantly have knowledge about the health of their clients. In this regard, nurses need to initially pay attention to primary health
concerns of the client and subsequently to the client’s overall wellness. For example, a client seeking help for cardiovascular disease is viewed as a unique individual with distinct psychosocial and spiritual needs as well and not only the physiological aspects of cardiovascular disease.

*Nursing*: This is the fourth concept in conceptual models of nursing. Nursing refers to interventions that the nurse performs for the client who is totally dependent on the nurse or performs, with the client who is able to participate in their own care. As a concept, nursing is considered as both a science and an art or practice. Nursing is conceptualized as including learning, leading, making rational decision and formulating strategies that meet individualized client’s needs holistically and not just their immediate health concerns. The fundamental roles of a nurse within the concept of nursing consist of promotion of well-being, healing, disease and injury prevention and alleviating suffering by use of every possible means that is within ethical and legal frameworks.

### 3.3.4. Arguments on usefulness of Conceptual models of nursing

The introduction of conceptual models of nursing in professional nursing practice has been emphasized as one way to enhance professional nursing advancement. Nurse researchers, scholars and theorists (Draper, 1990; Fawcett, 2005; Parker, 2005; Pridmore et al, 2010; Wimpenny, 2002) assert that the development of conceptual models of nursing was a commitment in response of the desire to generate a unique knowledge base that would make nursing distinct from other disciplines. This was especially, in reference to medicine to which nursing was seen as subservient at the time. Nurse researchers and scholars were hopeful that the
unique knowledge of nursing generated through use of models of nursing would be validated and ultimately, added to the profession’s knowledge base with regards to clear definition of nursing, its values and the contribution it makes to the larger health services (Draper, 1990; Fawcett, 2005; Parker and Smith 2010; Pridmore et al, 2010). It was also anticipated that application of these models would lead to the development of practical theoretical tools that would help nurses in their everyday practice so as to increase nursing visibility through justification of nurses’ contribution to client’s health outcomes.

Accordingly, conceptual models of nursing have largely contributed to the goals for which they were developed though there are some criticisms against them. There exists a wide consensus that conceptual models provide consistency in nursing practice and facilitate communication as well as providing a mechanism for engaging in a systematic approach to nursing research, education and practice. Alligood and Tomey (2006), Fawcett (2005) and Parker (2005) demonstrated that conceptual models of nursing guide not only clinical practice, but education and research as well. When applied together with the nursing process, a conceptual model of nursing organizes nursing approach to assessment in a way that the nurse is able to focus on the client as an individual so that the client’s unique needs are identified and relevant care is provided. Such a model also guides the planning, implementation and evaluation phases of the process.

For example, using Callista Roy’s adaptation model, the nurse applies the nursing process with assessment at two levels. The first level assessment is directed towards the adaptive modes while the second level assessment focuses on the stimuli. On the basis of assessment data, the nurse is
able to make nursing diagnoses, plan and implement interventions that focus on manipulating the
stimuli. Subsequently, adaptive modes are evaluated for the effects of intervention. Adaptation
which is the goal of nursing is inferred from the behaviour in the four adaptive modes.

Pridmore et al (2010) suggest that theoretical models of nursing can provide a platform for re-
examining and reasserting the essence of nursing and its contribution to health care. Pridmore et
al (2010) demonstrated how conceptual models of nursing could be used to address issues of
concern to the Chief Nursing Officer (CNO) for England (Maben and Griffiths, 2008).

According to the CNO for England, there were four areas central to nursing to robust the
measurement of the nursing contribution. Delivery of compassionate, client centered and
individualized care was the first central area. The second was the management of chronic disease
and empowering clients to self-care while the third and the fourth respectively were the need to
measure and account for the nursing contribution to health care and the need to develop a
flexible career structure for nurses.

The purpose of a nursing model is to guide rather than to prescribe practice. Conceptual model
used together with the nursing process helps nurses to formulate a view of the client’s experience
of ill health from the client’s own perspective. It is important to note that many of the
fundamental concepts inherent in nursing models such as the nature of caring, the explicit role of
the nurse and individualized care as well as client empowerment are still relevant to
contemporary nursing and underpin present day nursing policy.

Pridmore et al (2010) and Parker (2005) contend that conceptual models of nursing direct nurses’
actions that include comprehensive assessment with consideration of client’s participation in their own care. The models also guide nurses in providing individualized client care efficiently and effectively. Tierney (1998) support the use of nursing models and emphasizes their significance in making nursing visible with regards to the distinct contribution they make in clients’ health outcomes as well as professional independence. Theoretical models for nursing can provide a platform for highlighting the nursing contribution to health care. I argue that in the current dynamic health sector reforms globally, renewed interest in reconsideration, embracing and utilizing conceptual models of nursing becomes important to articulate the nursing voice, increase nursing visibility and reduce the theory-to-practice gap.

### 3.3.5. Methodologies for developing conceptual models in nursing

Aggleton and Chalmers (1986) described three ways in which nursing models and theories can be developed as inductive, hypothetico-deductive and reproductive approaches. According to Aggleton and Chalmers, inductive approach involves moving from specific observation to general explanation while hypothetico-deductive involves moving from existing research findings to identification of hypothesis to be tested. The third approach which is reproductive is described by Aggleton and Chalmers, Fawcett (2006) and Lee (2014) as a combination of both inductive and hypothetico-deductive approach.

Satu, Kääriäinen, Isola, and Kyngäs (2013) in support of inductive and deductive approaches to development of nursing theories argued that if both approaches are used, then they occur in turns, implying that the development process may begin using either an inductive or a deductive approach, depending on the nature of the data. However they referred to hypothetico-deductive
approach simply as the deductive method which involves looking for the compatibility of a
general nursing theory with nursing practice. Lee (2014), however, argued that other than the
two methods explained by Satu et al, (2013), nursing theories can also be derived reproductively
as proposed by Aggleton and Chalmers(1986) and Fawcett (2006) through looking for the
generation of ideas to devise a theory and approaches to theoretical inquiry.

Meleis (2007) came up with four different approaches which she called theory–practice–theory,
practice–theory, research–theory, and theory–research–theory that may be used to initiate the
process of theory development in nursing according to their origin such as theory, practice and
research. According to Meleis, the theory–practice–theory is the first approach to theory
development. Its origin of this approach is a theory which is typically non-nursing but describes
a phenomenon of interest. This approach assumes that the theory can help describe or explain the
phenomenon, but it is not completely congruent with nursing and is not directly defined for
nursing practice. However, it may be used to explain a selected clinical situation (e.g. adaptation,
stress, health beliefs) with its propositions and concepts modified and applied to the clinical
situation. Examples of such theories as given by Meleis (2007) include Benner’s use of
Dreyfus’s Model of Skill Acquisition to describe novice to expert practice (Benner, 2001) and
Roy’s use of Helson’s Adaptation Theory to describe human responses.

The second approach by Meleis (2007) is practice–theory. This is referred to as inductive
approach by other authors and begins with a question evolving from a practice situation. It relies
on observation of new phenomena, development of concepts, labeling, describing, and
articulating properties of these concepts. To accomplish this, the researcher observes the
phenomenon, analyzes similarities and differences, then compares and contrasts responses. Findings are used to develop concepts and propositional statements. Examples of this approach include a situation-specific theory of Caucasian cancer patients’ pain experience (Im, 2006), and “keeping the spirit alive” among children with cancer and their families (Woodgate & Degner, 2003). The practice-theory approach or the inductive approach was deemed suitable for the current Grounded Theory methodology which is described further in the methodology section of this thesis.

Meleis’ (2007), third approach is the research–theory which emphasizes on empiricism and is therefore a deductive method. The researcher selects a phenomenon of interest to the profession, and identifies and lists its characteristics that should be measured. The method to measure the characteristics of the selected phenomenon is developed. A controlled study is designed and conducted during which the characteristics of the phenomenon are measured. The results are analyzed to determine existence of any systematic patterns which are then formalized into theoretical statements. Examples of this approach include a report outlining a conceptual framework for caring in nursing practice (McCance, 2003), and a theoretical look at the involvement of relatives in palliative care (Andershed & Ternestedt, 2001).

According to Meleis (2007), Theory–Research–Theory is the fourth approach. A selected theory is defined and propositions for testing are determined. The research findings are used to further modify and develop the original theory or create a new theory which can be used as a framework for research. Examples of this approach include a theory of genetic vulnerability developed from Roy’s Adaptation Model using Grounded Theory methodology (Hamilton & Bowers, 2007), and
the theory of diversity of human field pattern, which was developed from Martha Rogers’ Science of Unitary Human Beings using a quantitative research design (Hastings-Tolsma, 2006).

Although Meleis (2007) had four approaches that were labelled differently, they all use the principles of inductive or deductive approaches to theory development which utilize quantitative or qualitative designs. An inductive approach to theory generation is utilized when the purpose is to develop a theory on an area with a dearth of information such as in the current study where the views of Kenyan nurses on the four nursing metaparadigms had not been explored. Deductive methods on the other hand are utilized when theoretical presumption concerning the subject on which the theory is being formed is required.

From the literature reviewed, the main methods that are used to develop nursing theory are inductive and deductive. This conclusion is supported by Liehr and Smith (1999). In their attempt to determine the approach used in developing nursing theories and models, Liehr and Smith (1999) reviewed 10 years of nursing literature on developing middle range theories in the late 1980s and 1990s. Their findings confirmed that most of the theories were developed inductively or deductively or reproductively.

3.4. **Conceptual models in Mental health Nursing**

Philosophical analysis of conceptual models of nursing by Sellers, (1991) indicated that despite, proliferation of nursing conceptual models that started in the 1950s, none of them was specific to the practice of mental health nursing. Peplau’s (1952) theory of psychodynamic nursing was the first formalized conceptual model of nursing. Review of various literatures by different theory
evaluators (Fawcett, 2005; Chinn & Kramer, 2011; Meleis, 2007) reveal that other than being linked to mental health by use of the terms “psychodynamic or interpersonal relationship nursing”, the theory is not specific to mental health nursing. Other conceptual models of nursing which have been applied to mental health nursing practice though not specific to the discipline include but not limited to those by Callista Roy, Martha Rogers, Benner and Wrubel (1989) as well as Travelbee (1971).

Based on all the literature reviewed during the current study and my previous experience with conceptual models of nursing as MScN student, Barker’s (1998) Tidal model is the only known model that was developed specifically for mental health nursing practice in the UK. The primary philosophical metaphor of the “Tidal Model” is derived from the chaos theory in which the unpredictable, bounded nature of human behaviour and experience is compared with the dynamic flow and power of water and the tides of the sea (Barker, 2000). The Tidal Model emphasizes a utilitarian method in identifying the problems of living, in a way that demonstrates respect for clients of care. The model aims to construct a narrative-based form of practice (Barker & Buchanan-Barker, 2005), that ensures there is individualized treatment for each patient as a unique being. The Tidal model differs from most other contemporary nursing models which employ evidence-based approaches, where features are established on the assumption that each patient is an equivalent subject to that of the research population (Barker, 2000).

Tidal recovery model places emphasis on the unique needs of each individual, while recognizing the common humanity that all human beings share. It focuses on people as individuals, rather than on their symptoms, or on statistical populations or diseases. Tidal model is credited as a
solution-focused rather than a problem-focused or diagnostic approach to care. It therefore contributes a different and complementary view of the person and the person’s difficulties. As a focused recovery approach, nursing care depends on an effective nurse-patient relationship that is consistent with, Peplau’s (1952) model of interpersonal relationships in which there is unconditional acceptance and respect.

Critical to the Tidal model, are three dimensions: The World dimension where the nurse examines the patient's experiences of distress, trauma, or illness, which led to the current state in which the patient finds him/herself (Barker, 2000). For instance, the nurse examines the self-dimension containing issues that revolve around the patient's emotional and physical security. Evaluation of emotional stability and the likelihood of physical self-harm as well as measures to protect the patient are conducted (Barker, 2000). Lastly, other dimensions where the focus is on the patient's means of leading a normal life after recovery are explored. The nurse assesses the resources that the patient has, identifies the needs and gap and strives to equip them with the lacking resources (Barker, 2000; Barker & Buchanan-Barker, 2005) Wilkin (2002) and Clay (2004) support application of the Tidal Model, as key in maintaining credible standards in the quality of mental health nursing care. However, Tidal Model is reportedly not applicable in hospitals with limited resources with a nurse: patient ratio 1: >10. It is argued that it is quite impossible to provide sufficient time for nurses to be with each patient in such circumstances. The heavy workload might already have emotionally drained and caused stress or burn out to the staff thus they might not have the capacity to support and implement the Tidal Model. In a low resource country such as Kenya with a nurse-to-patient ratio of 1 nurse to more than 1,500 people with mental health problems, it is imperative to consider a conceptual model that would
take the unique context of practice of mental health nursing practice into consideration.

3.5. **Summary**

In this chapter, I have discussed literature review including its importance and its place in qualitative and Grounded Theory research. I have also discussed conceptual models of nursing, their evolution and use in improving quality of nursing care. The third significant issue discussed is the methodologies that have been used in development of conceptual models of nursing. From these discussions it is reasonable to conclude that:

- Conducting literature search is critical to the research process in all phases although the debate on whether to undertake an initial review and how much literature to access still goes on. My position is that literature review has many functions and should be undertaken in all phases of the research process including the initial stages. I support the authors who recommend that each researcher uses professional judgment, bracketing and deliberate commitment to treat emerging concepts from data as priority and guard against using information from literature to influence them.

- Conceptual models of nursing can significantly improve quality of nursing care and professional development of the nursing discipline. However, the conceptual models need to be customized to improve their uptake. Inductive, deductive and deductive approaches can be used for development of conceptual models for nursing practice. I support the use of Grounded Theory using inductive approach to facilitate development of a customized conceptual model for practice.
CHAPTER FOUR: METHODOLOGY

4.1 Introduction

In this chapter, research methodology is described including justification for the design, sampling technique, recruitment and Grounded Theory applied in the study. The purpose of the study was to develop a Kenyan mental health nursing model for quality mental health nursing practice. The main research question guiding the study was: What is the appropriate conceptual model for mental health nursing practice in Kenya? To answer this question it was important to use qualitative and theory development appropriate methodology using participants’ views as data, hence the use of Grounded Theory. Additionally, the choice of practicing mental health nurses was necessary because they represented rich sources of data relevant for the study. To facilitate flow of information, the chapter is organized into three parts. The first part explains study design, part two discusses Grounded Theory methodology while the last part describes application of Grounded Theory in the current study.

4.2 Study Setting

The study setting was multisite, conducted in six regional mental health units and one national mental health teaching and referral hospital. Kenya consists of eight regions formerly called provinces that translated to eight regional and one national mental health hospital. The regional mental health units and the national mental health hospitals were purposively selected because they offered an environment where the researcher was likely to find maximum number of mental health nurses in active mental health nursing practice. The sites also allowed for recruitment of
mental health nurses with varying experiences, attitudes and demographic characteristics. The range, circumstances and scope of mental health nursing practice vary with each level and type of care. Therefore, purposeful selection of different regional and national mental health hospitals provided rich sources of data.

Grounded Theory advocates for purposive sampling since its inception as the preferred method for getting rich sources of data (Glaser & Strauss, 1967; Strauss & Corbin, 1990; Duma et al, 2007; Khan, 2014). Other researchers also propose the use of purposive sampling in cases where the population has the required characteristics with regards to study objectives (Mugenda and Mugenda, 2003). These reasons justify the selection of the study setting.

4.3 Study Design

Exploratory qualitative research design, employing Grounded Theory methodology was used in this study. According to Schurink (2004) qualitative research stems from an interpretive research paradigm with subjective epistemology and relativist ontology perspectives. The typical purpose of qualitative research that employs subjective epistemology and relativist ontology is to understand peoples’ social life processes and the meanings they attach to such processes. Schurink’s stance is consistent with Creswell’s (2009) and Tubey’s (2015) position that qualitative research is a vehicle through which what individuals or groups attribute to a social problem is explored and understood. Qualitative research emphasizes and values the human interpretive aspects of exploring the social world and the significance of one’s own interpretation and understanding of the phenomenon under study (Richie & Lewis, 2004).
The exploratory qualitative research design was selected because it is recommended in studies that seek to understand a phenomenon for a problem that has not been clearly defined or understood (Glaser and Strauss, 1967; Strauss & Corbin, 1990; Schreiber and Stern 2001; Hallberg, 2010; Hunter et al, 2011). The design was appropriate in the current study where Kenyan mental health nurses’ views on major nursing metaparadigm concepts had not been understood and therefore needed exploration. The interpretivist paradigm of inquiry such as qualitative approach used in the study explained the particular world views held by mental health nurses on mental health nursing practice, human being as the client of care, environment and mental health.

4.4 The Grounded Theory Methodology

Grounded Theory was first advanced by Glaser and Strauss (1967) and later expounded by Strauss and Corbin (1990), Charmaz (2000,2006) and Corbin and Strauss(2008). Both founders and proponents of Grounded Theory agree that it is a systematic methodology in social science mainly used in qualitative research to generate theory inductively from empirical data (Morse 2001; Gay et al., 2006; Hunter et al, 2011). Grounded Theory seeks to develop a theory about issues of importance in peoples’ lives (Glaser, 1978; Glaser & Strauss, 1967; Strauss & Corbin, 1998). It does this inductively in that the researcher does not have preconceived ideas nor hypothesis to prove or disprove. Rather, issues of importance to participants emerge from the stories that they tell about an area of interest that they have in common with the researcher such as nursing processes.
Grounded Theory, in addition, concentrates on specific social processes for narrower empirical areas of study, such as how mental health nurses develop interpersonal relationships with their clients (Heidt 1990, McCann and Baker 2001). In mental health nursing, interpersonal relationship is therapeutic and core to nursing processes (Peplau, 1955). From my experience in mental health nursing practice, nurses’ views on the metaparadigms of nursing greatly influence the development and type of interpersonal relationship between the nurse and the patient which in turn determines therapeutic outcomes.

Grounded Theory methodology was selected because its epistemological and ontological underpinnings made it valuable in development of the conceptual model of mental health nursing practice which was the focus of the study (McCann & Clark 2003; Hunter et al, 2011; Glaser, 2005; Glaser and Strauss, 1967). The Grounded Theory method provided guidelines on how to identify, make links and establish relationships between categories that lead to theory formation. This was consistent with the aim of Grounded Theory method which is to develop a theoretical framework that proposes a hypothesis based on the information within the data, rather than to test existing hypothesis within a setting. Grounded Theory originates in Symbolic Interactionism and reality based on knowledge acquired about world views and perceptions people hold on given contexts or objects (Denzin 1989).

Using Grounded Theory in this study was premised on assumption that nurses have unique world views they hold on major metaparadigm concepts during their interaction with patients. Use of Grounded Theory’s general inductive method, would provide for generation of concepts and subsequently the conceptual model from empirical data rather than from extant literature. A conceptual model generated would be customized to the Kenyan mental health nurses and clients.
of care. In my perspective, identification, analysis and understanding mental health nurses’ views on the four major nursing metaparadigm concepts (human being, nursing, environment and Health) advanced by nurse theorists (Fawcett, 2005; Parker & Smith, 2010; Pridmore et al, 2010; McEwen & Wills, 2011), was a critical step to customize the conceptual model.

Through constant comparison during data analysis process, relevant literature was reviewed and categories from nurses’ views were compared to those in extant literature. Nurses’ views which were consistent with the ones proven to contribute to quality mental health outcomes were integrated and used as a basis for developing a Kenyan conceptual model of mental health nursing practice. This action is consistent with recommendations by some Grounded Theorists. For instance, Straussian Grounded Theory that was adopted for this study recommends use of literature in concept development, defining properties and dimensions, and comparisons with the data (Strauss and Corbin, 1998; Yarwood & Jack, 2015).

The benefits offered by Grounded Theory methodology in the current research included its appropriateness for socially constructed experiences based on empirical data derived during interviews and analysis (Goulding, 1998; Charmaz, 2003; Hallberg, 2010). In using Grounded Theory method, my intention was to discover a theory grounded in data and not to test or duplicate concepts and hypotheses. Use of Grounded Theory allowed for exploration of the mental health nurses’ views on the four major metaparadigm concepts and their concerns in respective specific situations of mental health nursing practice. It, additionally, allowed for explanation of how the views held by mental health nurses guide them in resolving the challenges in professional practice.

Grounded Theory also aims to understand reality from concepts people hold on certain contexts
or objects, so as to generate knowledge, improve understanding and provide a meaningful guide for action (Dantas, Leite, Lima & Stipp, 2009). Thus, in the context of the current study, the purpose of Grounded Theory was to discover concepts within the views of nurses on the four nursing metaparadigms under study and enable the researcher to develop and relate metaparadigm concepts with one another and eventually develop a model. Grounded Theory employed in this study allowed for the construction of a model for nursing practice inductively through its processes such as coding, constant comparison, identifying the core category and a unifying theme that determined the nature of the model in accordance with suggestions by Glaser (2005), McCann and Clark (2003) and Corbin and Strauss (2008).

Grounded Theory was valuable in the development of the conceptual model in systematic concurrent data collection and analysis process throughout the inquiry to allow the salient features of the meaning that mental health nurses hold about clients with whom they interact with regards to their environments, mental health and mental health nursing practice. The process of developing a conceptual nursing model for practice in this study was consistent with that of constructing and developing a model using Grounded Theory as advanced by its founders and proponents. In the subsequent section, key characteristics that define the process of developing a theory using Grounded Theory are outlined while their application in the current research is discussed in Chapter five.
4.4.1 Key characteristics in the process of constructing and developing a model using Grounded Theory methodology

There are key characteristics that define Grounded Theory methodology and are reflected in its research process. According to Grounded theory founders and proponents like Glaser and Strauss (1967), Berterö (2012) and Khan (2014) among others, the defining characteristics are:

- **Simultaneous involvement in data collection and analysis**: Data analysis in a Grounded Theory study commences as soon as data collection begins and continues in parallel with it. In this study, it was found advantageous in that it directed me to more relevant sources of data and I did not have to get what Smith (2015) refers to as volumes of unfocused data that do not lead to anything new.

- **Construction of analytic codes and categories from data**: In Grounded Theory, the researcher creates codes based on what they see in data and not from preconceived logical hypotheses. The process of coding involves defining what the data are about during open, axial and selective coding procedures which are further described in chapter five.

- **Using constant comparative method**: The researcher makes comparisons during all steps of data analysis. At every stage of analysis, obtained data are coded and constantly compared with previously developed codes to generate categories which may be developed further or modified leading to systematic theory generation.

- **Theoretical sampling aiming toward theory construction**: In Grounded Theory, study, sample size is not determined by representativeness but at rich source and saturation of data. This means that sampling continues even during data collection and is directed by findings from the data of the preceding sample. Therefore analysis of the data informs sample selection (Glaser and Strauss 1967) which is based on further development of the emerging theory.
This explains why in the current study, data was not collected from all nurse managers before clinical nurse practitioners. From emerging concepts, it became important to move from nurse managers to clinical nurse practitioners and back to the managers. It also became necessary to include nurse educators who were not in the recruitment plan.

- **Memo-writing:** Glaser (1978) emphasizes that memoing is “the core stage in the process of generating a theory.” In memoing, the researcher writes up ideas that come up during data analysis stages and the theoretically coded relationships. Memoing works as an accumulation of written bank of ideas about concepts and how they relate to each other. The bank contains rich parts of what will later be the written theory.

- **Conducting literature review after developing an independent analysis:** Although conducted literature is a key feature in Grounded Theory, it remains controversial but all Grounded Theorists agree that extant literature should not be allowed to influence emergence of a theory that should entirely emerge from data. In Glaser’s classical Grounded theory, literature review on the substantive area of study and related areas should be avoided until the core category emerges and the theory is well developed to avoid preconception and forcing data to develop a theory. Straussian grounded theory on the other hand advocates for early literature review and during the entire research process but cautions the researcher not to allow extant literature hinder creativity and emergence of the theory. Charmaz constructivist Grounded Theory advocates for delay in literature to allow researchers develop their ideas but acknowledges that extant literature can help the researcher clarify their ideas. Charmaz also cautions researchers not to allow the literature interfere with theory emergence.
4.4.2 Straussian Grounded Theory and its selection over classical and constructivist Grounded Theory schools

Straussian Grounded Theory evolved from the late 1980s (Strauss, 1987; Strauss & Corbin, 1990, 1998) when Strauss differed with Glaser on some aspects of Grounded Theory procedures and continued to refine the version of the theory. Straussian Grounded Theory differed with Glaser mainly in the use of literature review and data analysis procedures. With regards to the use of literature review, Straussian Grounded Theory recommends early engagement but cautions against exhaustive and comprehensive review of literature in the substantive area. Moreover according to Strauss, engagement with literature should be ongoing throughout the research process as a secondary source of data or for comparisons with emerging empirical data (Yarwood & Jack, 2015). Furthermore Strauss argues that literature can direct theoretical sampling, and help with concept development and defining properties and dimensions. However, he cautions researchers not to allow extant literature hinder their creativity and interfere with emerging theory from empirical data.

Classical Grounded Theory on the other hand recommends no consultation of relevant academic literature before and during Grounded Theory study until data analysis is done so as to ensure an open mind, without undue influences. Constructivist Grounded Theory advises researchers to guard against becoming immersed in literature at the expense of their creativity and therefore recommends compilation of comprehensive literature review after data analysis.

In data analysis, Straussian Grounded Theory (Strauss & Corbin, 1990, 1998), moved towards verification, rather than focusing on the earlier version of Grounded Theory. Strauss and Corbin
also came up with three stages of coding with a more structured and rigid coding procedure than
the classical and constructivist Grounded Theories which have two stages of coding (Kenny and
Fourie, 2015) Straussian Grounded theory data analysis methods are discussed with application
to the current study in chapter five.

In response to Straussian version of Grounded Theory Glaser criticized Strauss as eroding
Grounded Theory with a different research method. Despite criticisms from Glaser, Straussian
Grounded Theory is reportedly more famous than the earlier version of Grounded Theory and
serves as a tool for conducting Grounded Theory approach for many graduate students globally
(Charmaz, 2014).

For current study, I selected Straussian Grounded Theory because of five reasons. Firstly, the
study was led by research questions which needed to be clarified from literature review.
Straussian Grounded Theory permits a preliminary literature study to identify research problems
and the areas in which to look for data therefore it permitted me to review literature to refine the
research questions. Secondly, my prior knowledge of conceptual models based on previous
training on them made Glaserian tabula rasa approach inappropriate. Thirdly, Straussian
Grounded Theory provided a more structured approach for data analysis within constant
comparison precincts that I understood better than the other versions of Grounded Theory.
Fourthly, Straussian Grounded Theory is based on social interactions and processes that underpin
nursing metaparadigms that the study sought to explore. Finally, Straussian Grounded Theory
gives more specific coding directives that enhance clarity, and guide data analysis and therefore
more appropriate for the novice Grounded Theory researchers such as the researcher in the
current study.

4.4.3 Main methods and procedures in Grounded Theory methodology

There are specific methods in sampling, data collection and analysis that are unique to Grounded Theory methodology. The uniqueness of Grounded Theory according to Strauss and Corbin, (1998) and Corbin and Strauss (2008) are based on two premises. Firstly, it is based upon patterns found in empirical data and not from inferences, prejudices, or association of ideas. Secondly, it depends on constant comparison between emergent theory and new data that directs theoretical sampling until theoretical saturation is reached. Application of sampling and data analysis methods in the current study are described under data analysis in chapter five. However in this section, their definitions and principles are briefly explained.

**Sampling in Grounded Theory:** The unique sampling method in Grounded Theory is theoretical sampling (Strauss and Corbin, 1998). This is a special sampling technique in which the researcher is directed to the next sources of data based on theoretical analysis and emerging theory (Glaser and Strauss 1967; Charmaz, 2006; Khan, 2014). This means that analysis of the data informs sample selection (Bluff, 2005; Khan, 2014) which is based on further development of the emerging theory. Theoretical sampling differs from open sampling although both are Grounded Theory sampling techniques. Open sampling is the initial or purposive sampling which involves making specific considerations regarding selection of the starting point or site for recruitment of participants and the type of data to collect. Theoretical sampling evolves during data analysis following the initial open or purposive sampling, data collection and analysis. A major consideration during open sampling is selection of participants who form rich source of
Data collection in Grounded Theory: This involves obtaining information systematically through interviews, field notes or records (autobiographies, diaries etc.) on the phenomenon of interest. Interviews may be unstructured or semi-structured. Bluff (2005), observes that semi-structured and unstructured interviews can be used for data collection in Grounded Theory. Unstructured interviews generally consist of one or two open-ended questions that guide the discussion. The researcher can then probe and seek clarification that allow elaboration without imposing ideas on the participant. Semi-structured interviews preferred by Strauss have more questions than unstructured interviews. However, Strauss cautions against the use of too many questions that inhibits discovery.

Interviews may take 50-180 minutes (Glacken et al. 2003), depending on the nature of the phenomenon under study. During interviews researchers are cautioned to guard against causing distress to participants. The researcher therefore needs to be sensitive and may need to offer support when sensitive issues regarding participant’s life are the subject of inquiry (Landmark and Wahl, 2002).

During data collection, the researcher is cautioned against being influenced by preconceived ideas. Founders of Grounded Theory (Glaser and Strauss, 1967; Strauss and Corbin, 1987) and its proponents (Hutchinson and Wilson, 2001) advise researchers to use reflexivity to guard against the influence of preconceived ideas. Use of reflective diaries is one way a researcher can
raise own awareness of their preconceived ideas and the influence on data collection.

Interaction and taking field notes in Grounded Theory provide an opportunity for the researcher to witness participant interactions in social settings. Combining field notes with interviewing clarifies the meaning of events and helps researcher discover consistencies and discrepancies between what is said and done and provides opportunities for clarifications. However, Bluff (2005) cautions researchers to be aware of ethical issues such as the Hawthorne effect that can alter participant’s behaviour.

**Data analysis in Grounded Theory:** In Grounded Theory methodology, the process of data analysis commences with constant comparative principle soon after initial data have been collected. This means that immediately after the first interviews are held and transcription is complete, data analysis begins and emerging concepts direct the next sources of data collection. Transcription includes all that was heard and audio recorded as well as observed behaviour and recorded as field notes during interviews such as coughs, pauses and laughs (Strauss and Corbin, 1990, 1998; Bluffs, 2005). In data analysis all what was collected have meanings and may influence interpretation of the data.

There are varying data analysis stages in Grounded Theory data analysis. These stages are the coding steps advanced by Glaser and Strauss, (1967), Strauss and Corbin (1990, 1998) and Charmaz (2006). Proponents of Glaserian Grounded Theory (Glaser and Strauss, 1967; Glaser & Holton, 2004; Holton 2010) advocate for two main stages of coding in data analysis called substantive and theoretical coding. Substantive coding is divided into subsections of open and
selective coding. Strauss and Corbin (Strauss & Corbin, 1990) and other proponents of Straussian Grounded Theory on the other hand advocate for three stages of coding which are open, axial and selective coding. Closely associated with these three levels of coding is the conditional matrix which Strauss and Corbin (1990) argue is a framework that summarizes and integrates the previous three levels of coding and serves as analytic aid illustrating conditions from micro to macro levels (Kenny & Fourie, 2015). The third version of Grounded Theory is constructivist advanced by Charmaz (2006). Like Glaserian Grounded Theory, Charmaz (2008) advocates for two stages of coding but names them differently as initial (or open) coding and refocused coding.

Despite the varying coding stages in the three versions of Grounded theory, a key feature in all Grounded Theory data analysis that is common to all of them is the constant comparative method of analysis in which data collection and analysis is a simultaneous and iterative process (Glaser and Strauss 1967; Kenny & Fourie, 2015). The process of constant comparison involves comparing words, sentences, paragraphs, codes and categories from new transcripts and field notes to the previous ones. The purpose of constant comparison is to identify similarities and differences in the data. Each interview and field notes are also compared. This process continues until the final write up of the report has been completed. It requires the researcher to interact deeply and thoroughly with data through repeated reading or listening to the tape recordings so as to understand the phenomenon that is being researched.

**Straussian data analysis method preferred in the current study:** Since I adopted Straussian Grounded Theory in the current research study, I shall explain principles underlying its data
analysis stages in some detail than other versions of Grounded Theory. However, its application to the current study is detailed in the data analysis chapter (chapter 5). Straussian data analysis has three stages as stated previously in above sections. The first stage is open coding which involves labelling, categorizing data and looking for patterns between categories. Patterns may be commonality, association or implied causality among others. The researcher reads the data several times and chunks them. Chunking can be according to words, sentences or paragraphs to which labels are created based on what the data means and not based on extant theories. The labels that have been created for the data are known as open codes. Through further examination of data and constant comparison, labels or open codes are grouped together to form categories with sub-categories and dimensions.

Axial coding is the second step in Straussian Grounded Theory. It is the coding step where relationships between categories and sub-categories identified by open coding are examined. Strauss and Corbin (1998) liken this process to fitting the parts of a jigsaw puzzle together. In axial coding, the specific set of relationships between the categories and sub-categories are brought together in an illustration called the paradigm model or coding paradigm. The model illustrates the overarching categories, at the center, with relationships to the causal conditions, intervening conditions, the context, action/interactional strategies and consequences.

The third step in Straussian coding is selective coding which is the process of integrating and refining categories relating them to the core category with higher level of abstraction and ultimately developing the Grounded Theory. The researcher then performs the following which are illustrated in Chapter five: determines the storyline, relates the storyline of the study in
analytical terms while, delineating the core category and the related sub-categories around the core category and orders a hierarchy of concepts. Categories are related at dimensional level from micro to macro levels in a conditional matrix (Strauss & Corbin, 1990).

Theoretical memos though not a step in coding, are useful since they reflect emerging ideas concerning relationships between data categories, new categories and properties of these categories and help the researcher capture what requires further exploration. They are used at all stages of Straussian Grounded theory coding procedures.

4.4.4 Critique of Grounded Theory Methodology

As other research methods, Grounded Theory has had criticisms that can be viewed as limitations. Theory limitations mainly affect novice researchers and can be mitigated when the mentorship of more experienced Grounded Theory researchers are used. Hussein, Hirst and Osuji (2014), identified five common limitations as: exhaustive processes, potential for methodological errors, reviewing the literature without developing assumptions, multiple approaches and limited generalizability. These limitations are explained in the subsequent paragraphs.

- **Exhaustive processes**: A number of researchers agree that large amounts of data produced by Grounded Theory in a non-standard format pause a challenge during analysis (Turner, 1983; Taylor and Bogdan, 1984; Yin, 1984). For instance, Myers (2009) and Allan (2003) observed that novice researchers are overwhelmed with microanalysis at the open coding stage where abstracting and encompassing concepts become time consuming, tiring and laborious. The novice researchers may then be hindered and absorbed with the time consuming processes and lose sight of discovering the ideas and themes that emerge from the data. To overcome
this challenge, Annells (1996) proposed that novice Grounded Theory researchers need to be forewarned of the required patience and mentorship by an experienced Grounded theory researcher throughout their research journey.

- **High Potential for Methodological Errors**: These errors are commonly experienced by the novice researchers and therefore can be overcome under the mentorship of an experienced grounded Theory researcher. Examples of methodological errors include confusing purposeful sampling that is conducted at the initial sample selection stage with theoretical sampling that occurs during data analysis and constant comparison that if not checked leads to a theory that lacks conceptual depth (Glaser, 1978; Charmaz, 1989). Another example of methodological errors that an inexperienced researcher may face is the use of only one source of data, such as that of interviews (Benoliel, 1996). Interviews alone according to Glaser (1992) and Benoliel (1996) may lead to a focus on lived experiences instead of social processes and therefore deviates from Grounded theory to Phenomenology. To circumvent the utilization of one data source, Glaser (1992) recommended that researchers should complement interviews with field notes.

- **Reviewing the Literature without Developing Assumptions**: The proposal by Glaser and Strauss (1967) that a Grounded Theory researcher needs to ignore extant literature before data analysis and emergence of theory continues to be a subject of debate. Schreiber (2001) argued that literature review is significant and is therefore a pre requisite for theoretical sensitivity advanced by Glaser (1998) and Strauss and Corbin (1998). Stebbins (2001) asserts that literature review reveals gaps in certain critical aspects of the phenomenon of interest and in my perspective helps justify the need for a study. Furthermore Khan et al (2014) and Schreiber (2001) observe that demonstrating comprehensive knowledge in the proposed area
of study, which is a requirement by institutional review boards and grants agencies, is only possible through review and analysis of literature.

I support the view of Bryant and Charmaz (2007) and Strauss and Corbin (1998) that review of literature is necessary for situating research work within the body of related literature. I share the same views with Allan (2003) that it is almost impossible to have some research agenda or propose to investigate a specific problem without some focus and knowledge about it and therefore literature review throughout the research process is inevitable. However as discussed in chapter two, the researcher has an obligation to ensure that emerging theory is based on empirics over any other input and guard against forcing data to the developing theory.

- **Multiple Approaches to Grounded Theory:** Grounded Theory is discredited for having many variants of the methodology over the years that cause confusion to scholars (Annells, 1996; Hallberg, 2006). For instance, Glaserian (Classical) Grounded Theory is influenced by the positivist paradigm, while Straussian Grounded Theory is influenced by the interpretive paradigm. Despite the perceived confusion, scholars are unanimous with regards to major fundamental methods such as theoretical sampling with constant comparison and the characteristic of the theory generated.

- **Limited Generalizability:** Although Grounded Theory is criticized for limited generalizability, it should be understood that the primary purpose of qualitative research is to generate deep understanding of the human experience within a given context and not necessarily generalize data to other populations. However, Khan et al (2014) argued that use of Grounded Theory methods to explore study questions provide distinct circumstances
within which study findings can be projected to other participants or setting (Glaser, 2002) and therefore Grounded Theory findings can still be generalized to other populations. Khan’s stance is supported by Ayres, Kavanagh and Knafl (2003) who argued that qualitative analysis may also lead to generalization, regardless of the language used. However, researchers undertaking Grounded Theory need to be aware of these threats that are common to other qualitative researches as limitations and take considerations when selecting its application.

4.4.5 The Benefits of Grounded Theory Methodology

Despite the criticisms advanced against Grounded Theory, it has many benefits that are referred to as advantages (Dey, 2010) and therefore still remains the most widely used and popular qualitative research method across disciplines as Bryant and Charmaz (2010) confirm. This explains its choice in the current study. The main advantages of Grounded Theory identified by Khan et al (2014) are: intuitive appeal, ability to foster creativity, potential for conceptualization, systematic approach to data analysis, data depth and richness. These advantages are explained in the subsequent paragraphs.

- **Intuitive Appeal:** Grounded Theory is applied widely across disciplines without limitation to specific types of data (Glaser, 1992; Morse, 2009). Myers (2009) and Charmaz (2006) observed that Grounded Theory has an “intuitive appeal” for novice researchers since it allows for deep immersion in the data during data analysis procedures that include constant comparison of data coding and memoing techniques. Besides Charmaz (2006) argues that Grounded Theory gives clear guidelines that direct researchers in the research process.

- **Fostering of Creativity:** The use of Grounded Theory methodology requires that researchers
avoid use of preconceived ideas and allow emergence of theory grounded in data. In this way the researcher is encouraged to use creativity when generating concepts and categories inductively to create relationships in data that allows for theory emergence (Jones, Kriflik, & Zanko, 2005). Myers (2009) asserts that these activities of Grounded Theory facilitate researcher creativity and provoke the generation of new ideas. Glaser (1978) implies that Grounded Theory fosters creativity with his statement that the generative nature of the methodology constantly opens up the mind of the analyst to a myriad of new possibilities.

- **Potential to Conceptualize:** Grounded Theory methodology differs from other qualitative methods in its emphasis on theory development (Strauss and Corbin, 1994). In order to develop a theory, the researcher has to create concepts using strict principles of constant comparison and continual memo writing (Glaser, 1978, Myers, 1997). Conceptualizing, legitimation of concept generation and ordering concepts are, according to Glaser (1978), some of the most exciting activities in Grounded Theory enjoyed by researchers.

- **Systematic Approach to Data Analysis:** Systematic approach to data analysis stems from Glaser’s (1978) definition of Grounded Theory as “systematic generation of theory from data that are systematically obtained from social research” Strauss and Corbin (1990) implied the same in their definition of Grounded Theory as “a qualitative research method that uses a systematized set of procedures to develop and inductively derive a theory grounded on data about a phenomenon”. The systematic approach of analyzing data such as constant comparative logic provides for rigor and ensures trustworthiness in the emerging theory (Strauss and Corbin, 1990; Stebbins, 2001).

- **Data Depth and Richness:** The purposive and theoretical sampling as well as in-depth interviews conducted in Grounded Theory methodology enables the researcher to obtain in-
depth and rich data. Depth and richness of data is even more improved through extensive field notes and thick descriptions expected of the researcher (Geertz, 1973; Charmaz, 2006). Rich data enables the researcher to develop quality analytic categories for better comparison of data and a more grounded theory in the empirical data.

From the debate about the criticisms and advantages or benefits of Grounded Theory, it is reasonable to conclude that Grounded Theory still remains the most appropriate method for developing a theory to solve a specific problem for a phenomenon of interest such as poor quality of mental health nursing in Kenya. This is because the critiques of Grounded Theory agree that the common limitations are mostly experienced by the novice researchers and can be mitigated by experienced Grounded Theory researchers. In this regard, I assume that a novice researcher under the supervision of an experienced Grounded Theory researcher can successfully use Grounded Theory. It is also evident that some of what is considered as limitations are advantageous in a way. For instance the principle in Grounded Theory of avoiding preconception and allowing theory to emerge from data without forcing them into extant literature with hypothesis is advantageous because it provides an opportunity for the researcher to practice conceptualizing and foster creativity in generating a theory grounded in empirical data.

My position is that the benefits of using Grounded Theory to generate a customized conceptual model for mental health nursing practice in Kenya outweigh the disadvantages and thus the use of Grounded Theory in the current study was justified. Moreover, the supervisors of the current research were Grounded Theory experts and ensured guidance required to generate the substantive theory.
4.5. Application of Grounded Theory Procedures in the Current Study

4.5.1. Study population

It is generally accepted that a study population also known as accessible population is the group to which the researcher intends to generalize findings. In the context of the current study, the study population was the mental health nurses.

4.5.2. Sampling and Recruitment of participants

4.5.2.1. Sampling methods and designs

Purposive, open and theoretical sampling methods were used to recruit nurses for the study, while selective sampling of the literature was done according to emerging themes during data analysis. Initially, purposive sampling method was used to select information-rich participants as recommended by proponents of Grounded Theory (Engel & Schutt, 2009; Sbaraini, Carter, Evans & Blinkhorn, 2011). In this study, criteria to determine selection of nurses at regional mental health units and the national mental health hospital was professional qualifications and experience. These criteria were unique to these mental health nurses in order to access rich data sources. The number of registered mental health nurses working in Government hospitals at the time of the study according to Director of Nursing services (Rakuom, personal communication, May 28, 2012) in a personal interview was approximately 400 of whom about 160 were deployed across mental health institutions in Kenya.

Open sampling method used involved selection of mental health nurses who met the stipulated criteria, were available in the hospitals at the time of the study and willing to be interviewed. These nurses were working either as ward managers, clinical nurse practitioners or nurse
educators in the mental health units/institutions at the time of the study. Additionally, the nurses had the greatest experience and thus provided the greatest opportunity for the discovery of the proposed conceptual model of nursing.

Subsequent to purposive and open sampling, theoretical sampling was used in accordance with principles of Grounded Theory (Strauss and Corbin, 1990; Duma et al, 2007; Dantas et al, 2009; Sbaraini et al, 2011;). Theoretical sampling involved selection of subsequent participants after the initial purposive and open sampling based on emerging concepts during data analysis. Theoretical sampling provided a way of ensuring that new data were useful to theory construction and concepts already compiled through a measure of fit and relevance to ensure the emerging theory developed rigor and parsimony.

In this study, further decisions about the mental health nurses to be included based on the emerging theory as initial data were collected and analysed using constant comparative logic. This means that emerging categories of nurses’ views on the four major metaparadigms were constantly identified and compared. Further selection of mental health nurses as appropriate to extend categories was done as recommended by founders and proponents of Grounded Theory methodology (Strauss and Corbin 1998; Dantas et al, 2009; Sbaraini et al, 2011). For example, if analysis indicated that professional experience was an important influence on the generation of views on environment of care or human being, theoretical sampling concentrated on nurses with the characteristic.

Selective sampling of literature was done during selective and theoretical coding when core categories were sorted, written, theorized and cross-referenced with literature (Jones & Alony, 2011; Lawrence & Tar, 2013). Selective sampling of the literature is recommended and generally
follows or takes place concurrently with data analysis. As the theory began to emerge, I conducted selective literature review to learn what had been published about the emerging concepts such as a homely environment and holistic mental health care (Strauss and Corbin 1998; Duma et al, 2007; Dantas et al, 2009; Lawrence & Tar, 2013; Sbaraini et al, 2011).

Nested Sampling design was used in this study to facilitate credible comparisons from two or more members of the same subgroup. In the context of this study, it involved sampling of additional mental health nurses in order to compare and develop emergent themes and determine their relevance and meaningfulness refine ideas and identify conceptual boundaries. For example, data obtained from a group of nurse managers at the ward level were compared with data from a group of nurse managers at the unit and hospital level to identify unifying themes. As noted by Glaser and Strauss (1967), Charmaz (2000) and Onwuegbuzie and Leech (2007), nested sampling designs are particularly pertinent for grounded theorists.

4.5.2.2. Recruitment of participants

The intention of the study was communicated to nurses working in the mental health units through a meeting facilitated by the hospital nursing services manager. The researcher discussed with the hospital nursing services manager on phone, gave the purpose of the visit and scheduled a visit on the date advised by the hospital nursing services manager. During the meeting, the purpose of the study and eligibility criteria was fully disclosed. Nurses who met the eligibility criteria and were willing to participate in the study were identified and invited to a second meeting scheduled at their convenience. During the second meeting, full disclosure of information about the study as contained in section 4.5.4 and appendix A of this document was done. The nurses’ permission to participate in the study was sought and were given at least 12-48
hours for decision making as recommended by Wiles, Heath, Crow and Charles, (2005). Those who made the decision to voluntarily participate in the study were met, their consent was taken and the interview dates were scheduled.

To facilitate free participation of the nurses, their preferred dates and location of the interview were discussed, confirmed and a schedule was drawn. Open sampling was used in initial recruitment. This means that interviews were scheduled with the most experienced and senior mental health nurses. Subsequent recruitments and interviews were scheduled in descending order guided by findings from initial data analysis. The intention of the study was to collect data from nurses in acute (in-patient) care mental health institutions and subsequently, from nurses who provide community mental health services though operating from the hospital. Data would be collected to saturation before moving to the next group starting from nurse managers, clinical nurse practitioners and finally nurses in community mental health practice but operate from the institution. However using the principle of theoretical sampling, the researcher moved in between the nurse managers, clinical nurse practitioners, nurses in community mental health nursing practice and nurse educators as guided by the data obtained.

4.5.2.3. Inclusion and Exclusion Criteria

Inclusion criteria

The criteria were selected to allow the researcher to capture the views of long-service mental health nurses who have witnessed transition periods in mental health nursing practice in large mental health institutions and are therefore considered rich sources of data. In this regard, nurses were included in the study if they:
• Were employees of the Ministry of Health working at study sites.
• Were Registered mental health nurses with a minimum of diploma in mental health nursing
• Were licensed by the Nursing Council of Kenya to practice as registered mental health nurses or clinical mental health nurse specialists.
• Had at least 6 years of consistent mental health nursing practice.
• Were willing to participate through a written informed consent.

**Exclusion criteria**

• Registered mental health nurses who were on study leave or annual leave and not willing to come to participate
• Registered mental health nurses who were in the place of work but were not willing to participate
• General nurses working in the mental health units

### 4.5.2.4. Sample size determination

Thirty three nurses participated in the study using the concept of data saturation which is a major principle in qualitative research. This involved concurrent sampling, data collection and data analysis until no new themes on the four major nursing metaparadigm concepts (human being, nursing, Health and environment) emerged. The sample size of thirty three nurses was appropriate as supported by many qualitative researchers including Auerbach and Silverstein (2003) and Thompson (2011). Glaser and Strauss, (1967) and Strauss and Corbin (1998) also assert that saturation normally occurs with sample size of between 10 and 30. Other qualitative Grounded Theory researchers who support this perspective are Creswell
(1998) and Guest, Bunce and Johnson (2006). They reported that codes are normally created and their distribution of frequency stabilized between 12 and 30 interviews in Grounded Theory study.

4.5.3. Data Collection procedures

4.5.3.1. Pilot Phase

The pilot was conducted in one regional mental health unit. Four mental health nurses identified purposefully were interviewed. One nurse was the mental health unit manager, two were clinical nurse practitioners and one deployed in community mental health services although she operated from the unit. All interviews were audiotaped, transcribed and data were analysed manually. Pilot study enabled the researcher gain more insight on the circumstances that are likely to come up during actual research process and plan for them. Study instruments were piloted for their suitability and feasibility to collect data, assess the challenges in the proposed data analysis techniques and provide the researcher with insight in all elements of the research process. Findings from the pilot study were used to modify the interview guides. Recruitment, data collection and analysis processes during pilot phase took the same procedure as actual research process explained in 4.5.2, 4.5.3 and chapter 5 respectively.

Pilot study in qualitative research is recommended by researchers including Holloway (1997) and Reid, Bush, Anderson and Teijlingen (2000) who caution researchers against getting into data collection or commencing the research process without any prior-exposure. Pilot study is also important in helping researchers especially the novice gain confidence with interview
techniques. Additionally, a pilot study, also serves to help researcher acquire early contextual sensitivity through collection of essential information for effective research design and development of greater awareness of dynamic events and circumstances that could positively modify the research process and affect decision-making.

The choice of piloting in a regional mental health unit with same eligibility criteria but not included in the actual study is consistent with Holloway (1997) and Reid et al (2000) advise that pilot in qualitative study should be done using the same target group but in a different area not included in the study sample to avoid contamination of the study population.

4.5.3.2. Data collection: Sources and Methods

Data collection was carried out from July, 2014 to May, 2015. Data were collected through demographic questionnaires, in-depth interviews, field notes and literature review as recommended by Glaser and Strauss (1967), Strauss and Corbin (1998), Hutchinson (2000), Charmaz (2006), Duma et al (2007) and Corbin and Strauss (2008). These researchers assert that multiple data collection methods that characterize Grounded Theory are important for exposing variation and establishing conceptual frameworks.

Demographic questionnaires: Data were collected through self-administered questionnaires on nurses’ demographic characteristics that included levels of educational and professional qualifications as well as experience in mental health nursing practice in the various capacities, religious affiliation, age and sex. Demographic questionnaire was important as data obtained were used firstly to confirm eligibility criteria that ensured selection of rich sources of data and secondly to obtain other personal characteristics such as religion that may
influence nurses views about the four metaparadigm concepts. The demographic questionnaires were issued to mental health nurses for completion after which they were returned to the investigator and analysed. Details of data analysis are described in chapter five of this thesis.

**In –depth Interviews:** The purpose of the in-depth interviews was to explore the views of mental health nurses on the four major nursing metaparadigms. In-Depth interviews were also used to explore the nurses’ vision on the four metaparadigms based on their experiences and current shortfalls. In this way, a future-oriented conceptual model with considerations for the current deficits experienced in practice would be discovered. The in-depth interviews were complimented by field notes documented during the interviews. Selected nurses were expected to have substantial and considerable insight in mental health nursing practice due to their level of experience. In-depth interviews were conducted in the mental health facility in a quiet and private environment preferred by the participant. Nurses’ views about the major nursing metaparadigm concepts that include human being as the focus of care, mental health nursing practice, mental health and environment both as influencing client’s health and nursing practice were explored during the interview.

Each in-depth interview with a participant was audiotaped and lasted approximately 45 to 90 minutes. The interview duration is consistent with other interviews in Grounded Theory where interviews ranged from 50-180 minutes (Glacken et al. 2003), 45-90 minutes (Mewborn, 2005) and 1-2 hours (Komives, Owen, Longerbeam, et al, 2005). Although interviews sessions appeared long, participants were informed of their freedom to ask for adjournment if they felt tired or could not continue with the interview for whatever reasons.
Furthermore, interviews were lengthier at the beginning of the study, but become brief, specific and focused toward particular subject matter as the interview sessions progressed.

An initial in-depth interview with each participant was conducted and follow-up sessions as necessary to clarify and validate certain categories and their relationships were organized through agreed arrangements as explained under ethical considerations in section 4.6 and consent information sheet (Appendix A). The interview strategy used is consistent with the ideas of Warren (2002), Guest (2006) and Thomson (2011), who propose more than one interview with a participant to validate information on already collected data.

To enhance trustworthiness of data, a meeting date with potential participants was scheduled within one week or participant’s preference after their decision to participate. During the waiting-in period, researcher stayed within the potential participants’ institution to interact with other potential participants and in the meantime become oriented to situations and contexts of providing nursing care. The researcher in addition developed rapport, trust and mixed with potential participants to diminish, any sense of threat that could accompany researcher’s presence and intimidation since the current study had been permitted by the Director of Nursing services (formerly Chief Nursing Officer), in the ministry of Health. Consequently, an understanding and co-construction of meaning between researcher and participants was developed to facilitate honesty during information disclosure at the time of data collection.

*Field notes:* These are documented records of what was observed during the interview session with the participants (Hammersley & Atkinson, 2007; Montgomery & Bailey, 2007). They consist of descriptions of social interactions and the context in which they
occurred (Roper & Shapira, 2000). To capture all information and enhance credibility, the researcher directly noted participants’ context of the interview as well as behaviour which were recorded as field notes. The researcher made notes in the presence of respondents if it did not disrupt the flow of the interview and flow of information from the respondent. However, where making notes disrupted respondents from telling their experiences, then notes were made immediately after the interview. Field notes included a list of the researcher’s observation during the interview sessions such as the interaction processes, context and the features. These field notes were a source for further descriptive elaboration. The notes were manually written by hand immediately following the interview or within 12 hours. The notes were then reviewed to determine if they were accurate and comprehensive. Additional details were added and editing was done as necessary with care not to alter the statements or their meaning by the participants.

According to Jones and Alony (2011) and Lawrence and Tar (2013), field notes represent the “facts” of researcher noted during data collection and are used as valuable sources of data to understand what the participant is not able to express orally. Throughout the study, field notes were made to record chronologically what the researcher noted. The notes described the environment surrounding the interviews including the environment of patient care. In addition, the notes described facts of events that occurred during the interviews including participants' reactions as well as researcher’s personal impressions and reflections. Field notes were shared with supervisors as one way of identifying possible personal biases and information that was relevant to data-analysis process.

Usefulness of field notes is supported by Laitinen, Kaunonen and Kurki (2014), who found
them helpful in Grounded Theory methodology because they serve as check against participants’ subjective report of what they believe and do. In the context of this study, environment of practice, the general verbal interaction and physical behaviours between nurses and patients were observed and recorded and compared with what the participants said during the interview. For example a comparison was made between the nurses report on patient’s respect compared to behaviour that indicated respect. Besides, the researcher was able to compare the information given on what defines mental health nursing practice with actual interventions by the nurses in the wards. Use of field notes additionally enabled the researcher gain more insight on the physical, social, and economic contexts in which the nurses worked as well as the environment in which patients were looked after. This information helped the researcher interpret the data that were collected. This information was analyzed as explained in Chapter 5 (data analysis)

**Literature Review:** The researcher initially conducted preliminary relevant literature review to demonstrate that a problem worthy of research existed and establish a working knowledge of conceptual models of nursing. Substantive literature review was, however, conducted during data analysis and the rest of the entire research process as recommended by Glaser (1998), Glaser and Strauss (1967), Strauss and Corbin (1990), the founders and the proponents of Grounded Theory (McGhee, Marland & Atkinson, 2007; Dick, 2007). These Grounded theorists argue that initial literature review that provides the researcher with a general understanding of the phenomena of interest is sufficient for commencing Grounded Theory of research. Substantive literature review is done during constant comparison throughout data analysis from initial open coding to theoretical development and ensures integration of literature. In other words, substantive literature search is conducted to support
the emerging theory and not to form the basis of hypothesis.

Table 4.1 illustrates three examples of when literature review was conducted to accomplish Grounded Theory tasks as recommended by Strauss and Corbin (1998) and Corbin and Strauss (2008).

<table>
<thead>
<tr>
<th>Task</th>
<th>Illustration</th>
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<tr>
<td>Establishment of a working knowledge and the need to for conceptual model in Kenya</td>
<td>Literature about the state of quality mental health nursing practice and complaints about it were reviewed from several authors including KIPPRA (1994), Ministry of Health (MoH, 2010), Ojwang et al (2010) and KNCHR (2011). Examples of literature to support advantages of use of conceptual models in improving nursing care and the fact that customizing conceptual models to the context of practice is necessary included Parker &amp; Smith (2010), Mensik et al (2011) and Carlyle et al (2012).</td>
</tr>
<tr>
<td>Identification of significance concepts that repetitively occurred in the data</td>
<td>Literature was used to label and arrange codes during open and axial coding processes respectively. For example: conducive and therapeutic environments were repetitively described by participants as being ideal for quality mental health nursing practice and patient recovery. Relevant literature search confirmed that “conducive” and “therapeutic” were both attributes of a homely environment which fitted well as a condition for mental health nursing practice in axial coding (Strauss and Corbin, 1990 &amp;1998; Thai, Chong &amp; Agrawal, 2012; Cho &amp; Lee, 2014).</td>
</tr>
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| Comparison of properties and dimensions from literature to the data obtained in order to differentiate and specify the emergent concepts | Categories or properties emerging from the participants’ information were constantly compared to the research –based literature. For example:
- The definition of passion as a property was compared to the one given by Merriam-Webster’s Dictionary, 2011
- Collins English dictionary (2014) was used to compare the definition of environment with that given by the participants
Properties and dimensions of the Metaparadigms derived from the participants’ data were constantly compared to those advanced by nurse theorists. For example:
- The metaparadigm of the human being was compared by the properties and dimensions given by renowned theorists such as Nightingale (1946), Peplau (1952), Roper et al (1980), Orem (1991), Neuman (1995) and Roy (2009). |
4.5.3.3. Data collection instruments (tools)

Two types of study instruments for use in data collection were developed by the researcher to facilitate data collection. They included a demographic questionnaire and an interview guide described in the subsequent paragraphs.

Demographic Questionnaires: The tool was developed to collect each participant’s demographic data including experience in working with mental health patients, level of education, qualification, age, sex and address. Demographic questionnaire was a one-page document consisting of 13 demographic questions as shown in appendix B (i). It was a self administered questionnaire that was presented to respondents, but the researcher was available to make basic clarifications. The researcher avoided, interpreting the questions for the participants in order to minimize interviewer bias. The advantages of using the demographic self-administered questionnaires were two fold. The first was that the researcher was available to collect all the completed questionnaire and therefore 100 percent response rate was achieved. Secondly, the questionnaires were used to collect data on the characteristics of research participants that provided data on context conditions during data analysis.

Interview guides: A semi-structured interview guide in appendix B (ii) was used to collect data during in-depth interviews. According to Strauss & Corbin (1990), semi-structured interviews are a powerful tool considered indispensable for in-depth exploration of participants’ perspectives. It entailed face-to-face interview between the researcher and participants. The semi-structured interview guide comprised general and specific questions. General questions were formulated in broad terms to allow for flexibility and encourage participants to express themselves freely on their views on major metaparadigm concepts. Then, specific sub-questions
such as "How?", "What else?" etc. were added as prompts to help probe participant’s views and allow them to elaborate on their perspective about major metaparadigm concepts and explore more specific themes, such as personal, environmental and organizational conditions that influence the views and perceptions on major metaparadigm concepts.

The interview guide used in this study was developed to cover the four nursing metaparadigm concepts and the respective recommendations. The guide consisted of five sections all of which asked questions on nurses’ beliefs and views about the major nursing metaparadigm with the fifth section asking for recommendations as follows:

- Section 1: Nurses’ beliefs and views about mental health nursing practice
- Section 2: Nurses’ beliefs and views about Environment
- Section 3: Nurses’ beliefs and views about the Human being
- Section 4: Nurses’ Beliefs and Views about mental health
- Section 5: Recommendations for an appropriate model considering the four metaparadigms

The tool provided for intersectional transitional information to facilitate flow of the concentration during the interview sessions.

4.5.3.4. Selection and Training of data transcribers

Two data transcribers with background training in social sciences and humanities as well as experience in conducting interviews and transcription of data for qualitative study were selected to assist with data transcription as well as serving as part of the validation process. They were trained on the subject of research for two days with a further orientation during pre-testing of
research instruments and data analysis. Training was conducted in the school of nursing sciences. The topics included the purpose and basic principles of the methodology of Grounded Theory research as well as what was the researcher’s expectations during data transcription.

4.5.4. Scientific Rigour and Trustworthiness

Lincoln and Guba (1985) argued that rigor is the basic question that must be addressed by every researcher to demonstrate to consumers that the findings are worth paying attention to. Rigour in interpretive research as in the current study is necessary for its trustworthiness. Bowen (2009) defined trustworthiness as the conceptual soundness from which the value of qualitative research is evaluated. According to Guba (1981), Lincoln & Guba (1985) Holloway and Wheeler (2002), Ulin et al., (2002) and Shenton (2004), the criteria by which trustworthiness of a qualitative research is measured by the degree to which credibility, confirmability, dependability and transferability are achieved. In the subsequent paragraphs, these criteria are explained.

**Credibility:** This is one of the criteria for evaluating trustworthiness of a research and is often referred to as the truth value (Duma et al, 2007). The focus of credibility is on the confidence in the truth of the findings. Holloway and Wheeler (2002) and Ulin et al. (2004) explains that credibility relates to how the participants can recognize the meaning they gave to the situation. It includes the extent to which the researcher’s interpretation of data is consistent with what the study participants perceive as reflecting their views or information.

In the current study, credibility, was ensured by adopting research methods that are well established in qualitative investigation such as interviews and purposive sampling which ensured
that only participants with rich data were included. The researcher also built trust with participants through prolonged engagement to enhance honesty from them when giving information. Triangulation was used to collect data as probing and iterative questioning were used to ensure that only accurate information was obtained. Thick description of phenomenon under scrutiny and examination of previous research findings were used to ensure credibility.

Another way to ensure credibility in the current study was by verification and confirmation of findings through member checking and validating the theoretical scheme and storyline with participants and other mental health nurses. Validation of the theoretical scheme and storyline with University of Nairobi School of nursing faculty was also done to verify credibility of findings. Feedbacks from study participants, other mental health nurses, faculty and peers were consistent that the study was credible and applicable in the Kenyan contexts. Lists of participants and mental health nurses as well as faculty are included as appendices D and E.

**Confirmability:** This refers to the extent to which findings can be corroborated by other researchers and can be improved by being reflexive (Merriam-Webster's dictionary, 2011; Carolan, 2003). In the current study, confirmability was achieved by the researcher’s constant cognizance of own epistemological preferences, values, theoretical orientations, bias, experiences and recording them as part of the memos as well as providing a comprehensive audit trail. Furthermore findings from the interviews were presented to supervisors who audited them and advised accordingly. Confirmation of codes done through intercoder verification procedure detailed in 5.2.1.2 of this thesis

**Dependability:** According to qualitative researchers including Lincoln and Guba (1985), Merriam-Webster's dictionary, dependability refers to the consistency between the data collected
and the findings. A detailed documentation of data collection procedures that are described in section 4.5.3 and analysis methods including code-recode of data procedures detailed in chapter 5 are for the sake of ensuring dependability.

**Transferability:** This is applicability of the study findings to other similar settings and includes application of lessons learned from one qualitative study to other contexts (Lincoln & Guba, 1985; Merriam-Webster's dictionary, 2011; Ulin et al., 2002). In the current study, detailed descriptions of methodology and data analysis provide credible information that makes study findings transferable to other contexts. Dense background information about informants, research context and setting have been done in chapter 5 (data analysis) and 6 (presentation of findings). Inclusion of mental health nurses from different levels of mental health care and varying experiences in mental health nursing practice were also done to ensure transferability.

### 4.6 Ethical considerations

**Study approval:** The study proposal was approved by the University of Cape Town, Faculty of Health Sciences and Human Research Ethics Committee (UCT-HREC, Appendix C [i]). Subsequent approvals were obtained from, University of Nairobi /Kenyatta National Hospital ethics and research Committee (UON/KNH-ERC,Appendix C [ii]), Kenya National Council for Science and Technology (NCST,Appendix C [ii ] ), Kenya Ministry of Health (Appendix C iv) and hospital administration of all mental health facilities where the study was conducted.
**Informed Consent:** Basic elements of informed consent (appendix A) according to Department of Health and Human Services (2005), Wagoro & Bhatt (2012) and Declaration of Helsinki (Seoul version) reported by Williams (2008) were discussed with participants. The basic elements included the following:

- **Full and complete provision of information:** Full disclosure of information to participants included explaining to participants that they were being enrolled in a research activity, purpose of research, criteria for selection, any compensation for participation, risks and benefits; and how anonymity and confidentiality would be assured including management of sensitive information and need for support.

- **Comprehension of Information:** Before signing of consent form, the researcher ensured that a participant understood about the research by asking participants if there were any areas which needed clarification and ensuring that participant satisfied with information given.

- **Voluntary participation:** Participation was voluntary with option to withdraw at any time during the study with no penalties. Participants were provided with contacts of researcher, supervisor and secretaries to human research ethics committees. Participants were asked to report issues of concern at any time during or after the study using contacts given.

- **Anonymity and confidentiality:** Participants’ information was protected through coding to maintain anonymity which was maintained all the time including during publication. In addition, information was stored under lock and key in the principal researcher’s office and was not shared by anyone outside of research team.
- **Benefits**: Participants were informed that they would not receive any remuneration for participating in this study. Additionally, they were informed about non-benefit for nurses who would retire during the time of study. Indirect benefits, explained to participants included the model’s contribution in changing policies on mental health education and practice. Nurses who would still be in employment could benefit from implementing the model of nursing practice that takes care of their views. Ultimately improved patient outcomes as a result of implementing the model and generation of nursing knowledge would be experienced.

- **Risks**: Neither physical risks, emotional nor social harm were reported as a result of divulging information considered private since participants were not obligated to disclose information that caused discomfort. However, arrangements had been made with the chief Counsellor in the Ministry of Health (informed consent form-Appendix A) to debrief the participant experiencing any discomfort.

- **Compensation**: No compensation for those who participate during their normal working hours. However, transport was reimbursed for those who came to participate during their leave or day offs.

**Participation**: Participation was voluntary through a written consent. The participants were required to attend one-on-one interview sessions that lasted 45-90 minutes. The participants attended one interview. However, for questions or themes that required follow up and classification, the respective participants were informed and follow up interviews were scheduled and conducted at the participant’s convenience.

**Declaration of interests**: It was explained that the study was part of PhD requirement and
researcher was not under any obligation to come up with a specific predetermined model in Director of Nursing Services’ request.

4.7 Study strengths and Limitations during the research process

Data collection process was successful although it took longer than was planned for by four months for reasons explained in the second paragraph. The respective hospital nursing services managers were able to arrange for meeting with nurses as scheduled. Nurses were also willing to participate. They were enthusiastic because this was the first time they were experiencing participation in an interview to come up with a conceptual model for mental health nursing practice. This was seen as a strength because it encouraged nurses to take part willingly and to provide honest information for the development of the model.

There were challenges at the ward level associated with workload in a resource constrained environment. There were occasions when I conducted only one interview or none at all on a day I had planned to conduct more than one interviews because of the dynamics of the work environment. For example, in one occasion, I had appointments with four participants and therefore planned for four interviews. On arrival at the venue, the situation had changed. One nurse had been called by the supervisor to stand in for another nurse in a different ward while another one was called into an impromptu meeting and one had been called to stand in as a co-assessor in a practical examination. Only one nurse was available after completing ward activities. Therefore only one instead of four interviews was conducted after the nurse had completed her shift.
In such occasions, I waited patiently and/or accepted to reschedule appointments in accordance with participants’ preference without taking any offence, thus exercising flexibility with participants to meet research objectives. Although the data collection took longer than planned, it was necessary and I obtained data until saturation was achieved.

I experienced the complex nature of Grounded Theory, especially involving tedious coding process and memo writing. Complex nature of Grounded Theory methodology is cited by researchers including (Dick, 2007; Jones and Alony, 2011). This was mitigated by use of qualitative data-processing software NVivo to facilitate coding.

I also sought guidance from the supervisors who were qualitative researchers with Grounded Theory research methodology experience from time–to–time throughout the research process to address other challenges experienced. For example, the first two coded transcripts together with the audiotaped records were sent to the primary supervisor for verification. I also conducted member-checking and verification of storyline in the presence of the primary supervisor. The participants all agreed that the storyline represented their views and that the model would be useful. The positive feedback from the mental health nurses who are the potential users of the model was a big strength.

It is also worth acknowledging that the mental health nurses described the metaparadigms from their own views. Some of the views such as those on the mental health metaparadigm may have been influenced by the westernized education and global definition of mental health. However,
the fact that they were asked to describe or define the metaparadigms in their own view given their experience means that they would also consider the metaparadigms based on their own experiences and interactions with patients and communities. This was evidenced by the inclusion of the spiritual aspects in their definition of mental health even though the WHO does not spell out clearly the spiritual component in its definition of mental health.

4.8. Summary

This chapter presented the methodology that was used in conducting research including description of Grounded Theory that was adopted for this study. The methods of Grounded Theory including criticisms and strength have been described. The justification of selecting Straussian Grounded Theory over the other versions of Grounded Theory is explained. Data collection instruments and methods have been included. The research process, including the pilot phase, actual phase and ethical issues observed during the research process were discussed. Academic rigour that underpins a scientific study has been explained to justify the trustworthiness of the substantive theory developed. The chapter concluded with the strengths that facilitated success and limitations of the current study and how they were mitigated to ensure credibility.
CHAPTER FIVE: DATA ANALYSIS

5.1. Introduction

In this chapter, the description of data management and data analysis leading to the development of a conceptual model is presented. The primary purpose of the study was to develop a Kenyan mental health nursing model for quality mental health nursing practice. Data management including the steps taken in processing data immediately after collection, to storage, import in to or export out of NVIVO software program are described.

Procedures for data analysis are also detailed along with contributions from different proponents of Straussian qualitative research tenets used to complement and enhance data analysis. Each step of analysis is described in a manner that first, reflects Strauss and Corbin tenets, followed by complimentary procedures from other qualitative methods and finally, application of the principles in analysis of the current study seriatim.

An audit trail that documents chronologically and systematically how data was analyzed and interpreted is described to ensure that the reader follows analysis of data in this study. Although sampling procedures and data collection were described in the previous chapter and analysis is described in the current chapter independently, practically, all the three procedures were conducted concurrently in accordance with Straussian and qualitative data analysis principles. The procedures of data analysis are however presented independently and sequentially to facilitate flow of information.
The chapter is organized into four sections starting with data management followed by data analysis within which the respective subsections are presented, and ends with a summary of the critical information that was presented in the chapter.

5.2. Data Management

Data sources for the current study included demographic questionnaires, interview transcripts, field notes, memos and literature review. All data including audio-recorded interviews were downloaded to the computer and stored in the research file created for data storage purpose. Each audio-recorded interview was replayed, transcribed verbatim by a transcriber and the researcher independently and double checked by a peer. The peer was a qualified PhD nurse who had just completed a study using grounded theory methodology. Independent transcription was done to verify consistency of data in the transcripts as one of the verification processes to enhance trustworthiness in Straussian Grounded Theory methodology (Curry, Nembhard, & Bradley, 2009).

To protect participant’s confidentiality, all identifying information was removed from the transcript and replaced with text identification labelled sequentially where letter “P” was used to represent participant. For example, Transcript from participant number 20 was named P 20. In addition, transcribed text quality was reviewed against the original audio. Further, each transcript was read and irrelevant data removed. Finalized cleaned transcripts in Microsoft word text documents were subsequently imported to QSR NVivo 10 created project file to facilitate storage and retrieval as necessary during analysis. To enhance storage and availability of data, a twin NVivo project file was created as back up. NVivo facilitated data analysis processes such as
constant comparison within and across cases during coding and theory generation. Field notes, memos and code notes were also stored in the electronic project file to facilitate retrieval during data analysis.

5.2.1. Use of QSR NVivo 10 Software in qualitative data management and analysis

To facilitate coding, constant comparison and theory generation, QSR NVivo 10 was used. A new project file for all transcripts, memos and field notes, named “Grounded Theory Project 1” with its twin back up as “GT project 2” was created. Within these project files all other relevant files were created with specific labels to store respective data. They included transcripts file, field notes, memos, etc. Data was subsequently transferred into these files appropriately. For example, it was possible to group Grounded Theory project files, into document sets that were easily retrieved for constant comparison of data during analysis. Subsequently coding step was started during which related extracts (across documents) were identified and coded to free nodes examples of which are in appendix G-J of this thesis. The created nodes took the titles of the nursing metaparadigm concepts which were mental health nursing, environment, human being and mental health. Created free codes are attached as appendix G to J. Thus the total number of nodes category files created were five into which extracts related to mental health nursing practice (MHNP), environment, mental health, human being and recommendations were stored respectively.

NVivo audio coding process was conducted in accordance with Wainwright and Russell recommendations (2010). Content of the codes were continually accessed by simply double clicking on the respective codes. Coding stripes were used to facilitate the process of coding they
provided some information such as parts with most dense codes. Use of NVivo additionally allowed for convenient connection of ideas emerging from two or more sources by use of the “see also link” system. Availability of all documents electronically at the click of a button facilitated coding processes, text searches for verification and theory integration. The next paragraph presents a brief description of QSR NVivo 10 software.

QSR NVivo 10 is a Qualitative data analysis Software for Researchers. Its roots are in Non-numerical Unstructured Data Indexing Searching and Theorizing (NUD*IST), specifically designed for qualitative data management in 1980's (Zamawe, 2015). QSR NVivo is, according to Adongo, Tabong, Azongo, et al. (2014) an improved and expanded version of the NUD*IST with improved features to facilitate its use in qualitative data analysis. NVivo is not methodological-specific, has high compatibility to research designs and is therefore used for a wide range of qualitative research designs and data analysis methods including Grounded Theory as in the current study. QSR NVivo software provides for easy organization and analysis of unstructured data from various sources (Adongo, Tabong, Azongo, et al).

5.3. General principles of Straussian Grounded Theory Data analysis and its application to current study

Strauss and Corbin (1990 & 1998) concurred with Glaser (1978 & 1992) that data analysis in Grounded Theory is a systematic approach by which a theory that is grounded in data is generated. Cho and Lee (2014) and Hussein, Hirst, Salyers, and Osuji (2014) support Strauss and Corbin’s (1990 &1998) principles, that data analysis in Grounded Theory is neither linear nor sequential but involves a systematic process that parallels data collection and continues until the
theory is discovered. The amount of data for analysis to discover the theory is based on saturation rather than on availability. Further, Corbin and Strauss (1990) and Cho and Lee (2014) propose that because of the nature of theoretical sampling, theory generated from analyzed data guides the decision about what kinds of data are appropriate for subsequent data collection.

During the coding process, in Grounded theory, an incident is compared and contrasted with other incidents (Corbin & Strauss, 1990). Glaser and Strauss (1967), Charmaz (2006), Gregory (2010) and Mohammadpur, Rezaei and Sadeghi (2010) hold the same views with Straussian principles that making comparisons between empirical data and concept, between concept and categories, among data, among categories and among different “slices of data” is necessary in order to reach higher levels of abstraction and advance with conceptualization.

While Glaser (1978), proposed open and theoretical coding as the two steps of data analysis for theory discovery, Strauss and Corbin (1990 & 1998) and Charmaz (2006) proposed three steps. The three steps of coding by Strauss and Corbin (1990) are open, axial and selective coding while those by Charmaz (2006) are initial, focused and theoretical coding. The coding steps were later modified and like Glaser (1978), Charmaz (2008) proposed two stages of coding but names them differently as initial (or open) coding and refocused coding. In the subsequent subsections of this chapter, three steps advanced by Strauss and Corbin (1990 & 1998) are discussed and their application in the current study is described.
5.3.1. Open Coding

Open coding which is also referred to by Strauss and Corbin (1998) as micro-analysis is the initial step of data analysis in grounded theory. Straussian data analysis recommends open coding as an initial process by which concepts and categories of information are generated from the interview scripts. This is also supported by other grounded theory proponents including Allan (2003) and Thai, Chong and Agrawal (2012). They all assert that open coding constitutes the most basic fundamental process which allows for analyzing data word-by-word, line-by-line or paragraph –by- paragraph. During open coding, transcripts of each interview are reviewed multiple times (Mohammadpur. et al, 2010) with the aim of examining the text for thoughts, ideas, meaning and consequently assigning them conceptual or in-vivo codes. Assigning codes is known as labeling and sometimes, the same text may give rise to more than one code.

Open coding also involves the use of constant comparative approach in which incident is compared with other incidents in terms of similarity and differences. Events or incidents which seem to have the same meaning are grouped together through a process of categorization. Thus in open coding, the researcher labels and categorizes data (Corbin & Strauss, 1990; Cho & Lee, 2014). Constant comparison requires that the researcher maintains close connection between codes, data and category to develop a theoretical elaboration enhanced by memos. Saturation is achieved when no new relevant data are obtained, category has well developed dimensions and properties and relationships among categories are well established and validated. This means that for effective open coding process, the researcher avoids mere descriptions when labeling phenomena and instead becomes more analytical and moves towards using theoretical labels.
Furthermore, in open coding, categories are discovered by grouping concepts that seem to relate to the same phenomena, using theoretical concepts from literature, in-vivo codes, tradition bearer and memos. Categories are named and their properties and dimensions are identified. According to Strauss and Corbin (1990) properties refer to features or characteristics of a category while dimension is a measurable aspect of a category along a continuum. During open coding, theoretical sensitivity is achieved by questioning that allows the researcher to compare properties of the category systematically and being sensitive to certain statements on an approach known as waving the red flag (Strauss and Corbin, 1998).

5.3.1.1. Open coding in the current study

The first step in open coding was to examine thoroughly each script within 48 hours of recording. All transcribed and audiotaped interviews, corresponding participant observation and field notes were accessed. Audio tapes of selected interviews were replayed to clarify assigned codes and levels of conceptual abstraction. Starting with full transcription of the interview, and using within-case and across-case approach (Thai et al, 2012; Corbin & Strauss, 2008) data were broken down into discrete incidents, ideas, events and acts. Breaking data into segments was possible because of analysis of each individual transcripts line-by-line, sentence-by sentence, and paragraph-by-paragraph and as a whole document.

During analysis, information from each transcript was compared throughout, audio taped record and subsequently with other transcripts in the within-case and across-case approach. Subsequently, segments of information or statements from each transcript were identified and assigned conceptual or in-vivo codes. In-vivo codes are labels that are derived directly from the
Conceptual codes on the other hand, are labels that were assigned because of the meaning those incidents, actions, ideas and events evoked when they were examined comparatively within their context. Conceptual labels were consequent to relevant literature reviewed. In table 5.1, examples to illustrate how conceptualization during open coding of the environment metaparadigm was done are given.

<table>
<thead>
<tr>
<th>Text ID</th>
<th>Total No. of Ref.</th>
<th>Ref No</th>
<th>Extract from participant’s data (participant’s statement)</th>
<th>Interview Statement Theme</th>
<th>FREE CODE &amp; TYPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>P 20</td>
<td>6</td>
<td>2</td>
<td>&quot;….I also feel that the environment should be friendly because if the people who are surrounding the patient are not friendly it can trigger the patient to have some feelings that maybe they are being looked down upon and this can trigger aggression or withdrawal from the environment…………&quot;.</td>
<td>…if the people are not friendly it can……… trigger aggression or withdrawal</td>
<td>Negative influence Conceptual</td>
</tr>
<tr>
<td>P 21</td>
<td>9</td>
<td>5</td>
<td>“……an ideal environment should be friendly like if it is in the family, there should be support, good communication between the members and may be if one gets a problem thy seek help from the necessary institution…..”</td>
<td>Environment should be friendly</td>
<td>Friendly</td>
</tr>
</tbody>
</table>

A total of 1,500 codes were initially generated by the researcher in open coding of the four metaparadigms as follows; Environment-388, Human being-202, Mental Health Nursing Practice-648 and Mental health -262. As analysis progressed, the codes were continually trimmed down and refined by grouping together ideas with similar meanings for the researcher’s understanding.
of the phenomenon. Subsequently code hierarchy with categories and sub categories were formed from free codes and open coding step was concluded with a total of 434 codes as follows; environment 143, Human being –85, Mental Health Nursing practice- 138 and mental health -68. Examples of free codes and code hierarchy are in appendix G-J of this thesis. However, Table 5.2 gives an example to illustrate how code hierarchy with categorization was done in a selected part of the environment metaparadigm.

### Table 5.2: Example of environment code hierarchy illustrating category and sub-categories that emerged from initial free codes of the Environment metaparadigm. Codes at lower levels are properties of their immediate parent codes

<table>
<thead>
<tr>
<th>1. Homely environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1. Harmonious</td>
</tr>
<tr>
<td>1.1.1. Conducive</td>
</tr>
<tr>
<td>1.1.1.1. Allows for patient monitoring</td>
</tr>
<tr>
<td>1.1.1.2. Space</td>
</tr>
<tr>
<td>1.1.1.2.1. Adequate</td>
</tr>
<tr>
<td>1.1.1.2.2. Open space</td>
</tr>
<tr>
<td>1.1.1.2.3. Non restrictive</td>
</tr>
<tr>
<td>1.1.1.3. Convenient</td>
</tr>
<tr>
<td>1.2. Therapeutic</td>
</tr>
<tr>
<td>1.2.1. Comfortable environment</td>
</tr>
<tr>
<td>1.2.1.1. Facilitates recovery</td>
</tr>
<tr>
<td>1.2.1.2. Promotes healing</td>
</tr>
<tr>
<td>1.2.1.3. Provides for group interaction</td>
</tr>
<tr>
<td>1.2.1.4. Encourages family interaction</td>
</tr>
<tr>
<td>1.2.2. Crucial for individuals</td>
</tr>
</tbody>
</table>
5.3.1.2. Verification process

This is an important procedure in grounded theory as it helps reduce interrelation bias and enhances credibility and trustworthiness of one’s findings. Verification was done through inter-coding. The procedure of inter-coder reliability examines the coding consistency of different coders by coding and comparing the findings of the coders. The inter-coder procedure starts with the development of the coding scheme. Then, each coder working independently on a set of transcripts, performs own coding that is then verified for consistency. This procedure is recommended in grounded theory by several researchers including, Miles and Huberman (1994), Morse, Barrett, Olson and Spiers, (2002) as well as Lombard, Duch and Bracken (2002) . These researchers further assert that achievement of inter-coder agreement is a necessary step before proceeding to the axial and selective coding processes to ensure that the emerging theory is based on an accurate conceptual framework.

In this study, a simple verification procedure proposed by Miles and Huberman (1994) was applied as follows:

\[
\text{RELIABILITY} = \frac{\text{Number of agreements}}{\text{Total number of agreements + disagreements}} \times 100
\]

A score of >70% inter-coder reliability indicates consistency and good inter-coder agreement. In the subsequent paragraph, a description of the verification procedure of the current study is made.

The following criteria were used to identify and appoint the inter-coder:

- She was an experienced Associate Professor from a distinguished University (University of Manitoba-Canada)
• She had a PhD qualification in nursing;
• She was familiar with Grounded Theory coding procedures since she had conducted and published several qualitative research articles using Grounded Theory methodology.
• She had supervised Master and Doctoral degree students conducting Grounded Theory research.
• She was a mental health Nurse and would therefore understand the four metaparadigms of nursing theories as applied to mental health nursing.

A sample of 30% of the transcripts which is consistent with \( \geq 10\% \) of the transcripts as recommended by Miles and Huberman (1994) and Lombard et al., (2004) was tested for inter-coder reliability. The inter-coder was given 10 transcripts constituting one-third or 30% of all transcripts from research participants for open coding, using the grounded theory principles. The inter-coder reliability was done at two levels. The first one was a general inter-coding for each transcript. The second was on inter-coding for each metaparadigm for all the transcripts. Upon completion of inter-coding, the inter-coder sent the coded scripts with notes to the researcher. Further discussions via mails and Skype were held between the researcher and inter-coder to conclude consistency of their coding. Using Miles and Huberman’s (1994) formula, acceptable inter-coder reliability score of 99% was achieved. To demonstrate inter-coder reliability, calculation for environment codes is illustrated below:

The calculation of the inter-coder reliability score was as follows:

\[
\text{RELIABILITY} = \frac{92\ \text{agreed upon codes}}{92\ \text{total number of agreed upon coded} + 1\ \text{disagreement}} \times 100
\]

\[
= \frac{92}{93} \times 100 = 98.9 = 99
\]
5.3.2. Axial Coding

Coleman and O’Connor (2007) assert that axial coding derives its name from the fact that coding occurs around the axis of a category that was identified during open coding. According to Strauss and Corbin (1998), axial coding is used to investigate conditions, actions and consequences of situations described in the interview thereby connecting categories and their sub-categories. In this process, data that were fragmented during open coding are assembled in new way to achieve higher levels of conceptual abstraction and develop a paradigm model that is the basis of the new theory (Strauss & Corbin, 1998; Goulding, 2002; Duma et al, 2007). The relationships among these categories and sub-categories as well as their dynamism are identified at the level of properties and dimensions using memos, field notes and relevant literature. Thus, axial coding aims to reassemble codes identified during open coding, look for their properties, specify relationships between the codes, and find an underlying story in them (Rodon and Pastor, 2007).

Dimmock and Lam (2012), like Strauss and Corbin (1998) assert that hypotheses with respect to the identified relationships are proposed and tested against existing and new data from the continuing interviews. Hence the need to use’ Straussian recommended questions of what, why, where, when, by whom, with what results and how, of the data to help specify the identified categories in terms of the central phenomenon, causal conditions, context, intervening conditions and action. These specifications form the basic components of the coding paradigm also known as the paradigm model. Figure 5.1 shows the basic components of a paradigm model.
The components of the paradigm model are defined as follows:

- **The Phenomenon**: This is the central idea, event, happening or incident about which a set of actions is related or interactions are directed at managing or handling.

- **Context**: locations of events. Although grounded theory proponents are consistent that context and causal conditions are difficult to differentiate, it is widely agreed that context are specific locations (values) of background factors while causes are active variables or a set of conditions that influence strategies.

- **Causal conditions**: These are events or incidences that influence or give rise to the central phenomenon and include a set of causes and their properties.

- **Intervening conditions**: That shape, facilitate or constrain the strategies that take place within a specific context.

- **Action/Interaction Strategies**: These are purposeful activities that are devised in response to a phenomenon under a set of perceived conditions or intervening conditions. They usually result from the core category commonly referred to as central phenomenon.

- **Consequences**: Outcomes or results of action or interaction. Consequences result from
the strategies and may include intended and unintended outcomes.

5.3.2.1. Axial Coding in the current study

In the current study, the researcher constantly retrieved transcripts and read them together with memos and field notes. These were compared to categories and sub-categories which were identified in the open-coding stage. Throughout this step of analysis, questions of why, when, how, where, and with what results of the data as recommended in Straussian cannons (Strauss, 1987; Strauss & Corbin, 1990, 1998) and their proponents (Lam, 2006; Rodon et al., 2006; Thai, Chong & Agrawal, 2012) were continually asked. The answers to these questions helped the researcher discover emerging patterns from the categories and clusters of data. Consequently the paradigm model was developed and the phenomenon of mental health nursing practice was contextualized. Further constant comparison recommended by Strauss and Corbin (1990 &1998) and Cho & Lee (2014) was done by continually testing existing and new data to confirm relationships within the paradigm model shown in figure 5.2.
The components of the paradigm model in the current study which later formed the concepts within the four nursing metaparadigms were defined as explained below:

**Causal conditions**: To discover causal conditions in the current study, the answers to the questions about what leads to the phenomenon of mental health nursing practice were searched for in the data. Key words that were searched for as indicators of causal conditions included “because” and “since”. Causal condition that was discovered was the human being as an individual, family or community with dimensions and properties or sub-categories.

In this study, the properties of the human being included an individual, family, community with dimensions such as being mentally sick, in crisis or at risk of mental illness / disorder that necessitated occurrence of the central phenomenon.

**The phenomenon**: The core category discovered from the data as the central phenomenon was mental health nursing practice. All other conditions were related to it in a manner that is illustrated in figure 5.2 either as causing it, resulting from it or together with intervening and contextual conditions it influenced actions and interactions of the nurses managing mental health nursing practice result in the consequences.

**Context within which the phenomenon (mental health nursing practice) occurred**: The context of mental health nursing practice was discovered when the questions about when, where, stage and with whom of mental health nursing practice were answered. The context that was discovered was the environment with properties such as the hospital, family or community. The context also had dimensions such as homely or hostile. Properties of homely environment included being, harmonious, conducive, and therapeutic, etc. The properties of a hostile
environment on the other hand included stigmatization, discrimination, neglect, disrespect, lack of basic human needs, etc.

**Intervening conditions:** These were discovered when answers to questions about situations or circumstances that facilitated or constrained strategies that took place within a specific context were answered from the data. The intervening conditions discovered from the data included the personal, educational and professional characteristics of the mental health nurses.

**Actions:** These were specific actions also referred to as interaction strategies, in response to mental health nursing practice. They were discovered from the data by looking for answers to the questions about what, why by whom and how of the mental health nursing practice. The interaction strategies that were discovered included interaction, communication, identification of mental health needs, caring, advocacy and collaboration among others.

**Consequences:** According to Straussian Grounded Theory, consequences are outcomes or results of action or interaction. They may be intended or unintended. To discover the consequences, the researcher re-read the data in search for answers to questions about results from strategies. The category that was discovered from data was optimum mental health which had many properties such as rational decision making, ability for adaptation, ability to develop and maintain relationships and self-understanding among others.

The hypothetical relationships that were developed in the paradigm model were continually checked using theoretical sampling of concepts and literature that had theoretical relevance until
theoretical saturation was reached. In Grounded theory, theoretical saturation is important as it is the point at which all the relationships between categories have been established. The outcome of axial coding was the paradigm model indicating the relationship between the main metaparadigms of nursing as illustrated in figure 5.2.

5.3.3. **Selective Coding**

Glaser and Strauss (1967) and Strauss and Corbin (2008) described selective coding as a step of integrating categories and building and refining a theory. They assert that selective coding involves identification of a central phenomenon or core category around which, other categories discovered during axial coding are related and a story line is constructed. The story line reflects conceptualization of the story or the core category which systematically relates the core category to other categories and filling in categories that need further refinement. The core category accounts for the most variation and most other categories relate to it. According to Corbin and Strauss (2008) and Straussian proponents including Duma et al (2007) and Thai et al (2012), the core category should be abstract, comprehensive, analytical, and frequently cited in collected data. To discover the core category, the researcher uses inductive and deductive analysis of data from transcripts, memos and diagrams that have been developed in the previous open and axial coding with the use of theoretical sampling.

Thus, it can be argued that the main purpose of selective coding (Strauss & Corbin, 1998; Corbin & Strauss, 2008) is to advance the theoretical integration of the interpretive work which is accomplished through three processes; Namely, formulation of the story (explicating the story line by analytic description of the core category), conceptualization of the storyline (relating
other categories to the core) and discriminate sampling to validate the story line. Formulation
and conceptualization of the storyline is facilitated by asking questions such as: ‘What is striking
me the most from these data?’, ‘What seems to be going on in these data?’, and ‘What keeps on
striking me over and over, i.e. what seems to be coming through even when it is said indirectly?
In discriminate sampling, the researcher selectively targets the sites, documents or persons who
can maximize opportunities for verifying the storyline. It may include returning to old sources of
information such as literature, participants, or going to new targeted sources of relevant data to
verify the storyline (Strauss & Corbin, 1998).
To discover the core category, the code should meet the criteria given by Strauss (1987). They
are:

1. It recurs frequently
2. It links the data together
3. It explains variation in the data since it is the core
4. It has implications for formal or general theory
5. It becomes more detailed as the theory moves forward
6. It permits maximum variation and analysis

5.3.3.1. Selective Coding in the current study:
This was the final coding phase that integrated all the interpretive work of analysis. The tasks of
the researcher during selective coding in the current study were three fold. Firstly, the researcher
was to explicate the story line by discovery and analytic description of the core category. The
second task was to conceptualize the storyline and finally to validate the story line through
discriminate sampling. Questions that were constantly asked to guide this final coding were:
“What is the core category? What seems to be coming through even when it is said indirectly?”
How does the core category proceed and with what variability and conditions, in both macro and micro environments?” The search for these answers formed open-axial-selective loop that continued with researcher modifying and refining categories until theoretical saturation was achieved. In the subsequent paragraphs the tasks in selective coding and the procedures undertaken in the current study are described.

5.3.3.2. Theoretical Memos:
These were records of the researcher’s developing ideas about codes and their interconnections (Glaser, 1998). They abstracted meaning from the field and played a key role in the development of the theory. Throughout this study extensive case-based and conceptual memos were written during transcription and coding of data. The content of the memos included researcher’s impressions about participants’ experiences during interviewers, their reactions and information given. Memos were used to systematically question some of the pre-existing ideas in relation to what had been said in the interview. In this way it was possible to make and record comparisons among these memos. In addition, memos were used to record researcher’s thinking about the meaning of codes as well as how and when processes occurred, how they changed, and what their consequences were.

Theoretical memos allowed for comparisons between data, cases and codes in order to find similarities, differences and raised questions to be answered in the subsequent interviews.
5.3.3.3. Explicating the Story Line:

The storyline can be defined as a “general descriptive overview” of the core phenomenon of the study given in a few sentences (Strauss & Corbin, 1990). It should be related to the study in analytical terms, delineating the core category. Two techniques were used in the current study to discover the core category also referred to as central phenomenon and come up with theoretical statements about it. The techniques involved the use of the paradigm model developed in axial coding, and continual sorting and reviewing data as well as memos and field notes. In order to discover the core category, the researcher used the following questions to guide intensive inductive and deductive reasoning that was required during this step.

1. What seems the most striking/interesting in the data so far obtained from interview, field notes and memos?

2. Does one category seem more central?

3. Can it explain the others?

4. What seems to be coming through even when it is said indirectly?”

5. How does the core category proceed and with what variability and conditions, in both macro and micro environments?”

This process was commenced after core categories had been discovered in axial-coding and a paradigm model developed. Each of the categories was analyzed, modified and refined until theoretical saturation was achieved and theoretical statements developed. The biggest challenge was to discover one core category since during axial coding; each of the nursing metaparadigms had a main category and sub-categories. Strauss and Corbin (1998) and Corbin and Strauss (2008) together with their proponents including Mcfadzean (2007) assert that in selective coding,
the researcher selects one of the axial codes based on the aim of the study. Once the core category is selected, all other axial codes are then related to it. Table 5.3. Illustrates the main categories, sub-categories and their source (P) in the four nursing metaparadigms.

<table>
<thead>
<tr>
<th>METAPARADIGM</th>
<th>CATEGORY</th>
<th>SUB-CATEGORY</th>
<th>EXAMPLES OF EMERGENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental Health Nursing Practice</td>
<td>Providing Holistic mental health Care</td>
<td>Communication</td>
<td>P7,P18,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Identify mental health needs</td>
<td>P15,P20</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Caring</td>
<td>P19,P27</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Advocacy</td>
<td>P2,P15</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Collaboration</td>
<td>P10,P19</td>
</tr>
<tr>
<td>Person/Human Being</td>
<td>A Unique Biopsychosocio-Spiritual Being</td>
<td>Unique God’s creation</td>
<td>P12,P29</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Peaceful with self and others</td>
<td>P7,P30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Has ability to manipulate environment</td>
<td>P18,P30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>One with bio-psychosocial needs</td>
<td>P11,P29</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Independence</td>
<td>P8,P16</td>
</tr>
<tr>
<td></td>
<td></td>
<td>a person as a biological being</td>
<td>P9</td>
</tr>
<tr>
<td>Optimum Mental Health</td>
<td>Resilience</td>
<td>Make rational decisions</td>
<td>P24,P28</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ability to adapt</td>
<td>P19,P26</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Maintain relationships</td>
<td>P11,P14</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Self-Understanding</td>
<td>P6,P13</td>
</tr>
<tr>
<td>Environment</td>
<td>Homely</td>
<td>Conducive</td>
<td>P19,P28</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Safe</td>
<td>P20,P31</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Harmonious</td>
<td>P17,P21</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Established routines</td>
<td>P12,P27</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Accommodative</td>
<td>P9,P18</td>
</tr>
</tbody>
</table>

The researcher went through a recursive process of reviewing transcripts, open codes, axial codes as well as memos, field notes and selected literature back and forth. Every emerging category was subjected to the core category criteria by Strauss (1987) to determine its suitability. Besides, the researcher constantly discussed the idea with the research supervisors to validate the core category. By continuously removing excess and filling in poorly developed categories until
they were saturated through theoretical sampling, human interaction was discovered as the core category that seemed more central in all the four nursing metaparadigms and was later used as the basis of the Kenya Human Interaction Model of mental health nursing practice.

A literature search on the concept of interaction further confirmed properties of human interaction that fit with the data in the current study and validates its use as the core category. Interaction nurse theorists who include Travelbee (1971), King (1981) and Roy (2009) among others, have over the years placed interaction as central to nursing care. These interaction nurse theorists argue that interaction, which is a process of perception and communication, is the core of nursing care. Moreover, interaction impacts on client’s relationship with the environment care and situations in which they find themselves while at the same time predicts the human health and well-being, both mentally and physically across the life span. Some of the properties of interaction found in literature (Moraes, Oriá & Pagliuca, 2006) that fit with the data in the current study include interest, attention, sensitivity, communication and relationships. Merriam-Webster’s dictionary, confirms the properties of interaction which are described as the act of doing things or influence of things on one another.

In table 5.4, examples are given to illustrate how the core category of human interaction was discovered from data and theoretical statements formulated. The third and fourth columns indicate sources (P) of codes at initial emergence and after modification. For example, human interaction within the human being metaparadigm first emerged from P3 when it was implied as a necessary condition for a human being. As data on human interaction was reviewed other sources were found that identified it more directly and the statement was finally modified with information from P31.
<table>
<thead>
<tr>
<th>TABLE 5.4: EMERGENCE OF HUMAN INTERACTION CORE CATEGORY</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Emergence of Human interaction in all the four metaparadigms and formulated theoretical statements</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Mental Health Nursing Practice</strong></td>
</tr>
<tr>
<td><strong>Optimum Mental Health</strong></td>
</tr>
<tr>
<td><strong>Human Being</strong></td>
</tr>
<tr>
<td><strong>Environment</strong></td>
</tr>
</tbody>
</table>

Human Interaction was selected as the core category, because it met the six criteria recommended by Strauss (1987) and Strauss and Corbin (1990 & 1998). Firstly, Human interaction was central in all the nursing metaparadigm according to the nurses who were interviewed. From table 5.4, it can be seen that the human being interacts intra-and interpersonally with and within the internal and external environment. Human interaction further occurs at professional level such as nurse interacting with client or other professionals to help client to achieve optimum mental health which is evaluated by quality of interaction. Human interaction, thus, explains variations in mental health nursing practice, its causal and intervening conditions, contexts and actions that lead to consequences whose properties are again measured using its variation.

Secondly, since human interaction was an activity in all the metaparadigms stated directly and
indirectly, it became the most frequent code expressed both explicitly and implicitly. Besides, Human interaction is a basic social-psychological process that occurs overtime, it explains variation in human behaviour and represents ideas that are most significant to the nurses and thus it is not easily saturated. Thirdly, Human interaction is more abstract and its theory on the effect on optimum mental health and human behaviour has been studied by researchers in other fields such as interpersonal theory of Harry Stack in psychology (Sharfstein, 1998) and society and social interaction in Sociology (Little, Vyain, Scaramuzzo et al, 2013). Ability of human interaction to account for variations in interactions for mental health nursing practice, achievement of optimum mental health, human interactions and environment was possible because of its dimensions and properties illustrated in figure 5.3.

FIGURE 5.3: PROPERTIES AND DIMENSIONS OF HUMAN INTERACTION
5.3.3.4. Conceptualizing the Storyline

In conceptualizing the storyline, the core category was systematically related to the other categories. In this study, human interaction was systematically related to the four nursing metaparadigms and the human interaction model was constructed. The human interaction was placed as the core of mental health nursing practice. Mental health nursing practice requires the interaction between the nurse, client and other mental health team members within an environment that is dynamic and interacts with both the nurse and client so as to achieve the goal of mental health nursing practice which is optimum mental health of the client. Figures 6.5 and 6.6 in chapter six illustrate how human interaction and the Kenya Human Interaction Model parts and their fit were conceptualized.

5.3.3.5. Validation of the Story Line

Relevant literature to the categories and the metaparadigm were discriminately sampled to validate the meaning of human interaction and its use in nursing. For instance Travelbee (1971) and Roy (2009) asserted that interaction is central to nursing practice as it is to nursing care. Merriam-Webster dictionary confirms the properties of interaction which are described as the act of doing things or influence of things on one another. Interaction can have positive or negative influence.

As part of discriminate sampling, member checking was performed with the mental health nurses who participated in the study. The storyline and the theoretical scheme, based on the data available were also discussed with the primary research supervisor, who is experienced in Grounded Theory research. Subsequently, the storyline and the theoretical scheme were shared with the study participants and other mental health nurses who had an interest in the findings,
although they had not participated in study. Under the guidance of the research supervisors, storyline and the theoretical scheme were also shared with the nursing faculty. All these groups (see attendance list in appendix D and E) agreed that the storyline and the proposed theory (figure 6.6) captured the essence of the future of mental health nursing practice in Kenya.

5.3.3.6. Integration of the theory
Integration of the theory of Kenyan Human Interaction Model of mental health nursing practice was done by weaving together all threads of data created during open and axial coding. This involved the use of different procedures and strategies as the integrative mechanism to ensure that the theory was well integrated and grounded on the data. The integrative mechanisms used included: analyzing for process and tracing the theory path, reviewing and sorting memos, drawing integrative diagrams and the conditional matrix /consequential matrix for relationships, gaps and holes within the emerging theory, validation of the theory and integrative writing up. These mechanisms are explained in the next sub sections.

Analyzing for process and tracing the theory path: The transcripts open codes, axial codes as well as field notes and memos on the four nursing metaparadigms were reviewed multiple times and analyzed to discover how mental health nursing practice which was the core phenomenon influenced or was influenced by other metaparadigms during human interaction process.
Information on views of current state of environment, mental health nursing practice, the human being and mental health were reviewed. This enabled the nurses to express their views on what they accepted as good and bad. Additionally, information on what would be their ideal in the four metaparadigms gave insight on the appropriate model for mental health nursing practice. In
Reviewing and sorting of memos: The content of the memos that were kept during the open and axial coding were sorted and reviewed systematically in order to validate the relationship between different categories and to integrate these into an emerging theory of human interaction of mental health nursing practice.

Integrative diagrams and the Conditional Matrix: Diagrams were used to aid the integration of the theory and to illustrate the connection between the causal conditions, context and intervening conditions, consequences as well as the phenomenon of human interaction of mental health nursing practice in figure 5.1, 5.2, 5.4 and 5.5.

The Conditional Matrix: According to Strauss & Corbin, (1998) and Guo (2014), a conditional matrix is an analytic aid that is useful for considering the wide range of conditions and consequence related to the phenomenon under study. In the context of the current study, a
diagram in the form of conditional matrix (figure 5.5) has been used to aid the integration of the
theory and illustrate connections and levels of intervening conditions on the phenomenon of
mental health nursing practice. The levels represented in the circles include national, community,
organizational, institutional, sub-organizational and sub-institutional, collective and group
individual, interactional levels and actions located at the center of the matrix. The matrix was
used in this study to locate mental health nursing practice in relation to causal conditions
(human being at risk for or experiencing mental disorders), context of practice (nurse
characteristics and qualifications), intervening conditions (homely or hostile environment) actions
and consequences (optimum mental health).
ENVIRONMENT

Mental Health Institutions
Community
Family

NATIONAL HEALTH CARE SYSTEM

Human being experiencing /at risk of mental illness/disorder

Mental health nursing practice
Mental health nurse
Optimum mental health

Significant others
Friends
Support groups

CODE OF ETHICS & LEGAL SYSTEM
GUIDING NURSING PRACTICE

POLICIES ON MENTAL HEALTH CARE

FIGURE 5.5: CONDITIONAL MATRIX
Summary

In this chapter, data analysis using Straussian Grounded Theory principles have been presented. The three stages of data analysis have been described and their application in the current study has been demonstrated. The progressive analysis demonstrates how the Kenyan Human Interaction Model of mental health Nursing practice has been developed from categories and sub-categories discovered in the data. This chapter discussed all analytical procedures used during the discovery and development of the Grounded Theory the Human Interaction Model of mental health nursing practice. The details of the theoretical scheme, concepts or categories of the theory and the narratives from the mental health nurses are presented in chapter six where research findings are discussed.
CHAPTER SIX: PRESENTATION OF FINDINGS

6.1. Introduction

In this chapter, research findings on a Grounded Theory of the Kenyan Human Interaction Model for mental health nursing practice that was developed using Straussian Grounded Theory methodology are presented. The chapter is organized into two sections. In the first section, profiles of the participants are described while in the second section the finding leading to the discovered theory are presented progressively according to the research questions. The second section is further divided into subsections that include the theoretical scheme, nursing metaparadigms, the human interaction core category as well as the integrated theoretical diagram that illustrates how the metaparadigms fit together in the theory.

6.2. Description of Participants Profiles

In this research, participants were mental health nurses recruited from mental health units in all the regions of Kenya. The sample consisted of 33 registered mental health nurses all of whom had undergone post-basic diploma course in mental health nursing and had been in mental health nursing practice for at least six years. The sample size of 33 is consistent with that recommended by Warren (2002), Guest (2006) and Thomson (2011). These researchers concur that the number of interviews and sample size vary from a minimum of 12-30 depending on the emerging data with subsequent theoretical sampling and saturation. The youngest participant was 38 years while the oldest was 64 years. The nurse who was 64 years was on the final year of a 4–year contract
on request since the retirement age for public servants in Kenya is 60 years. The breakdown of participants’ ages is given in table 6.1.

<table>
<thead>
<tr>
<th>Age in Years</th>
<th>38</th>
<th>39</th>
<th>40</th>
<th>41</th>
<th>43</th>
<th>45</th>
<th>46</th>
<th>47</th>
<th>48</th>
<th>50</th>
<th>51</th>
<th>53</th>
<th>55</th>
<th>56</th>
<th>57</th>
<th>59</th>
<th>60</th>
<th>64</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Participants</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>5</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>33</td>
</tr>
</tbody>
</table>

The experience of the nurses ranged from 6 to 31 years. One of the eligibility criteria for entry to the research was six years. This criteria was consistent with Bargal (2014), assertion that crystallization of a comprehensive professional worldview is often a long process in the life of the developing professional person. The researcher’s assumption was that six years would be long enough time for the mental health nurse to have crystallized their worldview on the major nursing metaparadigm concepts that were the subject of exploration in this study. The breakdown of the experience in years for participants is given in table 6.2. Only 3 nurses had been in mental health nursing experience for less than 10 years while 30 nurses had been in mental health practice for more than 10 years.

<table>
<thead>
<tr>
<th>Experience in Years</th>
<th>6</th>
<th>8</th>
<th>10</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
<th>17</th>
<th>18</th>
<th>20</th>
<th>24</th>
<th>25</th>
<th>31</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Participants</td>
<td>2</td>
<td>1</td>
<td>8</td>
<td>5</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>33</td>
</tr>
</tbody>
</table>

The other important aspect in seeking world views of the participants was the working capacity. The mental health nurses worked at the level of clinical nurse practitioners, nurse managers at the ward, unit or hospital level, community level and nurse educators as indicated in table 6.3.
The community mental health nursing services were operated from the mental health hospital or unit. This means that there were no independent community mental health nursing services other than those run from the mental health unit in the locality. The mental health nurses working in community mental health services were deployed on rotational basis from the mental health unit or hospital within the area.

**TABLE 6.3: CAPACITY IN WHICH PARTICIPANTS WORKED**

<table>
<thead>
<tr>
<th>Working level</th>
<th>Mental Health Nurse Practitioner (Clinical/Community)</th>
<th>Nurse Managers/Administrators</th>
<th>Nurse Educator</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Participants</td>
<td>10</td>
<td>13</td>
<td>6</td>
<td>1</td>
</tr>
</tbody>
</table>

Nursing is a predominantly female profession and this was reflected in the distribution of males and females in the sample where males were 13 compared to 20 females. With regards to religious background, participants were mainly from Anglican (11), Catholic (10) and Pentecostal (10) churches. Participants from Redeemed Church and Seventh Day Adventist were one each.

### 6.3. Description of the emergent theory and the metaparadigms

The purpose of the current study was to develop a Kenyan model of mental health nursing practice using empirical data from the mental health nurses on the four major nursing metaparadigms. The emergent theory proposes that mental health nursing practice is based on human interactions with clients within an environment that is influenced by sociopolitical and physical factors, nurse characteristics, client characteristics and policies. Analysis resulted in one major core category, entitled “human interaction”. This category was overarching in all the four
major nursing metaparadigms (human being, mental health, mental health nursing and environment) although for each metaparadigm, there were core categories with respective sub-categories.

In the subsequent sub-sections, the theory is presented. The first sub-section presents the theoretical scheme of the Kenyan Human Interaction Model for mental health nursing practice that summarizes all categories and concepts of the theory. The second sub-section presents each of the metaparadigm concepts. The third sub-section presents human interaction as the core category and major process in mental health nursing practice. Lastly, the theoretical diagram illustrating how the theory fits together with all its parts and transcript extracts is presented. This organization is adopted to facilitate understanding of the interrelationships between categories.

### 6.3.1. Theoretical Scheme

<table>
<thead>
<tr>
<th>TABLE 6.4: CATEGORIES AND SUB CATEGORIES OF THE THEORY</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Core Category</strong></td>
</tr>
<tr>
<td>INTERACTION</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Metaparadigm Category Sub-Category Sample Extracts From Participants’ Statements

Communication P4 “Another thing is that we should communicate...”
## Mental Health Nursing Practice

### Holistic mental health care

**Identify mental health needs**

<table>
<thead>
<tr>
<th>Page</th>
<th>Quote</th>
</tr>
</thead>
<tbody>
<tr>
<td>P18</td>
<td>“Mental health nursing should consist of assessment of patients where you receive a client and do your assessment of the patient to identify the mental health needs of the patient then...and planning care of the patient and implementation of the same till the patient is well to continue with his/her life.”</td>
</tr>
</tbody>
</table>

**Caring**

<table>
<thead>
<tr>
<th>Page</th>
<th>Quote</th>
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</thead>
<tbody>
<tr>
<td>P19</td>
<td>“I believe that mental health practice should be a holistic care. It is not just the care for the mental issues but the whole person that means we should be able to take care of a patient in totality even the physical health and the mental health and the psychological issues.”</td>
</tr>
</tbody>
</table>

**Advocacy**

<table>
<thead>
<tr>
<th>Page</th>
<th>Quote</th>
</tr>
</thead>
<tbody>
<tr>
<td>P2</td>
<td>“... we need to create lots of awareness amongst the policy makers because ..., you find that when they are investing in mental health, they feel that is a loss......”</td>
</tr>
</tbody>
</table>

**Collaboration**

<table>
<thead>
<tr>
<th>Page</th>
<th>Quote</th>
</tr>
</thead>
<tbody>
<tr>
<td>P10</td>
<td>“..........we also involve the community, the relatives and also any other person who can give us some help in management of these patients”</td>
</tr>
</tbody>
</table>

## Human Being

### A unique biopsychosocial-spiritual being

**Unique God’s creation**

<table>
<thead>
<tr>
<th>Page</th>
<th>Quote</th>
</tr>
</thead>
<tbody>
<tr>
<td>P29</td>
<td>“......according to me ... so a human being is a special creation of God and we should value.....”</td>
</tr>
<tr>
<td>P12</td>
<td>“...... because of the uniqueness of a client you take care of the patient as per the presenting needs”</td>
</tr>
</tbody>
</table>

**Biopsychosocial-spiritual being**

<table>
<thead>
<tr>
<th>Page</th>
<th>Quote</th>
</tr>
</thead>
<tbody>
<tr>
<td>P11</td>
<td>“A person is a living thing with physical, psychological and spiritual needs. Those needs in my view are what make a human being. I would like that my patients are taken care of physically, psychologically, spiritually and emotionally”.</td>
</tr>
</tbody>
</table>

**Peaceful with self and others**

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<tr>
<th>Page</th>
<th>Quote</th>
</tr>
</thead>
<tbody>
<tr>
<td>P30</td>
<td>“...... A human being is a person is a creature created ........, a person who is in peace with both the environment with himself and a well-balanced person”.</td>
</tr>
</tbody>
</table>

**Has ability to manipulate environment**

<table>
<thead>
<tr>
<th>Page</th>
<th>Quote</th>
</tr>
</thead>
<tbody>
<tr>
<td>P30</td>
<td>“A human being is created with ...... ability to manipulate the environment for his advantage ..........”</td>
</tr>
</tbody>
</table>

**One with self-regulation abilities**

**Unique Individual**

<table>
<thead>
<tr>
<th>Page</th>
<th>Quote</th>
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<tbody>
<tr>
<td>P8</td>
<td>“I see a person as a unique individual who has both abilities ... to take care of himself but is a unique person because of the uniqueness that he was created with in terms of abilities; when I am talking about abilities I am looking at things this individual do for himself and what can this individual get from others so that he can be assisted”.</td>
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## Optimum Mental

### Make rational decisions

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<td>P28</td>
<td>“......an individual is able to solve problems promptly,...... have better communications skills, and is able to meet his/her needs”</td>
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### Ability to adapt

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<td>P19</td>
<td>“.... I believe it is positive adaption... Eh... Adapting positively to internal and external stressors and the whole wellbeing of the mind of a human”</td>
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<td>HEALTH</td>
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<th>ENVIRONMENT</th>
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<td>P23 “……A safe environment for my client or my patients is also a safe environment for me as the worker ……. an environment that is conducive whether at home or in the hospital is the best for any person ……. basic human needs of which shelter, food, clothing and what have you consist of the environment and even the physical amenities …...............if the environment is conducive it facilitates healing…”</td>
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<td>P22 “An environment for mental health practice should be a therapeutic environment without harmful objects, a place where a patient cannot injure himself it should also be a place …............... where interaction can be done peacefully”</td>
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<td>Harmonious</td>
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<td>P17 “An ideal environment ……. is an environment will provide the peace of mind, an environment where the we do not have a lot of disturbance………… a place where a patient …….relaxes and ……….. that peace can be provided by the staff working in that facility ……….. structure that facility ranging from the ward unit to the place where they are sleeping ……….. feeding ……. meeting other needs like bathing etc.”</td>
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<td>Established routines</td>
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<td>P27 “………… Hospital linen and pajamas should be admirable and acceptable to patients. The routines should be regulated and similar to the home situation as much as possible to help patients cope and facilitate rehabilitation……”</td>
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<td>Accommodative</td>
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<td>P9 “…….So that kind of social environment is also apparent ……. so sometimes it is diverse and it keeps changing, it’s never constant…… mental health nurses need to ……. look at patients as people who are …….coming from diverse environments, diverse cultures…..”</td>
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6.3.2. The Human Being

The human being as the client of care was discovered as the first metaparadigm concept in the Kenyan human interaction model of mental health nursing. Nurses viewed the human being as an individual who needs their assistance as mental health nurses. To come up with nurses’ views on the human being, two questions were asked. The first question asked the nurses about their current views on the human being in general and as the client of care. The second question asked the nurses their view about an ideal human being and as the client of care. The human being has three properties and dimensions that were discovered from the meaning given by participants. The properties are individual patient, a family or community. The dimensions on the other hand range from being at risk of having a mental illness to having actual mental disorder either in a ward, health facility or at home.
The human being as the client of care is the causal condition for mental health nursing practice either to promote and maintain their mental well-being or to prevent or treat mental disorders/illnesses. As the client of mental health nursing, the human being is a Biopsychosocio-spiritual being with related subcategories that include uniqueness, God’s creation, peaceful with self, environmental manipulative and self-regulatory abilities. Examples of excerpts to support these Biopsychosocio-spiritual sub categories are indicated in table 6.4 which summarizes categories and sub categories of the theory.

The main category of the metaparadigm human being as the client of care is Biopsychosocio-spiritual being. Biopsychosocio-spiritual being is derived from four components of man which implies the holism of an individual. Bio refers to the physiologic or biologic aspect of the human being, psycho refers to the mental or psychological aspects, and sociologic refers to the social aspects while the spiritual aspect of man refers to “of or relating to sacred or religious matter (Merriam -Webster Dictionary)”. Example of Biopsychosocio-spiritual being is illustrated in the transcript excerpts below:

**P9** “My view about a person, maybe this has been influences by my training, but I look at a person as a biological being, biological to mean a person living, a person who is physiologically functioning properly, and the different parts which are interrelated to ensure that the physical being is functioning but importantly a person has the other psychosocial aspect which are also important so that a human being lives in a community and that community or society has an influence which are positive, which are negative. So a human being has those components biological, physiological and also psychosocial”

In the above transcript excerpt, the finding that an individual has social aspects is represented in the piece that describes human being as living in the community which influences him/her positively or negatively. This is also strengthened by the finding in the theoretical scheme (table
6.4) under the metaparadigm human being where the sub categories of the human being with the respective excerpts are given as “peaceful with self, others and environment” and “has ability to manipulate environment”

For some participants, the biopsychosocial-spiritual aspects were seen as forming needs that must be met.

P 11 “A person is a living thing with physical, psychological and spiritual needs. Those needs in my view are what make a human being. I would like that my patients are taken care of physically, psychologically, spiritually and emotionally”.

Some other participants acknowledged these aspects of the human being and argued that they must be taken care of in an ideal environment as demonstrated in the excerpt below:

P 10 “If the environment is not conducive, like if the environment is hostile the patient will really be affected; like if they are at home and they are viewed as people who are mentally sick, and they are viewed as animals and they are not given the proper care and love, then the environment we say is not appropriate and it’s not good for these patients. It should contain all factors for the physical, spiritual, social and emotional needs”

The context and intervening conditions together with the quality of the mental health nursing practice lead to actions / interaction and ultimately, optimum mental health as the ultimate consequence within the paradigm model and a third metaparadigm concept in the Kenya Human Interaction Model for mental health nursing practice.

The human being was also conceptualized as a contextual condition with properties that influence the mental health nursing practice. As contextual condition the human being is the mental health nurse with properties such as personal, educational and professional characteristics. The related subcategories for the properties of the mental health nurse include training
(Knowledge, skills and attitudes), unconditional love and acceptance, commitment, understanding, tolerance and passion. The main sub category of human being as a mental health nurse is passion. According to Merriam –Webster dictionary, passion is defined as a strong feeling of love for something. In the Kenyan Human Interaction model of mental health nursing practice, participants viewed passion for mental health nursing practice as the main subcategory for a mental health nurse. An example of the transcript excerpts below demonstrates participant’s description of passion.

P23 “I think I had mentioned to you that my belief is that, for you to practice as a mental health nurse, first of all you have to have that passion you have to understand what really it entails because it needs a lot of patience it needs a lot of understanding and yourself as a practitioner you have to be mentally stable”

Having passion for mental health nursing helps the nurse to provide unconditional love for his/her clients as one participant demonstrated in the statement below:

P26 “I view my patients with a lot of love .I normally imagine myself in my patient’s situation. So I view my patients as any other normal being that need care, love, a sense of belonging and to be embraced so as to facilitate their recovery. I view my patients as clients who are able to recover knowing that there is someone they can lean on, trust and look back to with appreciation for having helped them move up a step. Since nurses are in contact with patients first, they should treat patients with a lot of love as their own persons since no one has immunity against mental disorders.”

Some of the participants said that commitment to mental health nursing practice and passion for clients are necessary for provision of better care to clients. Passion makes mental health nursing very special as indicated in the excerpts below.

P27 “………………I feel it is (mental health nursing) special, because there must be a lot of commitment from the nurse to provide better care to patients with mental disorders. If the nurse
has a passion for the patients, they are bound to give better care as opposed to someone who is doing it just like a job”.

Training as a sub category of the mental health nurse is important in influencing the actions/interactions in the metaparadigm model. Two participants expressed the importance of having acquired the right skills in training in the excerpt below;

**P2** “Okay. First of all, there is the safety that pertains to ................. the skills that the nurses are having, are they able to discern impending aggression so that even before the patient is aggressive, injures themselves, the other patients or the Health provider ..........., and so we take corrective action, even like a patient who is suicidal, are we able to be able like if it is to close all the windows, ropes, bed sheets, are we able to be prepared against that kind of....., you know, we mitigate against that kind of happening so that before it takes place, we have taken remedial action..........

**P17** “............ I would suggest that mental health nurses first of all be equipped with the skills to give in patient care .patient who require to be get their needs fully met start with physical need like getting food clothing and medication nurses should be able to provide the psychological and that is giving individual psychotherapy individual counselling and be able to prepare the patient ................. to go back to their family units and continue with their social ................. then nurse should also be equipped with skills to care for the outpatient who will come for daily care and then continue with the service under their family units also the nurse should also be equipped with the skills to cater for the community mental health so that they are able to provide services to poor needy people who cannot go to the health facility”.

Another participant explained that mental health nursing should only be practice by those who have undergone specialized training in the excerpt below:

**P 26** “Activities of a mental health nurse are of a wide range but I’ll mention just basic ones. First of all, you have to be qualified for you to be called a mental health nurse, which means you have to go through a mental health / psychiatric nurse training. Activities for mental health nurse include admission of patients to the wards, psychotherapy, counselling, administration of medications, ensuring a safe holistic, environment and providing extensive mental health services
to the community and patients who are discharged back at home so you must be trained in a special way”.

6.3.3. The Environment

Environment is the second metaparadigm and was discovered as the intervening condition for mental health nursing practice. Nurses defined environment as a physical, social and
psychological space where individuals grow in, mental health nursing is practiced and everything in the surrounding of the individual. Collins English Dictionary (2014) defines someone's environment as their surroundings, especially the conditions in which they grow up, live, or work and include, setting, situation, circumstances, context, habitat and home. This definition is consistent with Merriam- Webster Dictionary (2011) which defines environment as the conditions that surround someone or something and influences their growth, health, progress, etc. In the Kenyan Human Interaction Model for mental health nursing practice, participants’ conceptualization of an environment is consistent with the definition in Collins -English and Merriam -Webster dictionaries. The participants were asked about their view on the current and ideal environment of nursing practice both in the ward and the community. The participants agreed that mental health nursing practice usually occurs within the client’s surrounding conditions. Participants, in addition, classify conditions of the environment into two dimensions irrespective of whether it is in the family/home, community or hospital.

The first dimension is a homely environment that is seen as promoting good mental health for clients in the community or facilitating recovery for individuals with mental disorders/illness. Subcategories of a homely environment discovered from the data as indicated in figure 6.2 and table 6.4 were five. They include being conducive, safe, harmonious, established routines and accommodative. In the subsequent sections, examples of nurses’ statements that illustrate their conceptualization of environment including its properties and homely dimensions are given in addition to the subcategories in table 6.4. The participants viewed the environment as existing at the institution/hospital, home /family or community level as illustrated in the excerpt below:

P2 “First of all, the environment from my point of view is not only the hospital or the institution environment for mental health. It involves also the community ......................... that is an
environment, the families, homes; all those are environments for mental health. So institutions is just the physical structure, but mental health environment ……………………, I would like to imagine is even out there in the churches, in the homes, it is everywhere”.

Besides, some participants described the environment as influencing growth in the same way that Merriam -Webster dictionary did as illustrated in the excerpt that follows:

P9 “I think, the environment, the only thing I need to add is that the environment generally needs to enable individuals to experience positive growth, mentally so that optimum mental health is achieved”.

A homely environment as being conducive to meet an individual’s needs is illustrated in the excerpt below;

P10 “It should be ………..the environment should be conducive in such a way that it should offer the spiritual, the psychological and the physical care. The environment should comprise of acceptance and love and also it should contain all what we need for our basic needs according to Abraham Maslow”.

Some participants described a homely environment from the perspective of its contribution to mental health promotion as follows;

P18 “The environment influences mental health of a person therefore the environment should always be therapeutic so that a client is able to stay to maintain his mental health so the care of the environment is very important and a key factor in promoting good mental health”.

P21 “an ideal environment should be friendly like if it is in the family, there should be support, good communication between the members and may be if one gets a problem thy seek help from the necessary institution. If there is a problem they seek counselling services from the church or some centres in the community or hospital friendly environment. In the ward, there should be no congestion so make the environment a bit comfortable as this tends to contribute to recovery”.

As an intervening condition for mental health nursing practice, participants described a homely environment as having the property of safety and availability of basic needs for both the nurse and the client as illustrated below:
The second dimension of the environment discovered in this study based on participants’ views is a hostile environment whose consequences lead to mental disorders / illness or delay recovery of a client already experiencing the disorder. The findings on the properties of the hostile environment discovered from the data were five as indicated in figure 6.2. They include stigmatization, discrimination, neglect, unmet basic needs and disrespect. Hostile environment in this study is derived from two terminologies which are hostile and environment. The definition of environment is adopted from Collins English dictionary (2014) and Merriam-Webster dictionary (2011) already explained in the first paragraph of this section. However the meaning of hostile from participants’ perspectives in also consistent with the definition given by Merriam Webster dictionary (2011) as “marked by malevolence” which is interpreted as having or showing unfriendly, unpleasant or harsh feelings. The transcript excerpts below are examples of illustrations of how some participants described a hostile environment and its properties.

*P7* “Our patients ……… are affected in the sense that there is a stigma once they are admitted in the hospital…… people develop a negative attitude towards the patient .When the patient is doing something good, somebody misinterprets. ……………when he goes at home …….. you find that when the patient makes a mistake, it is taken negatively; there are comments that are negative towards the behaviour of the patient; the patient feels rejected and that is a very hostile environment for the patient .So we should create an environment that is positive to a patient or to any normal person so that they would fit there”.
Some participants described the properties of the hostile environment in terms of how they are negative intervening conditions that delay recovery as indicated in the transcript excerpt below:

**P11** “When patients are isolated and feel discriminated against such as in this environment, they don’t recover quickly

Some participants recognized that stigma as a property of the hostile environment interferes with patient support and therefore recommended its removal:

**P12** “Most of the clients or patients do not have family support the community…..they view them like they are a burden and they actually like outcasts in the communities and there is stigmatization. So mental health nursing should include............Health education ........to the communities and more so to the family so that they should accept these patients”.

Another participant explained in their statement that unmet basic needs as property of hostile environment can be an intervening condition for mental illness. The statement below illustrates this explanation

**P15** “there is a lot of insecurity and this insecurity causes a lot of stress people are anxious all the time, you are not safe. The basic needs are not there, people have not gone to school, and people are not even able to get enough food and malnutrition is one of the causes of mental illness

Rejection as a property of a hostile environment was also identified by some participants

**P33** “..........a patient is in Mathari hospital goes home and gets rejection from the community or the family members then to me that is not a good environment”
Holistic mental health nursing care was discovered as the third metaparadigm in the Kenyan Human Interaction Model of mental health nursing practice from the nurses’ responses. It is also the core phenomenon in the model and is achieved through human interaction. In the model, the meaning of holistic was derived from Cambridge Dictionaries online which defines it as dealing with or treating the whole of something or someone and not just a part. In this study, the
whole of someone and not just a part was interpreted as the physiologic, psychological, sociologic and spiritual aspects of the human being. These four aspects of the human being together form what the nurses conceptualized as the Biopsychosocio-spiritual being to whom mental health nursing practice is to be directed. To discover mental health nursing practice, nurses were asked about their view on the current and ideal practice. In the next paragraph, holistic mental health nursing care is presented with its properties, dimensions, and contexts.

In the model, five actions / strategies that were discovered for holistic mental health nursing care include communication, identification of mental health needs, caring, collaboration and advocacy all of which are founded on human interaction. The nurses were consistent that mental health nursing practice is consequent to being at risk of or having mental illness / disorders discussed under 6.3.2. Dimensions of mental health nursing practice ranged from good to poor quality. The participants also alluded to the fact that favorable intervening conditions, contexts and mental health nursing practice together with effective actions/strategies influence consequences positively. Positive consequence in this study is optimum mental health. Examples of participants’ statements that illustrate dimensions, strategies and contexts of holistic mental health nursing care are given in the subsequent parts of the section. An example of how the nurses expressed holistic care is given below:

P4: “Psychiatric nursing is the kind of nursing that provides mental health services holistically to a patient; that will apply to a patient’s, mental, physical and social health state; that is what mental health psychiatric nursing is all about”.

Some participants stated that advocacy is a strategy for holistic mental health nursing practice. The participants explained that advocacy against stigma would help improve resource allocation
for mental health care. Examples of how participants expressed the need for advocacy in mental health nursing practice are given in the excerpts that follow:

P15 “That one, we have to, it is promotion, education, counseling, we should be the advocates of these patients, of people’s rights. They should be case finders and detectors of cases in the community”

P3 “I would say that we need to improve because you see these mentally ill patients are persons whom we need to advocate for. These are people who in most cases rely on us as health care providers”

The nurses viewed identification of mental health needs either at individual or community level as an important strategy for mental health nursing practice. The extract below is an example of how the nurses expressed this.

P18 “Mental health nursing should consist of assessment of patients, where you receive a client and do assessment of the patient, identify the mental health needs of the patient through doing a mental health assessment and taking history; then planning care of the patient and implementation of the same till the patient is well to continue with his life”.

P11 “Just as I had said before, mental health nurses should take care of the mentally sick in the hospital, but most importantly conduct community mental health diagnosis to identify community mental health problems and plan strategies with members of the community to help address them. In this way mental health nurses will promote mental health of communities”.

Communication was also discovered as a strategy through which holistic mental health nursing practice is achieved as it helps to ventilate or solve issues that are stress provoking. An example of an extract from the participant’s statement is given below:

P16 “Yes, I was saying, outside there one of the best ways that people can exist with each other is communication because communication can help solve anything; then if people can be sharing their social issues of course to a confidant not everybody else it can also help; because you find at the moment outside there in the community there are so many other mental health issues that are existing ranging from stresses to depressive illnesses; yes all this are being brought by social
issues but if all these people could be in communication, I believe half of these things could be solved....”

An example of extracts from the nurses’ statements that led to the discovery of collaboration as a strategy for holistic mental health nursing is given below:

**P2** “Okay, first of all, there is a lot to do with the multidisciplinary approach; creating awareness amongst the other health personnel like you know occupational therapy, physiotherapy, doctors, social workers, so that the nurse is not alone in trying to tackle this problem, the nurse includes all the other disciplines. And then once people work as a multidisciplinary team then it is easier to provide the mental health nursing care ...........”

Some participants stated that resources and nurses’ characteristics that include specialized training are necessary contexts for holistic mental health nursing care.

**P25** “For these patients (clients of mental health care) they need special people, specialized nurses that is what I mean and for specialized nurses they need to be trained”.

**P10**: “......... I believe that nurses who are supposed to handle these patients, are supposed to have undergone this training in psychiatry (mental health Nursing), in order to have the techniques of handling them. I recommend that nurses should be encouraged to go for this training. Thank you”.

Another participant identified the context of for mental health nursing as patience and listening skills of the nurse that are necessary for communication with the patient.

**P 6** “Mental health and psychiatry nursing is an interesting field which requires a lot of patience in and when nurses become patient and listen to the patients’ problems, they are able to assist them and understand their problems and these problems should be shared again with the relatives who bring them”
Optimum mental health is the fourth and last metaparadigm in the Kenyan Human Interaction Model for mental health nursing practice. Nurses viewed mental health as “a state of well-being physically, socially, psychologically and spiritually including ability to realize own potentials and weaknesses, cope with the normal stresses of life, work productively and fruitfully, and make a contribution to his or her community.” From nurses’ views of mental health, it is evident that nurses viewed mental health as defined by the WHO but went further to add the aspect of spirituality as well as its dimensions and properties. Mental health was also discovered as the consequence of the actions/strategies for mental health nursing practice (core phenomenon), context (nurses’ characteristics) and intervening conditions (environment) in the paradigm model.
at axial coding step. To discover optimum mental health, nurses were asked about their current and ideal view of mental health. All participants acknowledged definition of mental health from the WHO (2001) perspective. WHO defines mental health as “a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community.” Nurses concurred with this definition and went further to include the spiritual components although expressed in their own similar words. For example one nurse defined mental health as:

\[ P26 \text{ “the total health of an individual, psychologically, physically, spiritually”; A person’s way of coping with daily stresses without being overwhelmed”.} \]

Some nurses further viewed mental health as very important from the global perspective which says that the state of mental health significantly affects the country’s health while others said that there is no health without mental health. The excerpt below illustrates nurses’ views of mental health as a very important component of an individual’s general health state.

\[ P27 \text{ “………..I view it as a very important element in human being because without mental health, there is no health”.} \]

Nurses described mental health as having both dimensions and properties. From nurses’ perspectives, two dimensions of mental health are expressed along a continuum with mental disorders/illness at one end of the pole and optimum mental health at the opposite end. Variations of mental health states lie in between the poles. An example of how nurses expressed dimensions of mental health along a continuum as illustrated in the statement below:

\[ P2 \text{ “Optimum is a very relative thing because, looking at it being a continuum, where a person is able to function and not able to function, take care of themselves, earn a living, cope with the normal life challenges, and it also depends on the level, in a general} \]
hospital now, the level of functioning at which a client is discharged is not the same level a private hospital. So it is a very relative thing depending on expectations”.

The main property of optimum mental health is resilience with subcategories such as self-understanding, ability to make rational decisions, adapt, form and maintain positive relationships, meet the stresses of life in a positive way, withstand problems and carry on with life in a balanced manner. Nurses also gave other sub categories of optimum mental health as being able to contribute to society. Resilience as the main property of optimum mental health was made up of six sub categories. Some nurses viewed optimum mental health as ability to make rational decisions as expressed on the statement below:

**P6** “Well, in my view, is somebody who is able to make good decisions, somebody who can take care of himself and others positively”.

Another sub category of optimum mental health according to some nurses was ability to adapt to situations as illustrated by the excerpt below:

**P19** “Mental health I believe is positive adaption...Eh... Adapting positively to internal and external stressors and the whole wellbeing of the mind of a human being”.

She went on to explain that;

“The best mental health of a person is where by the person can be able to cope with stresses, because life consists of many stresses if one can be able to take care of those stresses not necessarily lack of illnesses but you are able to handle those stresses positively and come out of it without getting depressed, then I believe that is one of the best mental health because stresses are there to stay”.

A similar view was held by another nurse who said that:

**P32** “Mental health is the ability to handle positively internal and external stressors. It is ability of an individual to cope with stressful events and continue working despite the stressful events”
Another sub category of optimum mental health which was discovered from the nurses’
statements is ability to maintain positive relationships and love self. For example;

**P17** “…….he is capable and has the ability to relate to people and to have purpose and hope in
life and above all to be able to love one-self”

**P33** “optimum mental health of a person is when that individual is able to carry out his or her
duties, maintain relationships whether it’s from home to work to wherever he is in, and a person
who is able to have good reasoning and make proper judgment”

Some nurses viewed self-understanding as a subcategory for optimum mental health. Self-
understanding is defined by Collin’s English Dictionary as ability to understand one’s own
actions. The excerpts below illustrate participant’ expression of self -understanding:

**P20** “………….I would think that an individual should be able to understand themselves to be
able to be understood by others”.

**P24** “…….a person who is able to understand his view in such a way that his behaviour is
influencing other people how his behaviour may affect other people so he is able to take his
action well and be friendly to other people whatever action he is also careful to other people”

**P29** “… and is somebody who is able to evaluate himself about the activities they have done”

For some nurses, optimum mental health includes making contribution to the society as
illustrated in the excerpt below:

**P 11** “ for me I would like to see a person who is able to take care of him/herself; he is able to do
whatever he is supposed to do well without any problem, interact with his friends, take care of his
family, community and contribute a lot to national development. I think that is the person whom I
can define as mentally Health y”.

Mental health exists along a continuum with optimum mental health at one end and mental
disorder /illness at the opposite pole. Emerging from a negative perspective, nurses stated that
mental disorder/illness has properties such as psychosis and insomnia. Nurses also, acknowledged that stigma and neglect of the people with mental disorders/illness in the community are intervening conditions which together with a non-holistic mental health nursing practice lead to consequences such as delay in recovery and dependence. Examples of excerpts from statements that illustrate properties of mental disorder/illness and stigma and neglect as its intervening conditions are given next.

An example of a nurse’s statement that illustrates properties of mental illness;

P6 “The way I would define mental illness, is somebody who can’t function properly at a given stage; And in fact, I would say when people become mentally sick, they tend to regress, what they could do they are not able to do and they are doing it without their consciousness”.

For some nurses, mental illness has properties such as insomnia and psychosis and in their absence one is viewed as having good mental health. For example, the excerpt below illustrates what one nurse said in response to the question on what mental health means.

P12 “Somebody who has good mental health is able to relate well with others, somebody who can, at least will have no disturbance in sleep, somebody with no hallucinations and illusions. If someone undresses in public or somebody talks to self that one will definitely see that there’s something wrong with that mental activity”

The excerpt below illustrates stigma as an in intervening condition for mental illness

P6 “Well one, stigma is a problem, most patients suffer from stigma and when they leave the hospital going to their home environment and they are abused that they are mad they relapse. Sometimes environment where they leave in because of poverty and also these antipsychotic drugs, some of them tend to have a very high appetite; their caretakers feel that when they eat too much, they are relapsing. So it becomes a problem to manage of which if given proper education, it will make the environment good...”
Some participants also expressed the effect of environment in facilitating recovery of mental disorder or delaying patient’s recovery. An illustration of neglected environment as an intervening condition for mental illness/disorder is given below;

\[\text{P26} \quad \text{“I think that, the mental health facilities including this ward I work in have been neglected a lot. I imagine that if the environment is friendly for both patients and staff, provision of services will be easier, progression of good mental health and recovery will be facilitated”}.
\]

Totality of mental health as a property was discovered from nurses’ statements. Totality is defined by Merriam-Webster's Learner's Dictionary (2011) as the whole or entire amount of something. In the context of mental health as a metaparadigm, totality of mental health was used to describe:

a) All its different aspects that include physiological, psychological, social and spiritual: All nurses acknowledged the four aspects of mental health. For the nurses, one is considered mentally healthy if they demonstrate healthy state in all these aspects and not just one. The statements below illustrate how nurses expressed the four aspects of mental health.

\[\text{P16} \quad \text{“Optimal mental health is that well-being including how you are supposed to carry yourself so that in general well-being; are you able to relate well with people in terms of your social interactions, your spiritual well-being? What about biological quality, psychological and social quality of health?”}
\]

\[\text{P18} \quad \text{“This is the state of well-being of an individual and not just the absence of sickness so I view mental health as that state where a person is able to carry on with the his life normally; and psychologically socially, physically, spiritually the person is whole”}.
\]

b) Its presence everywhere and not confinement to a physical space: Some of the nurses expressed totality of mental health in its existence everywhere from the hospital to community, homes and in families as illustrated in the excerpt below:
“........................but mental health, I would like to imagine that it is even out there in the churches, in the homes, it is everywhere”.

6.3.6. Human interaction

Emergence of human interaction and its illustration as the process within the theory path has been described in chapter 5. In this chapter, human interaction and its fit within the four metaparadigms is described as a finding. Cambridge dictionaries online define interaction as an occasion when two or more people or things communicate with or react to each other. In their
responses to the question on views in the four major metaparadigms, nurses’ statements implied that interaction is always present in and between all the four metaparadigms. Interaction was also viewed as having dimensions and properties.

Dimensions of interaction were expressed as ranging from positive to negative and verbal to non-verbal while properties or categories of interaction were given as nurse and patient/client, nurse and mental health team/ professionals, nurse and nurse, patient /client and others and patient/client and environment. Nurses viewed dimensions of interaction as existing within the categories of interaction. As mentioned above, there are two types of dimensions, namely positive to negative and verbal to non-verbal as expressed by the nurses. Positive interaction was interpreted as communication or reaction between people or things that result in benefits to the human being while negative interaction is harmful to the people involved. In the subsequent paragraphs, examples of statements that illustrate dimensions and properties of interaction are presented.

A participant (nurse) in a regional mental health unit expressed positive interaction in terms of nurse to nurse interaction category within different environments with the aim of sharing knowledge to improve quality patient care as illustrated below:

P 6 “…… nurses should be given time to move out and learn from other nurses, we should share notes from other units …………. we share information holistically and also relationship with the other nurses who are not trained in psychiatry because you’ll find that if information is not shared in between environments, patients are mismanaged from their departments because of lack of information, so to have a proper environment, should share what we have in the psychiatry unit with other units within the hospital”.
Another participant expressed positive interaction within the nurse to patient interaction category as an important tool in helping the nurse conduct assessment for the patient’s benefit as illustrated below:

\[ P31 \] “……..in nursing care practice, we also interact with the patient so that we are able to assess whether the patient is improving and also through interaction we are able to conduct the mental status examination for the patient to able to assess and know whether the patient is improving or not; that informs the nursing care that we get to do to the patient”.

Positive interaction within the nurse to mental health team category was expressed by a participant in terms of how the nurses can network with colleagues in other programs for quality mental health services as illustrated below:

\[ P15 \] “There should be good coordination and networking with other significant programs like outreach program, HIV/AIDS program, malaria program, palliative care, so if we do network and of course we collaborate with other professionals, like the doctors, the counsellors, the social workers and so that one will create a very good environment for us to work. ……… we should not be waiting here in the hospital for very sick patients to come, we should be going out there in the community to offer preventive and promotive services at the community, and at the household level”.

In the patient to environment interaction category, consequences of the negative dimension of interaction were expressed by a participant. Besides, the participant also expressed positive interaction as a property of good mental health. The excerpt below is an example.

\[ P14 \] “I can say that they are also human beings and as human beings they interact with the environment and that if the environment is not safe of course if the environment is threatening then you realise that this patient is not settled”.

\[ P14 \] “I would look at mental health as a state of emotional well-being that enables an individual to interact with the environment and the society”.

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Positive interaction in the patient to others category was expressed as one way of achieving good mental health as in the illustration below:

**P20** “……..The person should take life positively they need to be able to interact with other people and they need to link and incorporate the other people in the environment and even in the environment in which they live to live a positive life so in defining mental health I would think that an individual should be able to understand themselves to be able to be understood by others.”

Positive interaction in the patient to family or patient to environment was expressed as being characterized by its supportive nature as illustrated in the excerpt below:

**P 32** “It should be warm, welcoming and conducive, also what I mean by conducive is the family members. The community at large should be supportive for the care of the patient so that it’s conducive for him or her that is what I understand by ideal environment”.

A participant expressed the negative and non-verbal dimensions of interaction in the patient to environment and patient to family category in terms of their negative effects on the patient’s mental health as illustrated below:

**P 23** “……….when you try to find out what could be precipitating the relapse you find that the environment at home could be hostile, the people at home do not understand this patient, the community does not understand this, or rather the environment depending on the cause the environment where the patient comes from is full of either bhang or illicit drugs so an environment full of such things and alcohol and an environment that is negative impacts the patient’s life negatively like an environment where the patient is always referred to as Mwenda Wazimu (mad person)it again takes the patient back”.
6.4. The Kenyan Human Interaction Model for mental health nursing practice

![Diagram of the Kenyan Human Interaction Model]

FIGURE 6.6: THE KENYA HUMAN INTERACTION MODEL: INTEGRATION OF PARTS
Figure 6.6 is an illustration of the Human Interaction Model for mental health nursing practice that was discovered from nurses’ statements. It illustrates the integration of all metaparadigms that have been discussed in the preceding sections and therefore acts as the summary of the chapter. In this model, the environment was conceptualized by the nurses as the intervening conditions for mental health nursing practice.

The colours of the environment represent its dimensions. The green colour represents a homely environment with properties that promote mental health or aids recovery from mental disorders/illness. The black part represents the hostile dimension with properties that contribute to mental disorders/illness or delay its recovery. Within the environment, there are the causal conditions for mental health nursing practice which is the human being as the individual patient, family or community with mental disorder or at risk of suffering from it.

The white colour represents holistic mental health nursing practice founded on human interaction with the strategies or actions that occur within it. Interactions occur between the nurse and the patient, to assist the patient move to optimum mental health which is represented by a yellow colour to depict optimal mental health as being bright and resilient. Human interaction between the nurse and the patient is influenced by the nurses’ personal, educational and patient characteristics. The human being is represented in red to indicate their significance in mental health nursing practice. Their significance is based on the premise that without the human being as the client of care or causal condition and as the mental health practitioner or context condition, mental health nursing practice would not exist.
6.5. Summary

In this chapter, findings that led to the development of the Kenya Human Interaction Model for mental health nursing practice were discussed. The model had four metaparadigm concepts that constituted its components. The first component of the model was the human being as the Biopsychosocial-spiritual being, the client and the causal condition for mental health nursing practice. The human being as the nurse was also discovered as the context that influenced mental health nursing practice and interacted with the client to help client achieve optimum mental health which was the fourth component. The second component was environment as the intervening condition for mental health nursing practice which also influences the human being. The third component is holistic mental health nursing practice founded on human interaction within all the four metaparadigms. Human interaction was discovered as the main process that occurs across all the metaparadigm.
CHAPTER SEVEN: DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

7.1. Introduction

The goal of the current study was to develop a conceptual model for mental health nursing practice using Grounded Theory methodology. Analysis of obtained data from mental health nurses resulted in the development of Kenyan Human Interaction Model of mental health nursing practice. The model is based on the mental health nurses’ experiences and visions for practice given the different levels of practice and clients as well as the diverse conditions under which mental health nursing is practiced in Kenyan environments.

In this chapter, the metaparadigm concepts of the model and their components will be discussed with regard to the specific research questions that guided the study. The main questions that guided this study explored the views of mental health nurses on the four metaparadigm concepts that form a conceptual model. Reflections on current findings that aim to place the metaparadigm concepts of the model within the context of existing literature are presented. In addition, the significance of the current findings and their potential contributions to professional nursing knowledge is presented.

The chapter is organized into sections that comprise discussion of study sample, the emergent theory and its metaparadigm concepts, processes, recommendations and conclusions which are presented in the next subsections.
7.2. Study sample description and relevance

The sample for the study consisted of 33 mental health nurses working as clinical nurse practitioners, nurse educators and nurse managers with varying demographic characteristics but shared the fact that they were registered mental health nurses in current mental health nursing practice with at least six years of experience in the regional and national mental health facilities in Kenya. The nurse educators were members of faculty who were teaching mental health nursing at the schools and supervising students during clinical placement in the respective mental health units. Nurse managers had varying span of control ranging from ward to a unit (comprises 4-5 wards at national level but all mental health services at regional level) and hospital.

Including the views of mental health nurses with varying work experience in the current model was important for acceptance and customization of the model as explained next. Firstly, the conceptual model will be used by all mental health nurses irrespective of years of experience and environment of practice. Use of information based on the nurses’ views in their own language ensures the development of a model that resonates with their terminology and professional culture. Secondly, the varying experiences and values served as a rich source of data. Thus, the developed model would be customized and therefore relevant for use in mental health nursing practice in the Kenyan environment. Involving nurses in development of the model and customizing it to their environment and terminology has been found to encourage its acceptability and utilization and preventing neglect and rejection (Cormack & Reynolds, 1992; Murphy et al, 2010; Parker & Smith, 2010; McRae, 2012). In the subsequent paragraph, I have described some of the evidence from literature to demonstrate that lack of involvement of nurses who are the consumers of nursing models lead to development of models that nurses reject because of inappropriate language or environment for use.
Murphy et al (2010) and Parker and Smith (2010) observed that the models that were once developed with impetus to help define the unique scope and domain of nursing fell out of favour with the nurses who neglected and rejected them. Nursing models are criticized for representing specific values and beliefs about nursing from a narrow perspective of individual authors thereby failing to capture what nursing is (Hardy, 1982). In addition, the jargon and complex concepts used in conceptual nursing models do little to endear them to nurse users who don’t participate in their development (Kenny, 1993; Hodgson, 1992). For example, Neumann’s (1995) conceptual model uses terminologies such as intra, inter and extra-personal stressors and the person as having a central core and lines of resistance and defense. Orem’s (1991) conceptual model also includes a number of complex terms such as Health deviation, universal and developmental self-care requisites, dependent-care deficit, and wholly, partly compensatory and supportive-educative nursing systems. These terms are considered complex and according to Hodgson (1992), leave nurses more puzzled than with motivation to use them in clinical practice.

Originality of conceptual models in the US is also another source of criticism. Kenny (1993) and Draper (1990) are some of the nurse researchers who questioned about their applicability and transferability to British nursing. Draper argued in favour of inductive theory generation derived from the practice of British nurses and the reality of contemporary British practice (Miller, 1985; Draper, 1990). The same can be said of the Kenya situation. Kenyan environment for mental health nursing practice is different from that of high income countries. Moreover, mental health nurses philosophy may not be the same as that of nurses in high income countries. Transferability of the nursing models developed elsewhere would be questionable. It is against this background that it became necessary to involve the Kenya mental health nurses who would
be the users of the model. Selection of mental health nurses in practice and their involvement in the theory being developed was also important to guard against criticisms related to extrinsic factors such a feeling that a theory is being imposed on the users. Kenny (1993) argued that the “top-down” strategy used to introduce conceptual nursing models prevented a sense of ownership by nurses and created a significant barrier to success. Top –down introduction of models also creates the perception that their purpose is primarily to advance the professionalization of nursing (Hodgson, 1992) rather than improving patient care. Selection of mental health nurses who are currently involved in all levels and environments of mental health nursing practice with a vast wealth of experience in Kenya would help incorporate fundamental and acceptable concepts, values and beliefs about nursing that are pertinent to contemporary nurses.

7.3. The Emergent Theory and the metaparadigms

The theory that emerged from the study is the Kenyan Human Interaction Model for mental health nursing practice. The core phenomenon of the theory that linked all the four metaparadigms is the human interaction as the foundational process of mental health nursing practice. The goal of human interaction is to help the client achieve optimum mental health. Human interaction occurs within the biopsychosocial-spiritual components at the person’s level, and in the context of nurses’ personal, educational and within a homely environment and actions/strategies. The causal condition for human interaction is the human being who is at risk or is suffering from mental disorders /illness. In the subsequent sub-sections, discussions of the major concepts of the emergent theory also called metaparadigms are presented. In the context of this study, each metaparadigm is considered as a category as it is a fundamental concept of the
conceptual model while dimension and property are descriptors of the category/metaparadigm. The fit of the metaparadigms within the theory is presented in form of summary after presentation of the metaparadigms and human interaction process.

7.3.1. The Human being metaparadigm

7.3.1.1. Defining the human being as the client of care

The human being in this study is defined as a person at risk of or one suffering from mental disorders (e.g. P3, P7, P9), the recipient of mental health nursing care (e.g. P2, P14, P20) and therefore the reason for existence of mental health nursing practice which is founded on human interaction. The metaparadigm, human being in this study emerged from two defining perspectives. Firstly, as the causal condition for mental health nursing practice. From this first perspective, the human being is viewed as a person either at risk of or suffering from mental disorders/illness. In the second defining perspective, the human being is the context for mental health nursing practice. From this perspective, the human being is the nurse providing mental health care. These two perspectives are described in the subsequent paragraphs and subsections.

The human being as the causal condition for mental health nursing practice in this current study is consistent with other nurse theorists such as Nightingale (1946), Peplau (1952), Roy (2009), Roper et al (1980), Orem (1991) and Neuman (1995) among others who describe the human being as the recipient of nursing care. For instance, Nightingale’s environmental theory recognizes human-being as a recipient of care though places emphasis on the environment (Medeiros, Enders & Lira, 2015; Pirani, 2016). Peplau (1992) in her theory of human relations, like Nightingale, implies that the human being is the recipient of care by describing him as a
person with problems requiring expertise nursing services. The views shared by the nurse theorists that the human being is the recipient of care or customer are similar to those held by nurses in this study (e.g., P9, P17, P18, P21, P29), who described the human being variously as a person with mental problems/needs, requiring, support and care or client of care.

Procter (1978) defined a recipient of services as a customer. Similarly, Cochran (2006) while holding the same view further referred to recipient or causal condition for a service as a customer and the reason for organization’s existence. I assert that the human being as the causal condition for mental health practice is the reason for existence in the Human Interaction Model for mental health nursing practice.

7.3.1.2. Properties of the Human Being

The properties of the human being as the recipient of care that were discovered in the study were at two levels. The first level was the human being as an individual patient, a family or community (P3, P18, and P19). The second level reflected holism whether at the individual, family or community care. Thus whether an individual, family or community, the human being is a unique God’s creation with components or subcategories that comprise biological/physiological, social, psychological and spiritual aspects (P1, P9, P26, P28, P29). These aspects according to study participants form the holistic nature of the human being as Biopsychosocio-spiritual being.

Recognition of the human being as a recipient of care at individual, family and community level is consistent with other nurse theorists’ views of the human being. While some nurse theorists
define these aspects as dimensions, others define them as scope. Roy and Andrews (1999), for instance, described human being as individuals, groups, organizations, communities and societies as dimensions of human being. Similarly, Nightingale’s environmental theory recognizes the multidimensionality of the human being as the biological, psychological, social and spiritual components. She, in addition recognizes the human-being as a recipient of care but places emphasis on the environment (Medeiros, Enders & Lira, 2015; Pirani, 2016). While some nurse theorists perceive biopsychosocial and spiritual aspects of the human being as dimensions or scope, the Human interaction model developed in this study recognizes them as properties since they do not exist along a continuum but are attributes of the human being as explained in the next paragraph.

To determine whether a characteristic is a property or a dimension, definitions by Strauss and Corbin (1990), Dey (1999) and Birks and Mills (2011) have been adopted. They are in agreement that property is an attribute quality or an element that is common to the whole class while dimension is a measurable range or extent variance that is demonstrated by a category. A category from their perspective is a fundamental concept which in the context of this study corresponds to a metaparadigm. Using these definitions, I can give examples of nurse theorists including Henderson, Roy and Rogers who share my stance that biopsychosocial-spiritual aspects are properties and not dimensions of the human being. These nurse theorists concur with the findings of the current study on the holism property of the human being as comprising the biological, psychological, social and spiritual components (P7, P8, P12, P16, P18, P29 & P30). Based on the participants’ views, I can argue that as a client of mental health nursing, the human
being is a Biopsychosocio-spiritual being with related subcategories that include uniqueness, God’s creation, peaceful with self, environmental manipulative and self-regulatory abilities.

7.3.1.3. Dimensions of the Human Being

The human being as the client of care was viewed by participants as having dimensions that exist along a continuum. Participants’ views are consistent with definition of dimension given by Strauss and Corbin (1990), Dey (1999), and Birks and Mills (2011). One perspective of dimension views a human being as existing along a continuum of mental health – illness whereby a human being who is at risk of mental disorders (e.g. P2, P3, P18, P27) is at one end of the continuum while a human being who suffers from mental disorders (e.g. P1, P17, 19, P20) is at the opposite end. In the second dimension perspective, the human being exists along a life span continuum with the young at one end and the old at the opposite end. Thus the dimensions of the human being in mental health nursing practice are conceptualized as existing along the “at risk to suffering from mental disorder” or “young to old” continuum either in the ward (P4, P17, P20, P21) or home environments (P2, P3, P17).

The dimension of the human being along the continuum is determined by its physiologic, psychological, social and spiritual properties which are in constant interaction to maintain homeostasis. The dimension of the human being makes him/her a causal condition and determines the strategies for mental health nursing practice such as communication, care, collaboration etc. explained in chapter five and six.

Dimensions of the human being that makes him a causal condition for nursing practice is being an adult or child with a disease. Roy’s conceptual model (Roy and Andrews, 1999), in which
health and illness are viewed as inevitable continuum of person’s life supports this stance. Although not referred to as dimensions or properties, nurse theorists argue that the focus of nursing care in general practice is the human being who is viewed as unique and can be well or sick/ill within the hospital or community environments. Hall (1965) in her care, core and cure theory argues that the human being becomes recipient of care when he is at least 16 years and is past the acute illness stage.

Dimensions of the human being along the life span continuum have also been documented by other nurse theorists. Both Orem and Peplau give descriptions of aging within their theories. Similarly, Rogers (1994) in her theory of the unitary human beings implies there is lifespan when she described the life process of the human being as evolving irreversibly and unidirectionally along the space time continuum. Likewise, Johnson Behavioral System (Johnson, 1968; Holaday, 2002) discussed factors that stimulate the human being and contributes to continued growth of the behavior and counteracts stagnation. The life span continuum is made clearer by Roper et al (1980) who explained how a human being as an individual passes from fully dependent at birth, to fully independent in the midlife, and returns to fully dependent state during old age.

7.3.1.4. The human being as the context for mental health nursing practice

The second perspective of the human being that emerged from the current study is the context for mental health nursing practice mentioned in 7.3.1.1. From the perspective of the human being as the context of mental health nursing practice, the nurse’s personal, educational and professional qualities are viewed as the necessary context for practice. The contexts also have properties and dimensions. The properties of personal, educational and professional characteristics include
experience in mental health nursing, specialized knowledge, attitudes and skills, passion for
caring, unconditional love, understanding, tolerance and commitment as expressed by P17, P20,
P21, P23, P25, P26, and P27 among others. These properties are the necessary contexts for
practice. The properties have dimensions and their location along their respective continuum
influence the quality of mental health nursing practice.

The dimensions of the nurses’ personal, educational and professional properties are as follows:

- Knowledge ranges from general nursing to specialized mental health nursing knowledge that
  is acquired through specialized mental health nurse training.
- Attitudes that range from positive to negative. The mental health nurse expresses positive
  attitudes by demonstrating passion for care, unconditional love, understanding, tolerance and
  commitment
- Skills that range from highly specialized gained from training and experience to lack of
  skills

Identification of nurses’ characteristics as the necessary contexts for practice is not unique to this
study. Although not referred to as contexts, nurse theorists have identified nurse characteristics
that are necessary for quality nursing practice. Peplau (1992) conceptualized the nurse as a
person with the particular professional expertise to help a patient. She described the six roles of
the nurse in the nurse-patient relationship as a teacher, resource, counselor, leader, technical
expert and surrogate all of which require the professional characteristics described as contexts
for mental health nursing practice in this current study.
Nightingale (1946), Orem (1991), Roy (1984) and Henderson (1991) are among nurse theorists who have identified nurse characteristics that are necessary for quality nursing practice. These nurse theorists are consistent that a nurse must have specialized scientific knowledge in nursing, biological, health and social sciences as well as humanities. They also argued that the nurse should have experiences and positive attitudes and uses findings from nursing research for quality nursing practice. Roy (2009) for example proposes nurses’ activities that involve manipulation of stimuli that affects a person to promote adaptive responses. This requires the nurse to perform a bi-level assessment that can only be possible if the nurse has specialized knowledge and characteristics already described and referred to as personal, educational and professional qualities in this current model.

7.3.2. The Environment metaparadigm

7.3.2.1. Defining the environment

The environment in this current study was defined as the intervening condition in the Human Interaction Model for mental health nursing practice (P2, P9, P10, P22). In the current study, environment as an intervening condition was defined from two perspectives. Firstly, as all conditions in the client’s/patient’s surroundings whether at home or in the hospital that influence their state of mental health or recovery from mental illness (P10, P20, P23). From this perspective, the environment is viewed as external. This definition resonates with many nurse theorists who place a lot of emphasis on the external environment and its effect on the health of the human being. Roy (2009) for example defined environment as the summation of all factors that surround and affect the behaviors and development of the human being individually or collectively. Roy’s position is supported by Orem (1991) in her Self-care deficit theory of
nursing. According to Orem, the environment comprises physical, biologic, chemical and social contexts within which the human being exists and may affect their ability to perform their self-care activity.

This definition fitted with Strauss and Corbin’s (1990) description of environment as general contextual conditions that influence strategies in a paradigm model (coding paradigm). It also fitted well with Strauss’ and Corbin’s (1998) argument that intervening conditions occur during the process and mitigate the impact of causal conditions. In fact, in the words of Strauss and Corbin, “They are conditions that enter into the situation after the situation is in process to somehow affect what the person can or does and therefore the outcome”. In the context of this study, it can be argued that environment come into play when the human being situation is already in existence as at risk before and after birth, and suffering from mental disorder.

The second definition of the environment as an intervening condition considered the surroundings of the nurses’ working environment such as safety, physical infrastructure and availability of resources that influence provision of care (P4, P22, P26, P27). Although nursing work environment is an important factor in provision of optimum nursing care, many nurse theorists do not place emphasis on its importance (Jarrin, 2012). The current study fills in this gap by considering what nurses views on the environment is currently and what they recommend as an ideal environment to improve quality if mental health nursing practice.

I argue that definition of the environment as the intervening conditions in the current study was justified in two ways. Firstly as a general contextual condition, the environment exists both as a community and hospital (care institution) and influences the mental health of the human being,
strategies for mental health nursing practice and how nurses demonstrate their professional qualifications and caring responsibilities. Secondly, the dimensions of the environment such as homeliness mitigate the risks of or the course of mental disorders in the causal condition (human being) for mental health nursing practice.

Environment has been identified as one of the metaparadigms that forms the cornerstones of all conceptual models of nursing and influences nursing practice. For instance, Jarrin (2012) observed that nurse theorists nearly unanimously recognize optimizing the environment for patients as an essential element of nursing care. Nightingale’s environmental theory emphasizes the importance of a healthy environment which according to her promotes health by allowing the patient to retain their energy (vital powers) for use towards self-healing (Nightingale, 1946).

In the current study, environment as an intervening condition was defined from two perspectives. Firstly, as all conditions in the client’s/ patient’s surroundings whether at home or in the hospital that influence their mental health (P10, P20, P23,). This definition resonates with many nurse theorists who place a lot of emphasis on the environment and its effect on the health of the human being. Roy (2009) and Orem (1991) are some of these nurse theorists as explained in the previous paragraphs. The second definition of the environment as an intervening condition considered the surroundings of the nurses’ working environment such as safety, physical infrastructure and availability of resources that influence provision of care (P4, P22, P26, P27). Although nursing work environment is an important factor in provision of optimum nursing care, many nurse theorists do not place emphasis on its importance (Jarrin, 2012).
7.3.2.2. Properties of the Environment

Properties of the environment that were discovered in this study include physical, cultural, social, psychological and spiritual components (P3, P5, P20, P21 and P23) which make a holistic environment. The properties of the environment are not unique to this study. Many nurse theorists have described properties of the environment although variously referred to as dimensions, characteristics or components. Orem (1991) and Roy (1984) for example described environment properties that include physical, chemical, biologic and socioeconomic features as dimensions. Similarly, Levine (1973 & 1988) in her conservation model described the environment as what completes the wholeness of a person stating that it is where a person is constantly and actively involved and lives their lives. Levine further explained that environment is composed of all experiences of the individuals and includes internal and external environments. According to Levine, the internal environment includes physiological and pathophysiological aspects of the patient while the external environment includes perceptual, operational, and conceptual environments.

In unison with other nurse theorists, the influence of environmental properties on the state of other metaparadigms emerged from the current study. Namely mental health, human being both as the causal and as the context conditions, mental health nursing practice and mental health as a consequence in the paradigm model. For example Levine’s pathophysiological aspects of the internal environment resonates with the unmet physiologic needs that cause disequilibrium and affect the mental health of the human being placing them either at risk of or leading to mental disorder and thus causal condition for mental health nursing practice. Moreover, the properties of the environment existing in a dimensional continuum explained in 6.3.3 influence the
dimensions of the human being along the “at risk – mental disorders/illness continuum”, the contexts and strategies and eventually the state of mental health of the human being.

I observe that the influence of properties of the environment on the human being as the context for mental health nursing practice is consistent with other nurse researchers. Findings in the current study indicated that nurses prefer to work in an environment with favorable physical, psychological/emotional, social and spiritual properties (P2, P3, P10 and P17). Nurses’ feeling that their work practice environment should be given importance is comparable to other nurse researchers who have pointed out the little emphasis given to it. For instance, Jarrin (2012) observed that nurse theorists emphasize on environmental properties and their influence on the human being as the client but forget about their influence on nurses and their practice. Yet, studies have indicated that unfavorable work environments negatively influence strategies for mental health nursing practice (Wagoro, et al, 2008; Madathil; Heck & Schuldberg, 2014).

7.3.2.3. Dimensions of the Environment

The two dimensions that were discovered in the study were internal and external environments. These dimensions are at two levels. At the first level is the internal environment which is within the human being while at the second level is the homely and hostile environment. Description of internal and external environments is consistent with other nurse researchers and theorists’ views. Nightingale in her environmental theory recognized the importance of the external environment in the reparative process of patient recovery (Reed and Zurakowski, 1989). Nightingale therefore emphasized environmental hygiene with properties such as good ventilation, cleanliness, lighting, favorable heat, reduced noise and odors and good nutrition, so
that the recovering process, established by nature, is not prevented (Medeiros, Enders and Lira, 2015)

Neuman (2002) classified environment into internal and external environments which fit within the dimensions of environment in the current study. According to her, internal environment is the intrapersonal system that occurs within the self and comprises of man as a psycho-spiritual being. The external environment is considered both interpersonal and extra personal in nature. Neuman argues that there must be constant energy interchange between these environments for the human being to maintain stability thus emphasizing the importance of both internal and external environments.

The dimensions of the environment metaparadigm along homely –hostile continuum have been documented by many nurse researchers who also explain their influence on the human being. Orem (1991), George (2002) and Bhanji (2012) asserted that individual’s basic needs of air, ventilation etc. and prevention of hazards facilitate maintenance of human integrity and promote human functioning. Nightingale as reported by Reed and Zurakowski (1989), implied a homely environment in her conceptualization of a suitable environment as the place where the sick individual and/or the family members are looked after with considerations of their physical, social and psychological components.

The properties of a suitable environment recommended by Nightingale and other nurse theorists/researchers correspond to the characteristics of homely environment that were discovered in the current study. They include conducive, harmonious, accommodative, safe and
therapeutic properties that ensure fulfillment of human needs. I therefore argue that, these assertions by Orem (1991), Nightingale (1989) George (2002) and Bhanji (2012) support the findings of this study that a homely environment provides the human needs and is a necessary condition for achievement of optimum mental health.

7.3.3. Mental Health Nursing Practice

7.3.3.1. Defining mental health nursing practice

In this study, mental health nursing practice was defined as holistic mental health nursing practice founded on human interaction. Mental health nursing practice is the third metaparadigm and the core phenomenon (P3, P4, and P15). In the context of mental health nursing, holism means caring for all the aspects of man as a Biopsychosocio-spiritual being. The definition discovered in the current study champions a more humanistic, person-centered nursing care favoured by nursing scholars / theorists where emphasis is directed toward therapeutic interactions for holistic care (Peplau 1952; Travelbee 1971; Benner and Wrubel 1989). The definition also reflects the views of Abdellah (1960) who emphasized delivering nursing care for the whole person with physical, emotional, intellectual, social, and spiritual needs. Holism and care emphasized in the definition are also consistent with the view of Jarrin (2007 & 2012) that without caring, nurses’ work would merely be tasks that could be performed by machines.

Holistic mental health nursing practice, is caused by the human being who is at risk of/ or experiences mental disorders and together with the context, intervening conditions and strategies, lead to optimum mental health. Although other theorists do not specifically single out nursing practice as leading to mental health well-being as done in the current study, they concur that
nursing action aims to make the human being healthy. Health as defined by WHO (1948) includes the physical, mental, and social aspects of the human being and therefore making human being healthy includes mentally healthy. Nightingale (1989) emphasized the role of nursing practice by defining nursing as “keeping the human being in the best possible conditions for nature to preserve or restore health, prevent or cure the disease or injury”.

My view that holistic mental health nursing practice exists because of the human being who is at risk of or is experiencing mental disorders resonates with Barker’s (2001), Roy’s (2009) and Orem’s (2012) theories. Roy, argues that nursing helps the patient with ineffective response to achieve adaptation leading to optimum health, well-being, and quality of life and death with dignity, (Roy & Andrews, 1999). Orem also, asserts that nursing is required when self-care demands of a patient exceeds the self-care ability and should be directed towards protecting, preserving, or promoting patients’ well-being. Roy, Orem, Nightingale and other nurse theorists concur that the human being is the focus of care thus supporting my view that nursing practice exists because of the human being.

However, while I emphasize on holistic mental health nursing practice, Orem, focuses more on the areas and the degree to which support is needed and Roy focuses on behavior change (George, 2002). Moreover, Orem’s focus is more towards the physiological needs of the patient whereas Roy’s focus is to the physiological as well as psychological adaptation. In the Human Interaction Model of mental health nursing practice, I emphasize on holistic care because, optimum mental health cannot be achieved unless all other properties of the human being such as physical, social and spiritual needs are met. I argue based on the current study findings that all
properties of the human being are in constant interaction and a deficit in one affects the rest. My argument is consistent with many nurse theorists including Roy’s, Henderson’s and Neumann’s theoretical cannons.

7.3.3.2. Properties of holistic mental health nursing practice

Properties of mental health nursing practice that were discovered from the data in the current study were holism and individual, family or community levels. Properties of holistic mental health nursing practice were conceptualized as its attributes or qualities that justify its description as holistic. In this regard, properties were conceptualized at two levels. The first level of holism as taking care of the physical/biologic/physiologic, psychological, sociologic and spiritual aspects of the human being (P2, P19, P26, P29). The second level is taking care of the individual, family and the Community (P3, P4, P17, and P22). Nurse scholars/theorists and researchers such as Orem and Roy may not have referred to these attributes of nursing practice as properties or may not have specified the mental health components as done in the current study. But, they have indicated that nursing care should not only be holistic but should be provided to the individual, family and community as demonstrated in the subsequent paragraphs.

Orem (2012) while describing the nature of holistic nursing care in nursing systems, implied inclusion of the family and community when she argued that the nurse assesses both individual patient and the family’s nursing care needs and that the goals of nursing is to promote human functioning and development within social groups. In the holistic care, she described application of nursing when a condition permanently or temporarily alters structural, physiological or psychological functions of clients of care. Similarly, Roy (2009) implies both properties of
nursing when she describes it as a science that promotes adaptation and full life potential for individuals, families, groups and the global society in all the four adaptive modes. Roy’s adaptive modes include physiological, self-concept, interdependence and role performance that reflect the biopsychosocial aspects of the human being.

Our properties of holistic mental health nursing care reflects the views of nursing practice of many nurse theorists, and is more comprehensive than the Tidal Model for Mental health recovery (Barker, 2000). The tidal model describes nursing care that focuses on the unique physical, emotional and security needs of each distinct patient, but does not mention nursing care to the family and community.

7.3.3.3. Dimensions of mental health nursing practice

Dimensions in the context of this current study considered the range over which mental health nursing practice extends. Two facets discovered were quality and level of mental health nursing practice. With regards to quality, mental health nursing practice was conceptualized as ranging from poor to best (P8, P10, 19,). Although not explicitly described, nurses alluded to poor care when they explained how there is need to have all nurses in mental health nursing practice go through specialized training and apply theoretical knowledge to provide the best professional care one can (P9, P10, P15, P26, P32). The perspective of the levels in mental health nursing practice ranged from promotion of mental health of individuals, families, communities, populations, to institutional care for recovery and rehabilitation (P1, P2, P4, and P22).

These dimensions of mental health nursing practice reflect what many nurse scholars/theorists advocate for in their theories. Some may not explicitly explain but imply their desires for mental
health nursing or health in nursing and health in general since health includes physical, psychological and social health according to WHO (1948). The Tidal Model of mental health recovery describes best mental health nursing practice as that which helps the client to recovery (Barker and Buchanan-barker, 2005). Peplau (1952) also implies nursing dimensions that range from promotion of health to institutional care when she describes nursing as a process of education and therapeutic interaction occurring only within the relationship of the nurse-client relationship irrespective of the environment. Neuman (1974, 1982 & 1995) explicitly describes the dimensions of nursing practice that includes primary prevention as health promotion, secondary prevention as treatment of symptoms to obtain client stability and tertiary prevention as intervention for maintenance of system stability.

7.3.3.4. Strategies for mental health nursing practice

Strategies for mental health nursing practice within the paradigm model are specific actions that nurses devise for mental health nursing practice in a homely environment in the context of nurses’ personal, educational and professional characteristics. The action /strategies that were discovered included interaction, communication, identification of mental health needs, caring, advocacy and collaboration (P1, P4, P18, P19). These strategies are consistent with descriptions given about nursing as a metaparadigm in other nursing models. Barker (2000) in the Tidal model for mental recovery argues that nursing is identifying what people need and working collaboratively to explore ways of meeting the needs. Further, Watson (1979) in Human Caring theory and Barker assertions that caring underpins nursing is congruent with findings of this study.
Moreover, interaction as a strategy for mental health nursing practice in the current study has been described as the crux of nursing by nurse scholars including (Peplau, 1952; Hummelvoll, 1996; Stuart, 2001). Nurse theorists argue that nurse-client-relationship which is the cornerstone of mental health nursing is based on interaction. In support of the findings in the current study, Rogers’ (1970), theory of the Unitary Human beings, observes that nurses undergo special training in contact and non-contact therapeutic touch and other interaction techniques that is used to enhance the healing process of people who are ill or injured.

The finding in the current study that holistic mental health nursing practice is influenced by context conditions such as nurse’s personal, educational and professional characteristics is consistent with the views of other nurse theorists/scholars. Limon (2007), for instance, states that nursing, which is one of the four metaparadigms, refers to the attributes, characteristics and the actions of the nurse providing care. This is supported by Potter and Perry (2001), who propounds that nurses use their nursing knowledge and experience, to develop individualized plan of care for each patient. Warelow (2013) and Meleis (2007) support these views in their argument that nurses require university based education programs in preparation for their work.

Likewise, nurse characteristics discovered in this study that include unconditional love and acceptance for patients, trustworthy, commitment and empathy have all been recognized as qualities of an effective mental health nurse (Thomas, Finch, Schoenhofer, & Green, 2004; Gildberg, Bradley, & Hounsgaard, 2013; Rørtveit, Hansen, Leiknes, et al., 2015). Ojwang et al(1994) alluded to these qualities in their report that nurses impoliteness and negative attitudes contributed to poor quality of nursing care. I argue that these nurse scholars, though do not label
characteristics of an effective mental health nurse as contexts of mental health nursing practice, as done in the current model, their views are in tandem with what is advanced in this study.

7.3.4. The Mental Health metaparadigm

7.3.4.1. Defining mental health

In the current study, mental health was conceptualized as defined by WHO with some modifications. Participants in the current study defined mental health as a state of well-being (physically, socially, psychologically and spiritually) in which every individual realizes his or her own potential, has a positive attitude towards self, can cope with the normal stresses of life, can work productively and fruitfully at an appropriate age, and is able to make a contribution to her or his community (P5, P6, P9, P25). Some nurses in addition to the WHO definitions, described mental health in a way that accommodated a variety of emotional states, dynamic nature of the human culture, achievement of balance and resilience as well as a positive attitude towards life (P16, P17, P19, P20, P33).

Mental health is the fourth metaparadigm in the current Human Interaction Model for mental health nursing practice. In the paradigm model in the current study, Optimum mental health is the positive consequence of mental health nursing practice, contexts and intervening conditions combined. Some nurses defined mental health in accordance with the World Health Organization’s 1948 general definition of health (Sartorius, 2006) which emphasizes a state of biopsychosocial wellbeing and not the mere absence of disease (P2, P18, P21, P23, P26). Other nurses in their definition reflected the WHO mental health specific definition as a state of well-being in which every individual realizes his or her own potential, can cope with the normal
stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community (P5, P6, P9, P25).

The definition in the current study which has been described in 6.3.5 accommodates the varying emotional states of mental health. This definition is consistent with Galderisi, Heinz, Kastrup et al, (2015). They assert that even people in good mental health can be sad, unwell, angry or unhappy, in certain situations as part of life for a human being. I therefore disagree with mental health definitions that conceptualize mental health as a purely positive effect, marked by feelings of happiness and sense of mastery over the environment at all times as implied by Deci and Ryan (2008). I also disagree with an aspect of WHO (2004) definition that includes ability to make a contribution to community as a core component of mental health without specifying the age. I argue that young children who due to their age cannot make significant societal contributions are inappropriately implied as not being mentally healthy.

The definition discovered from participants and adopted in the current Human Interaction Model for mental health nursing practice, goes beyond the WHO (2004) to include dynamism, resilience, spiritual and cultural considerations, dimensions along a continuum and intrapersonal harmonious relationship. The definition in the current study is consistent with a new definition of mental health advanced by Galderisi, et al (2015). Definition in the current study also resonates with a definition by Mfoafo-M’Carthy and Huls (2014) which includes integration of psychological, emotional, social harmony as well as quality of life in the definition. Additionally, I support the definition by Manwell, Barbic, Roberts, et al. (2015) that expanded WHO definition to explain overlapping areas in the physical, social and cognitive – emotional domain which
collectively influence mental health. I observe that the WHO’s definition of mental health is not the gold standard and therefore, join other researchers including Valliant (2012), Galderisi, et al (2015) and Manwell et al, (2015) in proposing mental health definition beyond the one by WHO.

7.3.4.2. Properties of mental health

The main property of optimum mental health that was discovered from the study is resilience with subcategories such as self-understanding, ability to make rational decisions, adapt, form and maintain positive relationships, meet the stresses of life in a positive way, withstand problems and carry on with life in a balanced manner (P11, P13, P19, P28). Although not defined as properties of mental health, the sub–categories in this study reflect components of mental health by WHO, nurse theorists and researchers. For instance, Keyes (2014), identified three components of mental health as emotional, psychological and social well-being. For Keyes, psychological well-being includes appreciating most parts of one’s own personality, being good at managing the responsibilities of daily life, having good relationships with others, and being satisfied with one’s own life. Similarly, social well-being refers to social contribution, integration, actualization and social coherence.

Our view that these sub-categories form the properties of optimum mental health is additionally consistent with Jahoda (1958), Vaillant (2012) and Lamers, (2012) who identified them as criteria for positive mental health. For example, their criteria on attitudes of an individual towards his own self reflects our sub-category on self-understanding and intrapersonal harmony. Similarly, their criteria on autonomy and self-determination is in tandem with our sub-category
on ability to make rational decisions. Furthermore, resilience that is the main property of optimum mental health in the current study is congruous with resilience and coping identified by Vaillant (2012), Lamers, (2012) and Keyes (2014) as one of the criteria for positive mental health.

Conceptualization of resilience as the main property of optimum mental health in the current study reflects its definition as positive adaptation by Fletcher and Sarkar (2013). Resilience as the main property in mental health is likewise implied in Roy’s adaptation theory. Roy asserts that the goal of nursing is to foster adaptation which she defined, in part, as the process by which human beings integrate environmental stimuli to achieve optimal health and well-being (Roy & Andrews, 1991).

7.3.4.3. Dimensions of Mental health

In the Human Interaction Model for mental health nursing practice, mental health is conceptualized as having dimensions along a continuum (P1, P2, P15, P31,). At the negative pole of the continuum, there is mental illness characterized by presence of mental disorders while at the positive pole, is the optimum mental health characterized by resilience. Dimensions of mental health is not unique to this study, but has been recognized by researchers for some time now. For instance Jahoda (1958), Vaillant (2012) and Lamers (2012), share the assumption that positive mental health is best conceived as a multidimensional phenomenon which fits in with approaches to positive mental health from other disciplines. Assumption of these three researchers can be interpreted as placing dimensions of mental health at two levels. The first level corresponds to the positive and negative dimensions advanced in this current study. The
second level comprises multidimensions such as hedonic and eudaimonic well-being within the positive or negative dimensions.

Many conceptual models of nursing in their definition of health metaparadigm implicitly or explicitly describe health in positive and negative dimensions. For instance Neuman (1995) argued that health is equated with wellness and defined it as “the condition in which all parts and subparts are in harmony with the whole of the person. She further asserted that the client system moves toward illness and death when more energy is needed than is available. On the contrary, the client system moves toward wellness when more energy is available than is needed. In this context, health is seen as having the dimension of illness/death and wellness. Since psychological/emotional health is a component of general health, Neuman’s dimension of mental health is implied in the illness/death-to-wellness dimension.

7.4. Human Interaction process

7.4.1. Defining Human Interaction and its significance

Human interaction emerged from the current study as an intercommunication process in and between all the four nursing metaparadigms (P14, P15, P20, and P31). It was recognized as an ingredient process that permeated and influenced the relation of metaparadigms with one another. This recognized significance is the basis of naming the model as the Human Interaction Model for Nursing Practice. The essence of interaction in nursing has long been recognized by nurse theorists who often discuss about patient–environment, nurse–patient, nurse–colleagues and their respective implications. Watson (2008), for instance described interaction as the trigger
for caring activity in nursing. Comparably, Peplau (1952) emphasized that interaction is the basis for nurse-patient therapeutic relationship.

In most nursing literature, interaction is recognized as a mutual process of interpretation and construction of meaning that determines the subjective experience of relationships (Tuckett, 2007). Moreover interaction is seen as pivotal, especially in mental health nursing where the use of self and interaction are a therapeutic intervention to improve health outcomes (Steffen, Almuth, Markus, et al, 2009). Nurse theorists recognize the significance of interaction in nursing actions, and many times describe its types and the role of nurses in each stage of interaction and yet they do not explicitly define it.

Roy’s (1976) conceptual model emphasizes human adaptation as the core of her theory and asserts that nursing must aim to help the individual or groups to achieve adaptation for optimum health. I argue that adaptation happens through interaction and therefore interaction is prerequisite to adaptation. Similarly, Rogers (1990), implicitly refers to human –environment interaction in her assumption that man and environment are continuously exchanging matter and energy, but explicitly recognizes that nursing directs the interaction of person and environment to maximize health potential.

Interactions between the human being and environment determine their health status and influence nurse patient interaction to cause expected results such as coping with illness and promote healing. The Human Interaction Model developed in this study takes cognizant of the intra and interactions and therefore emphasizes on the biopsychosocial and spiritual intra-action as well as human being and environmental interactions.
7.4.2. Properties of human interaction

Properties or categories of interaction that were discovered in this study cut across all the four nursing metaparadigms (P6, P14, P15, P20, P23, P31) and are enumerated as:

- **Nurse - patient/client interaction:** Over the years, interaction between the nurse and patient has been recognized as crucial to nursing practice. This interaction allows for the formation of nurse-patient therapeutic relationship through which, the nurse conducts a comprehensive assessment, makes nursing diagnoses, formulates a nursing care plan, implements and evaluates care (Peplau, 1952; George, 2012; Wagoro & Rakuom 2015). Additionally nurse-patient relationship is of importance for patient participation in nursing care (Millard et al. 2006). In all conceptual models of nursing, nurse-patient interaction is implied since the nursing metaparadigm is described in the context of nursing interventions for patients. For example, King’s (1981) Goal Attainment theory defines nursing in part as a process of action, reaction and interaction by which nurse and client share information for transactions in order to achieve client’s goals.

- **Nurse - Mental health team/professional colleagues interaction:** In this study, interaction between the nurse and other nurses or other professional team emerged as an important process for consultation and improvement of the quality of nursing care.

- **Nurse –Environment interaction:** This was discovered as nurse interaction with intervening conditions for mental health nursing practice. Nurse–Environment interaction was expressed by participants as a safe environment with resources that facilitate delivery of mental health nursing practice.

- **Patient/client - environment interaction:** The interaction between the client and environment emerged as the human being who is the causal and the context conditions.
Environment both external and internal influenced the mental health state of the client and influenced the recovery of the patient. Importance of environment on patients is emphasized by King (1981) whose theory of goal attainment is based on her philosophy of human beings interacting with their environment.

7.4.3. Dimensions of human interaction

Dimensions of interaction were expressed as ranging from positive to negative and verbal to non-verbal. Positive interaction was interpreted as communication or reaction between people or things that result in benefits while negative interaction results in harm to the people involved. Nurse-patient relationship is primarily mediated by verbal and nonverbal communication (Aguilera 1967). Properties of the nurse are important in determining positive communication. Such properties include empathy and intimacy.

7.5. Diagramming the Theory

The Kenya Human Interaction Model for mental health nursing practice (figure 6.4) evolved from participant interviews. The model comprises four major nursing metaparadigms which are the human being, environment, mental health and mental health nursing practice. The core phenomenon is holistic mental health nursing practice which is founded on human interaction with the environment, with client of care and with self.

The outer circle represents the environment within which all interactions take place. The green part of the environment represents the homely environment with properties that favorably interact with the human being to promote optimum mental health or facilitate recovery when
experiencing mental disorders. The gray part of the environment represents the hostile environment with properties that place the man at risk, precipitate mental illness or delay recovery.

Within the circle are the red pillars representing the nurse and the client of care who interact towards growth. Effective interaction is dependent on effective communication that sets the base for nursing interventions.

Mental health nursing practice is at the base of the pillars representing the foundation of existence of the model. It is founded on human interaction. It originates from hostile environment that causes mental illness. Effective mental health nursing practice brings the nurse and client together in a dynamic relationship (irrespective of the environment) to achievement of optimum mental health.

Mental health is represented by a yellow triangle with a yellow shade that is dull at the base. This depicts the mental illness from which the majority of Kenyans suffer. With effective nursing interventions, the population with mental illness decrease with a brighter yellow until the tip of the triangle representing few people in society with optimum mental health with the brightest colour. Mental health is also experienced within the environment.
7.6. **Conclusion**

This study demonstrated the development of new knowledge in the form of a conceptual model for mental health nursing practice grounded on the data obtained from mental health nurses. It also demonstrated that mental health nurses were a rich source of data. Human interaction is the foundation of mental health nursing practice for optimum mental health whose main property is resilience. From the study, it was discovered that the human being either as the causal or context condition is the reason for existence for mental health nursing practice. The environment as the intervening condition is the suprasystem for mental health nursing practice, the human being and mental health on which it has both positive and negative influences.

7.7. **Recommendations**

7.7.1. **Recommendations for clinical practice**

This Model is based on the views of Kenyan mental health nurses. During member checking, and verification of the storyline, nurses’ feedback indicated that the model represented their views and further said that it would be useful in nursing practice. Moreover, it is the first Kenyan nursing model that is specifically developed to guide mental health nursing practice which has been consistently reported as poor. I recommend that this model be used by mental health nurses in clinical mental health nursing practice so as to improve quality of mental health nursing care. I also recommend the use of the model in general nursing. I believe that the use of this model in general nursing care will benefit the up to 25–40% of outpatients and inpatients in Kenyan health facilities who suffer from mental health problems and are not seen in the mental health facilities. (Jenkins et al, 2010; Mbwayo, Ndetei, Mutiso & Khasakhala, 2013).
7.7.2. Recommendations for future research.

Application of this model in mental health nursing practice is expected to generate research questions on issues such as its acceptability, significant contribution to improvement of patient health outcome and need for further modifications. In addition, some of its aspects may be used as conceptual frameworks for research from practice. This theory is also recommended for utilization and testing to evaluate its clarity, consistency, simplicity, generality, accessibility, importance and other qualities that characterize a conceptual model of nursing.

7.7.3. Recommendation for nursing policy

These recommendations are made for nurse administrators in policy making organs for nursing practice policy. In this regard, Directorate of nursing at the Ministry of Health headquarters is the target for the recommendation. Since there is no nursing model to guide mental health nursing practice and given that development of the model was in response to the request by Director of nursing services, I recommend the introduction of a policy to support the implementation of this model. However, I recommend that the nurse administrators support sensitization of nurses on the model before it can be adopted.

7.7.4. Recommendation for the regulatory and professional organizations

Once the model is adopted and included in policy, I recommend the introduction of the model in the nursing curricula so that all nurses learn about the model to be able to apply it in practice. To facilitate training of students on the model, I recommend that the regulatory bodies support training of trainers on the model as one way of developing capacity of nurse educators to enable them teach their students about the model.
The professional organizations such as the National Nurses Association of Kenya and the Kenya Progressive Nurses Association need to support the sensitization of members on the model and encourage presentations of research findings on the model at annual scientific conferences as a way of sharing the benefits and challenges of utilizing the model as well as areas of modifications.
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APPENDICES

Appendix A: Consent Information Sheet and informed consent form

Protocol No. 199/5/2013

Study Title: Development of a Kenyan Mental Health and Psychiatry Nursing Model for Practice: A Grounded Theory Study

Introduction
I am Miriam Carole Atieno Wagoro, a PhD student at the University of Cape Town, Department of Health and Rehabilitation Sciences in the Division of Nursing and Midwifery

I am conducting a study which aims to develop a Kenyan Mental Health & Psychiatry Nursing Model for Practice.

I wish to invite you to participate in this study because you are one of the mental health nurses with at least (six) years of experience in mental health /psychiatry nursing. You therefore have a lot of information needed to develop the model for mental health nursing practice.

Procedure
• I estimate that the study will take six months (24 weeks).
• I shall use English language in the consent form and during interviews since this is the official language in educational institutions. However, if you are uncomfortable with this, then I can use the language that best suits you.
• I shall request you to sign part 2 (informed consent form), if you are willing to participate in this study.
• If you agree to participate in this study, you will be required to complete the demographic questionnaire first, before I hold an interview with you.
• I shall hold a one-on-one interview with you. The one-on-one interview sessions will take 45-60 minutes. You will participate in one interview session only. However, if I require you for a follow up interview session to clarify some questions. I shall make a written request to you and make arrangements that are convenient to you.
• I shall hold interviews in the mental health hospital you are currently working, at a comfortable place you prefer. These interviews will involve questions that you need to answer about your experience, beliefs and views on mental health nursing practice, environment of care and
environment that influence mental health of the clients you care for, mental health and the human being.

- However, you have a choice of not answering any questions or withdrawing at any time.
- You will participate in this study voluntarily (you are not under any obligation to participate). If you refuse to participate, there will be no consequences. You have the right to withdraw at any time without any penalty from any person or hospital administration.
- There will be no financial costs for participation or non-participation
- I shall not offer you any remuneration for taking part in this study. However, if you are on leave and have come specifically for the purposes of participating in the study; I shall reimburse your transport costs.

**Risks/Discomfort**
I do not foresee any physical risks in this study. However, there is a risk that you may share some personal or confidential information by chance, or that you may feel uncomfortable talking about some of the views you hold about what you will be asked. You do not have to answer any question or take part in the interview if you feel the question(s) are too personal or if talking about them makes you uncomfortable. If however you become uncomfortable about sensitive information you are asked and need any counselling support, the office of the chief counselor in the Ministry of health will be contacted and I shall make arrangements for you to attend in accordance with the Ministry of health protocol.

**Benefits**
You will not receive any remuneration for taking part in this study. The only direct benefit to you is that you will have an opportunity to have your views considered in the model of mental health nursing practice in Kenya. Other benefits may not be specifically to you but, information generated from this study will be used to develop a Kenyan mental health and psychiatry nursing model for practice for improved patient health outcomes.

**Confidentiality of information**
I shall not share your information with any one. The information that I collect from this study will be kept private. All information about you will have a number (code) on it instead of your name and therefore will not be linked to you in any way. The only persons who will share this information will be my supervisors as they are directly involved in supervising this research.

**Results**
Results of the study will be shared with you, your hospital and the chief nursing officer’s office before it is made widely available to the public. I shall also publish the results at nursing conferences and in nursing journals so that other interested people may learn from the study. In sharing results, no information will be linked to you and will remain anonymous.

**Approval of this study**
The authority to conduct this study has been given by:
- The University of Cape Town Faculty of Health Sciences Human Research Ethics Committee
- Kenyatta national Hospital and University of Nairobi joint Ethics and research committee
- National Council for Science and Technology-Kenya
- Ministry of Health Department of Standards-Kenya
• Your Hospital Administration

**Contact persons in case you have questions during or after research**
If you have any questions, later you may contact me or any of the persons whose name is given below;

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Do you have any questions at this time?
If you have no questions and have understood then please turn over the page and indicate whether you
agree to participate or not by signing in the space provided appropriately

Part 2: Informed consent form

I (Signature only-Optional)………………………………… have understood the information about the
study to my satisfaction. I have understood that I shall not be paid / compensated for participation in this
research activity except, where I have come from home solely for the purpose of the study, only transport
will be reimbursed.

I have understood that participation is voluntary and can drop out of the study at any time I wish with no
penalty at all.

I hereby agree to participate in this study titled, “A Kenyan Mental Health & Psychiatry Nursing
Model for Practice: A Grounded Theory study”, whose details have been explained to me by Miriam
C.A.Wagoro as the principal investigator.

Signature…………………………………                           Date…………………….
Appendix B: Study Instruments

(i): Demographic Questionnaire

Questionnaire number………………………………………………..

Date ………………………………………………………………

STUDY TITLE: Development of a Kenyan Mental Health and Psychiatry Nursing Model for Practice: A Grounded Theory Study

INVESTIGATOR: Miriam Wagoro, RN, MScN, BScN

DATE ………………………………

Introduction
The purpose of this questionnaire is to obtain some demographic characteristics about you as the participant in this study. This information is not intended to identify you personally, but rather to provide background about the people who participated in the study. All information about you as an individual will be kept strictly confidential.

The information you give will help develop a Kenyan Mental Health and Psychiatry Nursing Model for Practice

Please complete this questionnaire as honestly as possible. You may fill in the blanks or indicate by a tick in the appropriate corresponding box provided.

1. Address (Residence)…………………………………………………………...

2. Phone Number……………………………………………………………………

3. Ward/unit of work …………………………………………………………………

4. Hospital………………………………………………………………………………

5. Your Age in years……………………………………………………………………

6. Your Gender
   Female ☐
   Male ☐

7. Designation……………………………………………………………………………

8. Qualifications ………………………………………………………………………..
9. Position you hold in the ward………………………………………………………………

10. Years of experience in mental health nursing practice……………………………………

11. What is your current marital status?

   Married  
   Never married  
   Divorced  
   Widowed  
   Others (Specify)…………………………..

12. What is your religious affiliation?

   Catholic  
   Anglican  
   Pentecostal  
   Others (Specify)………………………………

13. When would you be available for the interview with the researcher?
   a) Please indicate the preferred months………………………………………………
   b) Will you be leave or on duty at this time?…………………………………………
(ii) Study instruments - Interview Guide for In-Depth Interviews with Ward Managers, Clinical Nurse Practitioners and nurse educators

STUDY TITLE: Development of a Kenyan Mental Health and Psychiatry Nursing Model for Practice: A Grounded Theory Study

INVESTIGATOR: Miriam Wagoro, RN, MScN, BScN

Questionnaire number…………………………………….
Date of interview………………………………………
Group……………………………………………………

Introduction

The purpose of this interview is to obtain information about your views and beliefs about Mental Health Nursing Practice, Environment, the Human being as the client of care and Mental Health. The information you provide will be for the purposes of the study only and will not be used against you nor be shared with anybody outside the study team. The information you give will help in Development of a Kenyan Mental Health Nursing Model for Practice.

Please answer the questions as honestly as possible.

This interview schedule has four sections. We shall ask your views and beliefs in all in the four sections.

The interview will take between 45-60 minutes

Opening question: Let me begin with asking you your views and beliefs about mental health nursing Practice

SECTION 1: Nurses’ Beliefs and Views about Mental Health Nursing Practice
1. What are your views about mental health nursing practice?
2. What do you believe mental health nursing should consist of?
3. How should mental health nurses provide mental health nursing in your view?
4. What else would you would like to share with regards to your belief about mental health nursing?

Transition to section 2: Thank you for answering the questions in the first section. We now move to the second section. I shall now ask you about your views on Environment of care or in which the clients live.

SECTION 2: Nurses Beliefs and Views about Environment
1. What are your views about the mental health care environment?
2. What are your views about the general environment in which people live?
3. What is your view about how environment affects mental health of patients you look after?
4. How should nurses make environments safe for mental health of individuals and patients?
5. What else you would like to share with regards to your belief about environment?

**Transition to section 3:** Thank you very much again. We now move to the third and second last section in which I shall ask you your views and beliefs about the human being.

**SECTION 3: Nurses’ Beliefs and Views about the Human being**
1. What are your views about a human being?
2. What are you views about the human being as the client of care or the patient?
3. To what extent do you think other nurses you have observed meet the client’s needs?
4. What interventions in your view would help meet patients’ needs fully?
5. What else would you want to share about how patients are viewed?

**Transition to section 4:** Thank you. We now move to the fourth section of this interview. I shall now ask you your views and beliefs about mental health

**SECTION 4: Nurses’ Beliefs and Views about Mental Health**
1. What are your views about the mental health of people generally and as patients?
2. What would you consider as optimum mental health?
3. What is your belief about what mental health nurses should do in mental health of the populations?
4. Is there anything else you would like to share with regards to your belief about mental health?

**Transition to section 5:** Thank you. As we now move to the fifth and last section of this interview. I shall now ask you what you would recommend for appropriate model for mental health and psychiatry nursing practice in Kenya that takes into consideration the four areas discussed in Sections 1, 2, 3, and 4

**SECTION 5: Recommendations for an appropriate model**
1. What is your view about
2. what mental health nurses should do to provide ideal mental health nursing care
3. What is your belief about what environment of mental health should consist of?
4. Tell me your views with regards to how nurses should view patients with mental disorders

**Closing the interview:** Thank you very much for your time and for the information you have provided. Do you have any comments or questions you would want to ask?
Appendix C: Authority to Conduct Research (Approvals for research)

(i): University Of Cape Town, Human Research Ethics Committee Approval
UNIVERSITY OF CAPE TOWN

Faculty of Health Sciences
Human Research Ethics Committee
Room E52-24 Groote Schuur Hospital Old Main Building
Observatory 7925
Telephone (021) 406 6338 • Facsimile (021) 406 4411
e-mail: shureta.thomas@uct.ac.za
Website: www.health.uct.ac.za/research/humanethics/forms

04 March 2013

HREC REF: 101/2013

Ms M Wagoro
c/o Ms S Maart
Nursing & Midwifery
Health & Rehab
ONB

Dear Ms Wagoro,

PROJECT TITLE: DEVELOPMENT OF A KENYAN MENTAL HEALTH & PSYCHIATRY NURSING MODEL FOR PRACTICE: A GROUNDED THEORY

Thank you for responding to the issues raised by the Faculty of Health Sciences Human Research Ethics Committee in your letter received on 1st March 2013.

It is a pleasure to inform you that the HREC has formally approved the above-mentioned study.

Approval is granted for one year till the 15th March 2014

Please submit a progress form, using the standardised Annual Report Form if the study continues beyond the approval period. Please submit a Standard Closure form if the study is completed within the approval period.

(Forms can be found on our website: www.health.uct.ac.za/research/humanethics/forms)

Please note that the ongoing ethical conduct of the study remains the responsibility of the principal investigator.

Please quote the HREC. REF in all your correspondence.

Yours sincerely,

[Signature]

PROFESSOR M BLOCKMAN
CHAIRPERSON, FHS HUMAN ETHICS

Federal Wide Assurance Number: FWA00001637.
Institutional Review Board (IRB) number: IRB00001938

This serves to confirm that the University of Cape Town Human Research Ethics Committee complies to the Ethics Standards for Clinical Research with a new drug in patients, based on the Medical Research Council (MRC-SA), Food and Drug Administration (FDA-USA), International Convention on Harmonisation Good Clinical Practice (ICH GCP) and Declaration of Helsinki guidelines.

The Human Research Ethics Committee granting this approval is in compliance with the ICH Harmonised Tripartite Guidelines E6: Note for Guidance on Good Clinical Practice (CPMP/ICH/135/95) and FDA Code Federal Regulation Part 50, 56 and 312.

s.thomas
Dear Ms. Wagoro,

RESEARCH PROPOSAL: DEVELOPMENT OF A KENYAN MENTAL HEALTH & PSYCHIATRY NURSING MODEL FOR PRACTICE: A GROUNDED THEORY STUDY

This is to inform you that the KNH/UoN-Ethics & Research Committee (KNH/UoN-ERC) has reviewed and approved your above proposal. The approval period is 3rd December 2013 to 2nd December 2014.

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 severe 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.
e) 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)
f) Clearance for export of biological specimens must be obtained from KNH/UoN-Ethics & Research Committee for each batch of shipment.
g) Submission of an executive summary 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 www.uonbi.ac.ke/activities/KNH/UoN.

"Protect to Discover"
Yours sincerely,

Signed

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

C.c.  Prof. A.N. Guantai, Chairperson, KNH/UoN-ERC.
     The Deputy Director CS, KNH
     The Principal, College of Health Sciences, UoN
     AD/Health Information, KNH
     Supervisors: Prof. Sinegugu E. Duma, Prof. Pat Mayers, Prof. Preston Chiteme
(iii): National Commission for Science and Technology and Innovation (NACOSTI) Approval
(iv) Kenya Ministry of Health Approval

MINISTRY OF HEALTH
Office of the Director of Medical Services

Telephone: Nairobi 2717077
Fax: 2719008

When replying please quote:
Ref: MOH/ADMU1/I/01 Vol:II

Ms Wagoro Miriam C.A
School of Nursing Sciences
University of Nairobi
KNH Campus
NAIROBI

RE: AUTHORITY TO CONDUCT RESEARCH IN GOVERNMENT HEALTH FACILITIES

The Ministry of Health is in receipt of your undated letter on the above subject.

The research is part of fulfillment of your PhD Course at the University of Cape Town. Research Title: Development of a Kenyan Mental Health & Psychiatry Nursing Model for Practice. It’s noted that the KNH/IQN Ethics Research Committee has approved your Research Proposal.

The following Government Mental Health Units and National Hospitals will be visited:

1. Madaraka Hospital (Nairobi)
2. Port Reitz Hospital (Coast)
3. Nakuru PGH (Rift Valley)
4. Kiambu District Hospital (Mental Unit)
5. Nyeri PGH
6. Moi Teaching & Referral
7. Kakamega PGH
8. Embu Hospital
9. Machakos Hospital

This office has no objection to the above research being carried in Government Health facilities.

The Medical Superintendents of the above Health facilities are requested to provide the necessary support.
You are requested to share the results of the study with the Ministry of Health.

Signed

Dr. Francis M. Kimani
Director of Medical Services

Copy to: Concerned:
County Executive of Health
County Health Director
Medical Superintendents
Appendix D: Participants Attendance list for Presentation of Story line and member checking

<table>
<thead>
<tr>
<th>NAME</th>
<th>AGREED /DISAGREE</th>
<th>SIGNATURE</th>
<th>DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRUTEA M. MUNYENDO</td>
<td>AGREED</td>
<td></td>
<td>24/2/2016</td>
</tr>
<tr>
<td>MONICA W. IGIDI</td>
<td>AGREED</td>
<td></td>
<td>24/2/2016</td>
</tr>
<tr>
<td>LORNALI O. ODENDI</td>
<td>AGREED</td>
<td></td>
<td>24/2/2016</td>
</tr>
<tr>
<td>ANNE W. MUKOKI</td>
<td>AGREED</td>
<td></td>
<td>24/2/2016</td>
</tr>
<tr>
<td>ROXAN M. CHUKA</td>
<td>AGREED</td>
<td></td>
<td>24/2/2016</td>
</tr>
<tr>
<td>LOISE N. MBOKA</td>
<td>AGREED</td>
<td></td>
<td>24/2/2016</td>
</tr>
<tr>
<td>PAUL M. MWANGI</td>
<td>AGREED</td>
<td></td>
<td>24/2/2016</td>
</tr>
<tr>
<td>ANDREW M. MATHE</td>
<td>AGREED</td>
<td></td>
<td>24/2/2016</td>
</tr>
<tr>
<td>RUTH O. OTIENO</td>
<td>AGREED</td>
<td></td>
<td>24/2/2016</td>
</tr>
</tbody>
</table>
Appendix E: Attendance list for Presentation of the storyline in the form of a draft model to Nursing Faculty-University of Nairobi, at school of Nursing Sciences

(i): Faculty Attendance List

<table>
<thead>
<tr>
<th>NO.</th>
<th>NAME</th>
<th>UNIT</th>
<th>SIGNATURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Prof Grace Omwino</td>
<td>Director</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Prof Pokest Kaibee</td>
<td>Dept of Anatomy</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Mrs. Angelina C. Kimu</td>
<td>Med/Surg</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Prof Siungo Dama</td>
<td>UCT.</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Dr. Lucy Kimai-Biwe</td>
<td>Admin &amp; Edu</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Ms. Thesaga M. Aga</td>
<td>Com Hautt</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Dr. Marion Makame</td>
<td>Teaching Institute</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Lilian A. Omende</td>
<td>Med-Surg</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Prof Anna Kareri</td>
<td>Adm/Ed.</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Dr. James Mburu</td>
<td>Med.Surg</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Dr. Margaret Chege</td>
<td>Med.Surg</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Prof. Nelson Githin</td>
<td>Professor</td>
<td></td>
</tr>
</tbody>
</table>

Signed

248
(ii): Faculty in Attendance Pictures
Appendix F: Chief Nursing Officer, Letter of Request

MINISTRY OF MEDICAL SERVICES

MMS/ADM/1/1/19 VOL.1/86

28th May, 2012

Miriam C.A. Wagoro,
Lecturer,
School of Nursing Sciences,
University of Nairobi,
P.O. Box 19676-00202,
NAIROBI.

IMPROVING MENTAL HEALTH SERVICES IN KENYA

I wish to appreciate the contribution you have made towards the improvement of general Nursing Care Services in Kenya as the head facilitator in Mainstreaming Nursing Process in Public Hospitals.

We note that mental Health and Psychiatry Nursing Services still lags behind. It is in this regard that I ask you to help us come up with a model of care that will improve mental health and psychiatry nursing services in Kenya.

Signed

CHRISTA RAMOT
CHIEF NURSING OFFICER
## Appendix G: NVivo:QSR codes for Mental health Nursing Practice

<table>
<thead>
<tr>
<th>Mental Health Nursing Practice Codes free codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Practice or care by mental health nurses</td>
</tr>
<tr>
<td>2. Act substitutive to the patient</td>
</tr>
<tr>
<td>3. Care for patient</td>
</tr>
<tr>
<td>4. Administer treatment</td>
</tr>
<tr>
<td>5. Treating patient to recover</td>
</tr>
<tr>
<td>6. Care for hygiene</td>
</tr>
<tr>
<td>7. Rehabilitate for recovery</td>
</tr>
<tr>
<td>8. Care for nutrition</td>
</tr>
<tr>
<td>9. Assessment</td>
</tr>
<tr>
<td>10. Monitor progress</td>
</tr>
<tr>
<td>11. Care by nurses</td>
</tr>
<tr>
<td>12. Care for hygiene</td>
</tr>
<tr>
<td>13. Treatment and nutritional care</td>
</tr>
<tr>
<td>14. Attending</td>
</tr>
<tr>
<td>15. Integrate them</td>
</tr>
<tr>
<td>16. Patient involvement</td>
</tr>
<tr>
<td>17. Safety care</td>
</tr>
<tr>
<td>18. Administer medications</td>
</tr>
<tr>
<td>19. Encourage family interaction</td>
</tr>
<tr>
<td>20. Make environment conducive</td>
</tr>
<tr>
<td>21. Try all one can</td>
</tr>
<tr>
<td>22. Hygiene care</td>
</tr>
<tr>
<td>23. Nutritional care</td>
</tr>
<tr>
<td>24. Administer medication</td>
</tr>
<tr>
<td>25. Taking care</td>
</tr>
<tr>
<td>26. Training more nurses</td>
</tr>
<tr>
<td>27. Provide health education</td>
</tr>
</tbody>
</table>

### P2

28. Providing holistic mental health-category
29. Promoting mental health of populations-sub category
30. Mental health care of individuals and communities
31. Creation of mental health awareness
32. Determining difference between mental health and illness
33. Assessment of mental health status
34. Identifying types of mental illnesses
35. Creating awareness among health professionals
36. Teamwork/collaboration-sub category
37. Learning more about treatment
38. Conducting follow up of patient/families-sub categories
39. Risk assessment
40. Modifying environment for mental health promotion
41. Creating awareness
42. Identifying mental health needs
43. Involves parenting
44. Ensuring safe environment
45. Assess risk for violence/aggression
46. Influenced by beliefs about mental illness
47. Individualize care
48. Help patient gain insight
49. Administer treatment

### P17

324. Care for the mentally ill
325. Counselling
326. Inpatient care for those not manageable at home
327. Home-based care
328. Family involvement
329. Middle-house mental health services
330. Individualized physical and psychological care
331. Care for those not able to access inpatient care
332. Decongest the hospital
333. Assessment
334. Identify patient for discharge
335. Mobilize community for participation
336. Collaborate with religious leaders
337. Take services close to people

### P18

338. Very important aspect of nursing
339. Holistic care
340. Assessment
341. Identify needs
342. Planning for and meeting needs
343. Help patient to recovery
344. Very important
345. Identify and diagnose needs
346. Help improve mental health
347. Monitor health and progress
348. Ensure safe sleeping environment
349. Provide basic needs to make environment safe
350. No sharing beds
351. Assessment
352. Evaluate care
353. Collaboration and coordination
354. Public education
355. Public education on prevention in pregnancy
356. Identify mental disorders early
357. Secondary prevention

### P19

358. Holistic care
359. Total care-physical, psychological and mental health
360. Holistic care
361. Reduce stigma
362. Care for drugs for patient’s safety
363. Conduct home visits
364. Give best care
365. Help patient recover
366. Supervise bathing
367. Hygiene care
368. Help patient develop self esteem
369. Show patient love and appreciation
370. Provide needs
50. Monitor treatment
51. Understand patient
52. Create therapeutic space
53. Create awareness
54. Fight stigma
55. Avoid institutionalization
56. Eradicate relapse
57. Create awareness on mental disorders prevention

P3
58. Caring for people with challenged mind.
59. Care across life span
60. Follow up care
61. Caring and working with family
62. Community mental health care
63. Reducing nurses workload
64. Case finding in the community
65. Educating the family and community members
66. Family, group and individual therapy
67. Helping relatives in home care
68. Outreach services
69. Treat patients with kindness,
70. Show patients great love
71. Patient involvement
72. Empathy
73. Being available for patients
74. Case finding in the community
75. Education on mental illness
76. Empowering people to report risk factors
77. Encourage patient support
78. Advocate for community acceptance
79. Community education on mental illness and law

P4
80. Application of knowledge and skills for mental health concern
81. Theory based practice
82. Mental health care in a ward/hospital & community settings
83. Community education
84. Prevention of mental illness
85. Assess client
86. Assessment based interventions
87. Holistic assessment of etiological factors and intervention
88. Family – genetic counselling
89. Establish recreation centers to
90. Prevent substance use
91. Assessment using psychosocial model to capture concerns
92. Provide holistic mental health services
93. Provide holistic care
94. Involve patient in care
95. Avoid patient isolation

P5
96. Application of knowledge
97. Manage their patients
98. Manage a client

P20
371. Socialize patients
372. Administer medication
373. Involve family and community
374. Work as a team to reduce stigma
375. Integrate mental health in other services
376. Have a positive attitude to patient

P21
377. Care of mentally ill
378. Identify specific mental health needs/problems
379. Give targeted care
380. Provide best care
381. Meet needs
382. Keep confidentiality
383. Adhere to ethics
384. Being consistent
385. Provide mental health care
386. Have adequate knowledge
387. Set priorities
388. Unconditional knowledge
389. Give a sense of belonging
390. Advocate for support
391. Unconditional acceptance
392. Create awareness
393. Individualize care
394. Help regain highest self-esteem
395. Be empathetic

P22
| 99. | Learn about mental disorders |
| 100. | Achieve complete well being |
| 101. | Curative |
| 102. | Preventive |
| 103. | Rehabilitative |
| 104. | Treat and rehabilitate |
| 105. | Provide |
| 106. | Knowing mental health nursing |
| 107. | Diagnosing |
| 108. | Knowing clients |
| 109. | Unconditional acceptance |
| 110. | Make that client understand |
| 111. | Understand client and community |
| 112. | Managing our patients |
| 113. | Make the environment safe |
| 114. | Seek informed consent for procedures |
| 115. | Observe client dignity |
| 116. | Focus on client |
| 117. | Quality care |
| 118. | Self-involvement in all care activities |
| 119. | Involve family in care |
| 120. | Altruism |
| 121. | Commitment |
| 122. | Case identification |
| 123. | Avoid discrimination |

**P6**

| 124. | An interesting field |
| 125. | Requires a lot of patience |
| 126. | Be patient and listen |
| 127. | Assist patients gain insight |
| 128. | Relative’s involvement. |
| 129. | Prepare for patients for community reintegration |
| 130. | Destigmatize |
| 131. | Reduce relapse |
| 132. | Rehabilitate to reduce relapse |
| 133. | Unconditional love & understanding |
| 134. | Administer treatment |
| 135. | Educate on illness |
| 136. | Conduct follow ups |
| 137. | Interpersonal relationships |
| 138. | Show passion |
| 139. | Educate staffs |
| 140. | Mental health care |
| 141. | Educate on precipitating & perpetuating factors. |
| 142. | Direct to service facilities |
| 143. | Educate communities on parenting |
| 144. | Encourage clinic attendance |
| 145. | Understand patients |
| 146. | Listening |
| 147. | Understanding |
| 148. | Interactions |
| 149. | Make patients closer |
| 150. | Establish interpersonal relationship |
| 151. | Administer treatments |
| 152. | Observe patients |

| 421. | Total care given for recovery |
| 422. | Consists of nursing care and psychotherapy |
| 423. | Involve family and society |
| 424. | Determine patient acceptance |
| 425. | Assess home environment suitability |
| 426. | Demanding |
| 427. | Ensure therapeutic environment |
| 428. | Interact with patients |
| 429. | Nutritional care |
| 430. | Includes home visit |
| 431. | Conduct psychotherapeutic group activities |
| 432. | Public education on mental health |
| 433. | Individualize nursing care |
| 434. | Quality nursing care |

**P23**

| 435. | Challenging |
| 436. | Helps one to cope |
| 437. | Needs skills |
| 438. | Helps personal growth |
| 439. | Understanding |
| 440. | Helping to overcome |
| 441. | Care |
| 442. | Family involvement |
| 443. | Help them gain insight |
| 444. | Patient education |
| 445. | Discharge planning |
| 446. | Ensuring a therapeutic environment |
| 447. | Requires passion |
| 448. | Requires patience |
| 449. | Needs understanding |
| 450. | Provide basic needs |
| 451. | Ensure safe environment |
| 452. | Ensure a therapeutic environment |
| 453. | Facilitate recovery |
| 454. | Facilitate healing process |
| 455. | Advocate for environment improvement |
| 456. | Visionary |
| 457. | Relatives involvement |
| 458. | Assessment |
| 459. | Be role models |
| 460. | Teaching other nurses on the job training |

**P24**

| 462. | Care of mentally ill people |
| 463. | Care of mentally persons |
| 464. | Prevent mental illness |
| 465. | A profession |
| 466. | Maintaining good community mental health |
| 467. | Treating people |
| 468. | Prevent that mental illness |
| 469. | Give treatment |
| 470. | Public education |
| 471. | Identify those at risk |
| 472. | Give better care,
Conduct frequent inspections
Keep environment safe
Unconditional acceptance
Understand patient
Use drugs only when necessary
Integrate them to community
Rehabilitate
Advocate for employment
Acceptance
Give health education
Create community awareness

Helping those not able
Help our patients
Therapeutic
Use drugs & occupational therapy
Involve patients
Assessment
Involve patients
Nurse involvement
Help gain recovery
Needs to be appreciated by patient
Understanding
Make environment safe
Create a therapeutic environment
Help patients develop patient-to-patient relationships
Help patient grow
Advocate for patient rights
Assist patients
Involving patients
Educate communities on influences of mental status
Help them develop problem solving skills
Formulate workable policies

Support to a patient with mental illness
Aid recovery of a patient
Occupy a patient
Assess, identify and meet needs
Accept individual
A crucial profession
Tolerate
Take care
Keep environment safe
Give the best care
Provide comfort
Manage patient
Understand patient
Educate community

Nursing practice by trained nurses
Identify risk problems
Prompt interventions
Involve the family activities
Friendliness
Develop Interpersonal relationship with patient and family
Interaction
Identify causes of the problems
Advise
Counsel
Avoid discrimination
Create good environment
Advocate for clients
Collaborate for a therapeutic environment
Decongest wards
Administer medications
Monitor treatment
Involves other care providers
Ensure a therapeutic environment
Good nutrition
Help patients
Conduct group therapy
Educate other workers
Monitor progress
Teamwork
Family therapy
Involve family
Involve community
Community education

Beneficial to the nurse practitioner as well
Helps understand behaviour
Helps in effective coping
Help patient and family
Helps in understanding patient in totality
Prevent the mental illnesses
Doing the curative
Prepare patient and family
Teach adaptation skills
Prevention
Care
Rehabilitation
Assessment and identification of needs
Involve client in their care,
Unconditional acceptance
Mentor other nurses
Advocate for patients
Facilitate quick recovery
Have hope-optimism
Individualize care
Understand client needs
Conduct therapeutic activities
Be there for them
Health education
Be involved at policy level
Be involved in planning mental health activities at all levels
Optimize mental health for individuals and communities
Multidisciplinary
Prevent illness
Identify risk factors
Prompt interventions
Rehabilitate for family and community reintegration
Accept psychiatric nursing
Accept clients
Appropriate interventions
Independent practice
Teamwork
Identify individuals at risk
Prevent mental illness
Care at home
Make environment therapeutic
Administer therapy
Advocate for clients
Advocacy
Public education
Identify exact point of vulnerability
Support for independence
Identify needs
Evaluate needs
Care beyond hospital
Stay abreast
Advocate for resources
Identify those at risk
Prevent mental illness

P10
Care offered to mentally ill patients nurses trained in psychiatry
Appropriate care to mentally disturbed
Appropriate care
Love and acceptance
Appropriate care
Unconditional positive regard.
Use of care plan to provide care
Provide conducive environment
Giving the best one can
Give love
Appropriate care
Discovering the root cause of problems
All inclusive
Advocacy to destigmatize psychiatric nursing
Improve people’s perception

P11
Goal to help recovery
Aims at integration to family and community
Make patient recover from mental illness
Administration of medication
Supervision of patient care
Patient assessment
Rehabilitation for integration

P26
Giving back to the community
Making the life of the people with mental disorders better
Ensuring a therapeutic environment
Taking care of patients well
Professional nursing by trained nurses
Admit patient for treatment
Provide holistic care
Service beyond the hospital
Sticking to professional training and ideals
Practicing according to standards
Putting knowledge gained back to the community
This is challenging
Ensure availability of resources
Ensure availability of modern resources and human resources
Administer effective medications
Supervision of patient’s meals
Ensure a conducive environment for both patient and staff
Promote effective coping
Prevent mental illnesses
Community mental health assessments

P27
A specialty nursing
Having a passion for the mental health patients
Holistic care to the individual with mental illness
Provide comprehensive care.
Care beyond patient and hospital
Provide a conducive environment for both the patient and staff.
Prepare patients for community reintegration
Ensure availability of basic needs
Ensure Interpersonal relationship
Ensure fairness and a good relationship
Understanding patient as a human being
Empowering patients
Create awareness

P28
Care of our patients
Promote mental health,
Family involvement
Develop a good rapport
Holistic support
Ensure a good environment
Create awareness,
Prevent mental illness
Educate our communities

P29
Provide quality of care
Assessment
Rational decisions
| 252. | Treat with humane care. |
| 253. | Make an environment safe. |
| 254. | Advocacy for equal distribution of resources |
| 255. | Holistic care |
| 256. | Interact with the patients |
| 257. | Assess progress |
| 258. | Discover root cause of mental illness |
| 259. | Include occupational therapy for rehabilitation |
| 260. | Education to family and community |
| 261. | Reach out to the community for prevention |
| 262. | Understanding |
| P12 | Patient treatment |
| 263. | Counselling for the family |
| 264. | Health education and retraining |
| 265. | Involve patient in their care |
| 266. | Follow up of patients |
| 267. | Prevent relapses |
| 268. | Counselling in communities |
| 269. | Mitigate risk factors |
| 270. | Counselling for the client |
| 271. | Family therapy |
| 272. | Family involvement |
| 273. | Care according to needs |
| 274. | Assessment of the client |
| 275. | Administer treatment |
| 276. | Supervise care |
| 277. | Assist in group therapy |
| 278. | Health education |
| 279. | Communities |
| 280. | Treatment of affected. |
| 281. | Educate them on drugs. |
| 282. | Develop interpersonal relationships with patients |

| P15 | A very noble practice |
| 283. | Care delivered trained and motivated personnel |
| 284. | Requires resources to achieve the objectives. |
| 285. | Create community awareness |
| 286. | Follow up care |
| 287. | Identify the etiological factors and patient needs |
| 288. | Family involvement |
| 289. | Application of the nursing process |
| 290. | Research |
| 291. | Offer evidence-based preventive services at all three levels |
| 292. | It is actually holistic care. |
| 293. | Team work |
| 294. | Community mental health care |
| 295. | Preventive services |
| 296. | Provision of safe services |
| 297. | Good assessment |
| 298. | Create awareness about mental health. |
| 299. | Community education |
| 300. | Holistic treatment |
| 301. | Effective referral systems |
| 302. | Psychosocial treatment and pharmacotherapy |
| 303. | Holistic care |
| 304. | Ensure a better environment |
| 305. | Supervise patient care |
| 306. | Make environment conducive |
| 307. | Unconditional acceptance |
| 308. | Individualize Kenya |
| 309. | Teamwork |
| 310. | Discharge planning |

| P30 | Holistic care |
| 311. | The goal is holistic rehabilitation |
| 312. | Assessment |
| 313. | Lead a normal life |
| 314. | Understand the patient |
| 315. | Provide outreach services |

| P31 | In-patient care |
| 316. | Spending time with patient |
| 317. | Assessment of needs |
| 318. | Administer treatment |
| 319. | Interact with patient |
| 320. | Monitor patient |
| 321. | Holistic care |
| 322. | Help patient achieve mental & physical health |
| 323. | Help patient become independent |
| 324. | Holistic care |
| 325. | Assisting patient to feed |
| 326. | Assist patient with personal hygiene |
| 327. | Holistic care |
| 328. | Interact with patient |
| 329. | Avoid stigma |
| 330. | Explore causes of mental illness |
| 331. | Meet physical needs |
| 332. | Help patient recover |
| 333. | Conduct counselling |
| 334. | Interact with community |
| 335. | Care for patient and relatives |
| 336. | Educate clients |
| 337. | Care for environment-family community |
| 338. | Follow-up care |
| 339. | Educate public |
| 340. | Give the best care |
| 341. | Conduct psychotherapy |
| 342. | Being there for the patient |
| 343. | Care for environment |
| 344. | Ensure safe environment |
| 345. | Help patient recover |
| 346. | Administer treatment |
| 347. | Interact with patient |
| 348. | Counsel families |
| 349. | Patient education |
| 350. | Prevent people coming to the wards |
| 303. Empathy  |
| 304. Advocacy  |
| 305. Doing everything for patient  |
| 306. Assessment  |
| 307. Mental health promotion, education, counselling  |
| 308. Advocacy  |
| 309. Case finding and detecting  |
| 310. Networking  |
| 311. Referrals,  |

**P16**
312. Goes beyond mental illness only  
313. Support individuals with mental health issues  
314. Provide treatment  
315. Provide counselling  
316. Communicate effectively  
317. Unconditionally accept patient  
318. Make environment conducive  
319. Continued talking to patient  
320. Diagnose patient’s problems  
321. Help  
322. Educate population on mental illness  
323. Care given to populations and mentally sick

**P32**
622. Care for people with disordered minds  
623. Consists of trained professionals  
624. Care within legal frameworks  
625. Nurse –patient therapeutic relationship  
626. Caring  
627. Restore back to original state  
628. Holistic care to all patients  
629. Supervise treatment  
630. Safe environment  
631. Friendliness  
632. Create awareness

**P33**
633. Nursing care for patients with psychiatric problems  
634. Rehabilitation  
635. Administration of drugs  
636. Hygiene and nutritional care  
637. Make patient feel good  
638. Make patient feel accepted  
639. Enhance recovery  
640. Taking care  
641. Listening to people  
642. Give patient unconditional love  
643. Being available for patient  
644. Education to families and communities  
645. Ensure safety  
646. Ensure friendly environment  
647. Provide good care  
648. Educate the community
### Appendix G: NVivo:QSR codes for Mental health Nursing Practice

<table>
<thead>
<tr>
<th>Mental Health Nursing Practice Code Hierarchy</th>
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<tbody>
<tr>
<td>1. Provide holistic and quality mental health care</td>
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<tr>
<td>1.1. Individuals and communities</td>
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<tr>
<td>1.1.1. Populations and mentally sick</td>
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<td>1.1.2. Care for environment</td>
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<tr>
<td>1.1.3. Care across life span</td>
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<td>1.1.4. Optimize mental health for individuals and communities</td>
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<td>1.2. Provided by trained mental health nurses</td>
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<tr>
<td>1.2.1. Provide best / quality Provide comprehensive care.</td>
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<tr>
<td>1.2.1.1. Holistic Assessment and identify needs</td>
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<tr>
<td>1.2.1.2. Use of care plan to provide care</td>
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<tr>
<td>1.2.1.3. Care for hygiene</td>
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<td>1.2.1.4. Treatment and nutritional care</td>
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<td>1.2.1.4.1. Administer medication</td>
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<td>1.2.1.4.2. Nutritional care</td>
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<td>1.2.1.5. Safety care</td>
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<td>1.2.1.6. Individualized physical and psychological care</td>
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<td>1.2.1.8. Evaluate care</td>
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<td>1.2.2. Teamwork/collaboration</td>
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<tr>
<td>1.2.2.1. Involve patient in care</td>
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<tr>
<td>1.2.2.2. Self- involvement in all care activities</td>
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<tr>
<td>1.2.2.3. Involve family, community and society</td>
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<tr>
<td>1.2.2.4. Involve other care providers</td>
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<td>1.2.2.5. Multidisciplinary</td>
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<tr>
<td>1.2.2.6. Work as a team to reduce stigma</td>
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<tr>
<td>1.2.2.7. Networking</td>
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<td>1.2.2.8. Referrals</td>
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<tr>
<td>1.2.2.9. Intersectoral collaboration</td>
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<tr>
<td>1.2.2.10. Collaborate with religious leaders</td>
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<td>1.2.2.11.</td>
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<td>1.3. Mental health care in a ward /hospital and community settings</td>
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<tr>
<td>1.3.1. In-patient care</td>
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<td>1.3.2. Care beyond patient and hospital</td>
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<td>1.3.2.1. Community mental health care</td>
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<td>1.3.2.2. Home-based care</td>
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<td>1.3.2.2.1. Helping relatives in home care</td>
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<td>1.3.2.3. Follow up care</td>
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<td>1.3.2.4. Extend care to the family and community</td>
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<td>1.3.2.5. Care for patient and relatives</td>
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<td>1.3.2.6. Outreach services</td>
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<td>1.3.2.7. Direct to service facilities</td>
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<td>1.3.3. Care within legal and ethical frameworks</td>
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<td>1.3.4. Appropriate care</td>
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<td>1.3.5. Nurse involvement at all levels of mental health care</td>
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<tr>
<td>1.3.5.1. Unconditional love and acceptance</td>
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<td>1.3.5.2. Commitment</td>
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<tr>
<td>1.3.5.3. A lot of patience and tolerance</td>
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<td>1.3.5.4. Show passion</td>
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<td>1.3.5.4.1. Giving the best one can</td>
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<td>1.3.5.4.2. Doing everything for patient</td>
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<td>1.3.5.5. Listening</td>
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1.3.5.6. Communicate effectively

1.3.5.7. Interactions
   1.3.5.7.1. Interact with the patients
   1.3.5.7.2. Encourage family interaction
   1.3.5.7.3. Individual interaction
   1.3.5.7.4. Interact with community
   1.3.5.7.5. Establish interpersonal relationships

1.3.6. Understand patient
   1.3.6.1. Empathy
   1.3.6.2. View with dignity
   1.3.6.3. Treat with humane
   1.3.6.4. Doing all one can/best

1.3.7. Create a therapeutic environment
   1.3.7.1. Ensure safe and friendly environment
   1.3.7.2. Practice the ideal
   1.3.7.3. Take responsibility
   1.3.7.4. Being available for patient

2. Advocacy
   2.1. Advocate for client rights
      2.1.1. Advocacy to against stigma
         2.1.1.1. Avoid Client discrimination
         2.1.1.2. Unconditional positive regard
         2.1.1.3. Advocate for employment
         2.1.2. Advocacy for equal distribution of resources
         2.1.3. Encourage support for patient
         2.1.4. Avoid patient isolation
         2.1.5. Advocate for community acceptance

2.2. Creation of mental health awareness
   2.2.1. Creating awareness among health professionals
   2.2.2. Create lots of awareness amongst the policy makers
   2.2.3. Community education on mental illness and law

2.3. Requires Government support
   2.3.1. Formulate workable policies
   2.3.2. Nurse involvement in planning at policy level

3. Total care given for recovery
   3.1. Identifying mental health needs
   3.2. Treating patient to recover
   3.3. Rehabilitate for recovery
   3.4. Help patient gain insight and recover
   3.5. Monitor treatment
   3.6. Understand patient
   3.7. Create therapeutic space
   3.8. Treat patients with kindness,
   3.9. Being available for patients
   3.10. Achieve complete well being
   3.11. Rehabilitation for integration
   3.12. Assist patients gain insight
   3.13. Prevent relapse
      3.13.1. Monitor progress
      3.13.2. Make environment conducive
      3.13.3. Learning more about treatment
      3.13.4. Risk factors assessment and mitigation
         3.13.4.1. Identify those at risk
         3.13.4.2. asses risks for violence and aggression
         3.13.4.3. Empowering individuals to report risk factors
      3.13.5. Caring and working with family
3.13.6. Educating the family and community members
3.13.7. Family, group and individual therapy
3.13.8. Encourage clinic attendance
3.13.9. Help patient grow
3.13.10. Help them develop problem solving skills
3.13.11. Discharge planning

4. Promotion of mental health and Prevention of mental disorders
4.1. Provide health education
4.2. Modifying environment for mental health promotion
4.3. Educate communities on parenting
4.4. Ensuring safe environment
4.5. Create awareness on mental disorders prevention
4.6. Case finding in the community
4.7. Education on mental illness
4.8. Family – genetic counselling
4.9. Establish recreation centers
4.10. Prevent substance use
4.11. Provide comfort

5. Application of knowledge and skills for mental health practice
5.1. Theory based practice
5.2. Provide holistic mental health services
5.3. Avoid institutionalization
5.4. Observe client dignity
5.5. Help patients develop patient-to-patient relationships
5.6. Prompt appropriate interventions
5.7. Independent practice
5.8. Provide conducive environment
5.9. Counselling in communities
5.10. Application of the nursing process
5.11. Offer evidence-based preventive services at all three levels
5.11.1. Research
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<th>Code name</th>
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<tr>
<td><strong>P1</strong></td>
<td><strong>P 20</strong></td>
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<tr>
<td>1. Free from harmful objects</td>
<td>14. Conducive, safe, friendly, psychological and physical security</td>
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<tr>
<td>2. Relaxing</td>
<td>15. Negative consequences of non-conducive environment</td>
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<td>3. Rest</td>
<td>16. Comfortable</td>
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<td>4. Characteristics</td>
<td>17. Availability of resources</td>
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<td>5. Influence recovery</td>
<td><strong>P21</strong></td>
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<td>6. Availability of professionals</td>
<td>18. Characteristics influence of comfortable environment of an ideal environment</td>
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<td><strong>P 3</strong></td>
<td>19. Availability of services</td>
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<td>7. Acceptance</td>
<td>20. Spiritual considerations</td>
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<td>9. Not restricted to physical boundaries</td>
<td>22. Safety</td>
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<td>10. Defined by services offered</td>
<td><strong>P22</strong></td>
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<td>11. Availability of team members</td>
<td>23. Safety</td>
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<td>12. Disregard for environmental concerns</td>
<td>24. Therapeutic</td>
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<tr>
<td>13. Convenient</td>
<td>25. Clean</td>
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<td>15. Availability of basic needs</td>
<td>27. Adequate space</td>
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<tr>
<td>16. Extend beyond the hospital</td>
<td>28. Availability of essential amenities</td>
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<tr>
<td>17. Infrastructure is critical</td>
<td>29. Influence on services</td>
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<td>18. Favorable</td>
<td>30. Influence on patients</td>
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<td><strong>P4</strong></td>
<td><strong>P23</strong></td>
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<tr>
<td>19. Availability of resources</td>
<td>31. Has physical amenities</td>
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<tr>
<td>20. Characteristics</td>
<td>32. Both hospital and community</td>
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<td>21. Has basic needs</td>
<td>33. Space where care is provided</td>
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<tr>
<td><strong>P5</strong></td>
<td>34. Rural or urban space</td>
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<tr>
<td>22. Both community and hospital</td>
<td>35. Safe for both clients and staff</td>
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<td>23. Where patients are managed</td>
<td>36. Therapeutic</td>
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<td>24. Caring</td>
<td>37. Facilitates healing</td>
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<td>25. Holistic</td>
<td>38. All essential amenities</td>
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<td>26. Physical, cultural and spiritual</td>
<td>39. Adequate supplies</td>
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<td>27. Infrastructure</td>
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<td>28. Basic human needs</td>
<td>41. Provides for group interaction</td>
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<td><strong>P6</strong></td>
<td>42. Orientation</td>
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<td>29. Where care is provided</td>
<td>43. Availability of personnel</td>
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<td>30. Community</td>
<td>44. Encourages family interaction</td>
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<td>31. Relaxation</td>
<td>45. Physical safety and psychological security</td>
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<td>46. Promotes healing</td>
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<td>47. Availability of basic human needs according to Maslow</td>
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<td>34. Parenting</td>
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<td>35. Negative effects of environment</td>
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<td>36. Side effects of drugs</td>
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<td>37. Inadequate knowledge on social support</td>
<td>50. Both hospital and community</td>
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<td>38. Hostile environment</td>
<td>51. Resources for care</td>
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</table>
41. Homely
42. Conducive
43. Hostile
44. Positive
45. Safety
46. Physical and social components
47. Acceptance
48. Conducive
49. Family–social environment

50. Hospital and community
51. Safety
52. Acceptance
53. Non-discriminatory
54. Social interactions
55. Safety for both carers and patient
56. Influence on recovery

1. Extends to society
2. Social environment
3. Characteristics
4. Diversity in environment
5. Individualistic
6. Dynamism
7. Positive or negative influence
8. Suprasystem for patient
9. Extends to family & community
10. All inclusive
11. Appreciation
12. Safety

13. Conducive

51. Bio psychosocial space
52. Teamwork
53. Quality care
54. Therapeutic
55. Open space
56. Non restrictive
57. Secure
58. Stimulating
59. Availability of basic human needs
60. Interaction
61. Social support
62. Influence on mental health
63. Responsible family
64. Patient involvement
65. Non-overcrowding
66. Safety

67. Characteristics of a therapeutic environment
68. Safety
69. Administration involvement
70. Conducive for both staff ad patients
71. Staff and patient security
72. Free expression
73. Loving environment
74. Teamwork
75. Security
76. Love
77. Requirements of ideal environment
78. Extends beyond the hospital
79. Family support
80. Teamwork
81. Physical characteristics
82. Avail resources

83. Availability of care
84. Engagement
Appendix H: NVivo:QSR codes for Environment

<table>
<thead>
<tr>
<th>TABLE 5.2: Environment codes hierarchy: codes at lower levels are properties of their immediate parent codes</th>
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<td>1. Homely Environment</td>
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<td>1.1. Harmonious</td>
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<td>1.3.2. Psychological and physical security</td>
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<td>1.3.4. Emotional and physical safety</td>
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<td>1.3.5. Safe from both violence and communicable diseases</td>
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<td>1.3.6. Free from Side effects of drugs</td>
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<td>1.3.7. Protective</td>
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<td>1.3.7.1. Patient protection</td>
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<td>1.3.7.3. Adequate ventilation</td>
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<td>1.3.7.4. Therapeutic activities</td>
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<td>1.3.7.4.1.1. Facilitates recovery</td>
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<td>1.3.7.4.1.2. Promotes health</td>
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<td>1.3.7.4.1.4. Originates in the family</td>
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<td>2. Habitat</td>
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<td>2.1. Tranquility</td>
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<td>2.2. Homely</td>
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<tr>
<td>2.3. Relaxing</td>
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<tr>
<td>2.3.1. Rest</td>
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</table>
2.3.2. A place to sleep
2.3.3. Clean
2.3.4. Comfortable
2.3.5. Warm
2.3.6. Offer relief from the hostilit
2.3.7. Recreation

2.4. Parenting

2.5. Positivity
  2.5.1. Non-discriminatory
  2.5.2. Appreciation
  2.5.3. Unconditional love
  2.5.4. Favorable
  2.5.5. Friendly
  2.5.6. Welcoming
  2.5.7. Unconditional acceptance
    2.5.7.1. Acceptance extended to family
  2.5.8. Motivating
  2.5.9. Support system
  2.5.10. Understanding
  2.5.11. Respect

3. Space where care is provided
  3.1.1. Rural or urban space

3.2. Both hospital and community
  3.2.1. Comprises the home and health facility
  3.2.2. Bio psychosocial space with security
  3.2.3. Physical and social components
  3.2.4. More than the physical space
  3.2.5. Physical characteristics

3.3. Set up for care
  3.3.1. A place
  3.3.2. Independent accommodation for male and females

3.4. Not restricted to psychiatric setup

3.5. Where patients are managed
  3.5.1. Rules or established routines

3.6. Defined by services offered

3.7. Influence on services

3.8. Influence on patients

3.9. Positive or negative influence

3.10. Influence on recovery

3.11. Diversity in environment- interpreted as accommodative

3.12. Suprasystem for patient

3.13. Extend beyond the hospital
  3.13.1. Extends to society
  3.13.2. Social environment
  3.13.3. Family
3.13.4. Extends to family and community

4. Characteristics of an ideal environment

4.1. Requirements
   4.1.1. All inclusive
   4.1.2. Involvement of administration
   4.1.3. Availability of adequate Resources for care
     4.1.3.1. Adequate staff
       4.1.3.1.1. Professionals
       4.1.3.1.1.1. Multidiscipline
       4.1.3.1.1.2. Adequate personnel
       4.1.3.1.1.3. Team members
     4.1.3.2. Infrastructure
       4.1.3.2.1. Essential amenities
       4.1.3.2.2. Has physical amenities
     4.1.3.3. Availability of services

4.2. Availability of Basic human needs according to Abraham Maslow
   4.2.1. Availability of all patients’ needs
   4.2.2. Provides a sense of belonging and love
   4.2.3. Encourages growth

4.3. Therapeutic Processes
   4.3.1. Teamwork
   4.3.2. Quality care
     4.3.2.1. Individualistic
     4.3.2.2. Dynamism
     4.3.2.3. Safe/security
   4.3.3. Family support
   4.3.4. Engagement
     4.3.4.1. Responsible family
     4.3.4.2. Patient involvement
   4.3.5. Social support
   4.3.6. Interaction
     4.3.6.1. Nurse–patient interaction
     4.3.6.2. Free interaction
     4.3.6.3. Social interactions
     4.3.6.4. Freedom of association
     4.3.6.5. Stimulating
   4.4. Freedom of expression
     4.4.1.1. Expression of feelings

4.5. Rehabilitation
   4.5.1. Skills acquisition

4.6. Caring
   4.6.1. Care beyond medications
   4.6.2. Humane treatment/respect
   4.6.3. Holistic
4.6.3.1. Physical
4.6.3.2. Cultural
4.6.3.3. Spiritual
4.7. Therapy beyond individuals to families
4.8. Acceptable for clients and staff
5. Negative consequences of Hostile environment
  5.1. Inadequate knowledge on social support
  5.2. Disregard for environmental concerns
  5.3. Labelled
  5.4. Stigmatized
  5.5. Perceived as for isolation
  5.6. Overcrowding leads to negative influence
### Appendix I: NVivo:QSR codes for Human Being

#### FREE CODES : HUMAN BEING

| P1 | 1. Needs rehabilitation |
| 2. Needs safety |
| 3. Need of restraint |
| 4. Unconditional acceptance |
| 5. Stigmatized |
| 6. God’s creation |
| 7. View with love |
| 8. Need care |
| 9. Need coping strategies |

| P2 | 10. God’s creation |
| 11. Influenced by environment dynamics |
| 12. Person requiring care |
| 13. Needs to be understood holistically |
| 14. As nurses need training |
| 15. View as any other person |
| 16. Potential to recover |
| 17. Respected |

| P3 | 18. Burden |
| 19. God’s creation in his image |
| 20. Social being |
| 21. Needs care |
| 22. Individual with rights |
| 23. Person with illness |
| 24. Do not discriminate |

| P4 | 25. Patient involvement |
| 26. View holistically |

| P5 | 27. Gift from god |
| 28. Has high self esteem |
| 29. Superior than other animals |
| 30. Improvement leads to stability |

| P6 | 31. Contributor to community well being |
| 32. Interest in own recovery |
| 33. Persons with problems |
| 34. Not viewed with love in communities |
| 35. Able to explain source of sickness |
| 36. Patient with no hope |
| 37. Are predisposed to mental illness |
| 38. Need support psychosocial across life span to ventilate stressors |
| 39. Ability for self-disclosure |

| P15 | 86. Subjects of community stigmatization |
| 87. Cooperative |
| 88. Complex, creative creatures |
| 89. Social |
| 90. Ability to function |

| P16 | 91. ‘unique being |

| P17 | 92. Superior being |
| 93. Ability to reason |
| 94. Person with many needs |

| P18 | 95. Unique with special needs |

| P19 | 96. God’s creation |
| 97. Deserves quality life and empathy |

| P20 | 98. Deserve respect |
| 99. Requires care and support |
| 100. Assisted to achieve self-actualization |
| 101. Have needs |

| P21 | 102. Client of care |
| 103. Person who may get sick |
| 104. Predisposition to sickness |
| 105. Person with rights |
| 106. Unique |

| P23 | 107. A leaving creature |
| 108. Deserves unconditional respect and dignity |
| 109. A social being |
| 110. Needs personal touch |

| P25 | 111. A social animal |
| 112. An individual not group |

<p>| P26 | 113. Viewing patient as one of your own |
| 114. Unique being |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>40.</td>
<td>Persons requiring care and love</td>
</tr>
<tr>
<td>41.</td>
<td>Can benefit from pharmacotherapy</td>
</tr>
<tr>
<td>42.</td>
<td>Needs interaction</td>
</tr>
<tr>
<td>43.</td>
<td>Needs self-understanding</td>
</tr>
<tr>
<td>44.</td>
<td>Confront their behaviour</td>
</tr>
<tr>
<td>45.</td>
<td>Help them to gain financial dependence</td>
</tr>
<tr>
<td>46.</td>
<td>One whose mental health status is affected by poverty</td>
</tr>
<tr>
<td>47.</td>
<td>Mistreated in society</td>
</tr>
<tr>
<td>48.</td>
<td>Feel safe when under care</td>
</tr>
<tr>
<td>49.</td>
<td>Mental incapacitation</td>
</tr>
<tr>
<td>50.</td>
<td>Unfortunate</td>
</tr>
<tr>
<td>51.</td>
<td>Ability to recover</td>
</tr>
<tr>
<td>52.</td>
<td>Complete and holistic</td>
</tr>
<tr>
<td>53.</td>
<td>Desires being active and integrated in community</td>
</tr>
<tr>
<td>54.</td>
<td>Perfect god’s creation</td>
</tr>
<tr>
<td>55.</td>
<td>Unconditional value</td>
</tr>
<tr>
<td>56.</td>
<td>View as positive figure</td>
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<td>57.</td>
<td>Communicate with them</td>
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<td>58.</td>
<td>Needs help</td>
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<td>59.</td>
<td>Ability to personal achievement</td>
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<tr>
<td>60.</td>
<td>Stigmatized</td>
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<td>61.</td>
<td>Sick</td>
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<td>62.</td>
<td>Unique</td>
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<tr>
<td>63.</td>
<td>Potential for self-care</td>
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<td>64.</td>
<td>Persons with mental problems</td>
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<td>65.</td>
<td>Made up of psychosocial aspects</td>
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<td>66.</td>
<td>Care recipient</td>
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<td>67.</td>
<td>Vulnerable person</td>
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<td>68.</td>
<td>Has independent functions</td>
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<td>69.</td>
<td>A system with interrelated parts</td>
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<td>70.</td>
<td>Feel neglected</td>
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<td>71.</td>
<td>God’s creature</td>
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<tr>
<td>72.</td>
<td>Superior</td>
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<td>73.</td>
<td>Need humane treatment</td>
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<td>74.</td>
<td>One with bio-psychosocial needs</td>
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<td>75.</td>
<td>Ability to perform family, community and national roles appropriately</td>
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<td>76.</td>
<td>Ability to interact with others</td>
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<td>77.</td>
<td>A unique being</td>
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<td>114.</td>
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<td>115.</td>
<td>Not complete without mental health</td>
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<tr>
<td>116.</td>
<td>Needs love and care for recovery</td>
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<td>117.</td>
<td>Intellectual</td>
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<td>118.</td>
<td>Capabilities</td>
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<td>119.</td>
<td>Persons with challenge</td>
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<td>120.</td>
<td>Individual</td>
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<td>121.</td>
<td>An entity</td>
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<tr>
<td>122.</td>
<td>Person in need but meets challenges</td>
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<td>123.</td>
<td>Part of community</td>
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<td>124.</td>
<td>To have knowledge on mental health</td>
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<td>125.</td>
<td>View without discrimination</td>
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<tr>
<td>126.</td>
<td>God’s special creation</td>
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<tr>
<td>127.</td>
<td>One to be valued and treated with humane</td>
</tr>
<tr>
<td>128.</td>
<td>Deserves respect and love</td>
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<td>129.</td>
<td>Individual with universal needs</td>
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<tr>
<td>130.</td>
<td>Individual with bio-psychosocial and spiritual needs to be met</td>
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<tr>
<td>131.</td>
<td>God’s creation with</td>
</tr>
<tr>
<td>132.</td>
<td>Intelligent</td>
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<tr>
<td>133.</td>
<td>Has ability to manipulate environment</td>
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<td>134.</td>
<td>Well-balanced</td>
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<td>135.</td>
<td>Peaceful with self and others</td>
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<td>136.</td>
<td>Needs dignity</td>
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<td>137.</td>
<td>Created with purpose</td>
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<td>138.</td>
<td>Intelligent social being</td>
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<td>139.</td>
<td>Has mental illness</td>
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<td>140.</td>
<td>Society misfit</td>
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<td>141.</td>
<td>Inability to perform roles</td>
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<td>142.</td>
<td>Self-regulation when well</td>
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<tr>
<td>143.</td>
<td>Has potential to improve</td>
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<td>144.</td>
<td>Has other needs a part from mental illness</td>
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<tr>
<td>145.</td>
<td>Effect of readmissions</td>
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<td>146.</td>
<td>Patient needs met in care environment</td>
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<td>147.</td>
<td>Person with self-care deficit</td>
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<tr>
<td>148.</td>
<td>Inability to perform community social roles</td>
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<tr>
<td>149.</td>
<td>Has care needs</td>
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<tr>
<td>150.</td>
<td>Ability to perform roles</td>
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<tr>
<td>151.</td>
<td>Be accepted in community and family</td>
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<td>152.</td>
<td>Needs supportive community</td>
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<tr>
<td>153.</td>
<td>Ineffective coping</td>
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<tr>
<td>154.</td>
<td>Overwhelmed with stress</td>
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<tr>
<td>155.</td>
<td>Sick person requiring care</td>
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</table>

268
<p>| | |</p>
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<tbody>
<tr>
<td><strong>P13</strong></td>
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<tr>
<td>78.</td>
<td>One to be viewed without discrimination</td>
</tr>
<tr>
<td><strong>P14</strong></td>
<td></td>
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<tr>
<td>79.</td>
<td>A living being not object</td>
</tr>
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<td>80.</td>
<td>Have feelings</td>
</tr>
<tr>
<td>81.</td>
<td>Influenced by environment</td>
</tr>
<tr>
<td>82.</td>
<td>Influenced by bio-psychosocial, and religion factors</td>
</tr>
<tr>
<td>83.</td>
<td>Identify and manage these influences</td>
</tr>
<tr>
<td>84.</td>
<td>Patients under professional care</td>
</tr>
<tr>
<td>85.</td>
<td>Patients to recover</td>
</tr>
</tbody>
</table>
### Human Being Code hierarchy

1. **God’s creation in His image**
   1.1. Gift from God
   1.2. God’s Special Creation
   1.3. God’s Creature
   1.4. Superior Being
   1.5. Unique Being
   1.6. Superior than other animals
   1.7. A Living Creature

2. **Has Independent Functions**
   2.1. Capabilities
      2.1.1. Perform Family, Community and National Roles Appropriately
      2.1.2. Interact With Others
      2.1.3. Function
      2.1.4. Reason
      2.1.5. manipulate environment
      2.1.6. Contributor to community well being
      2.1.7. Explain source of sickness
      2.1.8. Self-disclosure
      2.1.9. Recover
      2.1.10. Personal Achievement
      2.1.11. Self-care
      2.1.12. Community Participation
   2.2. Complex, Creative Creatures

3. **Self-Regulation When Well**
   3.1. Peaceful with self and others
   3.2. Created With Purpose
   3.3. Ability To Perform Roles

4. **Holism**
   4.1. Complete and holistic
   4.2. Needs to be understood holistically
   4.3. A system with interrelated parts
   4.4. Made up of psychosocial aspects
   4.5. One with bio-psychosocial needs
   4.6. Social Being
   4.7. Has Other Needs A Part From Mental Illness

5. **View with love**
   5.1. Unconditional Love
   5.2. View as positive figure
   5.3. Unconditional acceptance
   5.4. View as any other person
   5.5. Respect
   5.6. Should be viewed with love in communities
   5.7. View Positively
   5.8. Persons requiring care and love
5.8.1. Rehabilitation
5.8.2. Safety
5.8.3. Restraint
5.9. Should Not Be Stigmatized
5.9.1. Do Not Discriminate

6. **Individual with Rights**
   6.1. Has High Self Esteem
   6.2. Deserves Quality Life and Empathy
   6.3. Deserves unconditional respect and dignity
   6.4. Unconditional Acceptance
   6.5. Need Quality Care

7. **Persons with Mental Problems**
   7.1. Subjects of community stigmatization
      7.1.1. Unfortunate
      7.1.2. Burden
      7.1.3. Mistreated In Society
      7.1.4. Feel Neglected
      7.1.5. Patient with No Hope
      7.1.6. Society Misfit
      7.1.7.
   7.2. Needs Help
      7.2.1. Sick
      7.2.2. Persons with Problems
      7.2.3. Are predisposed to mental illness
      7.2.4. Needs interaction
      7.2.5. Need psychosocial support across life span to ventilate stressors
         7.2.5.1. Requires Care And Support
         7.2.5.2. Need Humane Treatment
         7.2.5.3. Help them to gain financial dependence
         7.2.5.4. Assisted To Achieve Self-Actualization
         7.2.5.5. Need Coping Strategies
      7.2.6. Can Benefit From Pharmacotherapy
      7.2.7. Needs Self-Understanding
      7.2.8. Unique With Special Needs

8. **Influenced By Environment Dynamics**
   8.1. Bio-psychosocial, and religion factors
   8.2. Vulnerable Person
   8.3. Have Feelings
   8.4. Identify and manage these influences
   8.5. Individual
   8.6. Part Of Community
   8.7. Individual with bio-psychosocial and spiritual needs to be met
## Appendix J: NVivo:QSR codes for Mental Health

### MENTAL HEALTH : FREE CODES

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>Social, physical and spiritual well-being</td>
</tr>
<tr>
<td>P2</td>
<td>Neglected</td>
</tr>
<tr>
<td>P3</td>
<td>Mental health has been neglected</td>
</tr>
<tr>
<td>P4</td>
<td>High IQ</td>
</tr>
<tr>
<td>P5</td>
<td>Rational decision making</td>
</tr>
<tr>
<td>P6</td>
<td>Ability to make rational decisions</td>
</tr>
<tr>
<td>P7</td>
<td>Ability to manage self</td>
</tr>
<tr>
<td>P8</td>
<td>Bio psychological well-being</td>
</tr>
<tr>
<td>P9</td>
<td>Resilience</td>
</tr>
<tr>
<td>P10</td>
<td>Holistic well-being</td>
</tr>
<tr>
<td>P11</td>
<td>Complex issue</td>
</tr>
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<td>P18</td>
<td>Ability to fend for self</td>
</tr>
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<td>65</td>
<td>Total well-being</td>
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<td>66</td>
<td>Independence</td>
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<td>P19</td>
<td>Adaptation</td>
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<td>67</td>
<td>Well-being of the mind</td>
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<td>68</td>
<td>Effective coping</td>
</tr>
<tr>
<td>P20</td>
<td>Resilience</td>
</tr>
<tr>
<td>71</td>
<td>Positive attitude to life</td>
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<tr>
<td>72</td>
<td>Ability to interact</td>
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<tr>
<td>73</td>
<td>Cooperate and socialize</td>
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<td>74</td>
<td>Live positively</td>
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<td>75</td>
<td>Self-understanding</td>
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<td>76</td>
<td>Effective communication</td>
</tr>
<tr>
<td>P21</td>
<td>Bio-psychosocial well being</td>
</tr>
<tr>
<td>79</td>
<td>Effective coping</td>
</tr>
<tr>
<td>P22</td>
<td>Holistic well-being</td>
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<tr>
<td>81</td>
<td>Independent being</td>
</tr>
<tr>
<td>82</td>
<td>Ability to form interpersonal relationships</td>
</tr>
<tr>
<td>83</td>
<td>Ability to adopt</td>
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<tr>
<td>84</td>
<td>Resilience</td>
</tr>
<tr>
<td>P23</td>
<td>A state of well-being</td>
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<tr>
<td>85</td>
<td>Ability to carry on daily activities</td>
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<tr>
<td>86</td>
<td>Maintaining equilibrium</td>
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<td>88</td>
<td>Ability to deal with daily challenges</td>
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<tr>
<td>89</td>
<td>Key to functioning</td>
</tr>
<tr>
<td>90</td>
<td>Necessity for a healthy Nation</td>
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<tr>
<td>P24</td>
<td>Ability to reason</td>
</tr>
<tr>
<td>91</td>
<td>Ability to socialize</td>
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<tr>
<td>92</td>
<td>Problem solving</td>
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<td>93</td>
<td>Self-understanding</td>
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<td>95</td>
<td>Ability to form friendly relationship</td>
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<tr>
<td>96</td>
<td>Ability to fend for self</td>
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<td>P25</td>
<td>Bio psychosocial well being</td>
</tr>
<tr>
<td>97</td>
<td>The most important aspect of health</td>
</tr>
<tr>
<td>98</td>
<td>Ability to cope</td>
</tr>
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<td>99</td>
<td>Ability to cope in the community</td>
</tr>
<tr>
<td>101</td>
<td>Calmness-</td>
</tr>
</tbody>
</table>
38. Ability to form interpersonal relationships
39. Ability to perform social roles
40. Bio psychological components
41. Ability to form interpersonal relationships
42. determines one’s response to situations
43. Normal sleep
44. Absence of psychosis
45. Ability to form interpersonal relationships
46. Independence
47. ability to identify own limitations
48. Emotional well-being
49. Interaction with environment and society
50. Positive interpersonal interaction
51. Ability to identify own limitations
52. Moral well being
53. Health not complete without mental health
54. Resilience
55. ability to meet basic needs
56. individual well-being bio psychosocial, cultural and spiritual
57. social interactions
58. Well-being
59. Interpersonal relationships
60. social stability
61. Effective coping
62. Free from physical illness
63. Has volition
64. self-appreciation

102. No health without mental health
103. total health
104. Resilience
105. Ability to coordinate
106. ability to balance problems and coping
107. no health without mental health
108. well-being and not merely absence of diseases
109. Resilience
110. Ability to maintain hygiene
111. A state of well being
112. Not merely absence of illness
113. Ability to solve problems promptly
114. ability to meet one’s needs
115. to take care of himself somebody able to support yourself and family financially you
116. educate the people community about Mental Health
117. taking properly your responsibilities and is somebody who is able to evaluate himself about the activities they have done.

118. Integral part of health
119. Acceptable behaviour
120. Plausible behaviours
121. Ability to make good independent judgment

122. Achieve balance
123. Meet basic needs

124. ability to perform roles
125. Maintain interpersonal relationships
126. Good reasoning and judgment
127. Exists in a continuum
MENTAL HEALTH CODE HIERARCHY

1. Holistic well-being
   1.1. Bio-psychosocial- spiritual well-being
   1.2. State of well-being
   1.3. Total well-being
   1.4. Be in touch with reality
   1.5. Psychological, emotional and social well being
   1.6. Exists along continuum / Dynamism
   1.7. It is everywhere and affected by environment
   1.8. starts at family level

2. Adaptation
   2.1. Environmental adaptation
   2.2. Resilience
      2.2.1. Maintaining equilibrium
         2.2.1.1. Calmness
         2.2.1.2. Ability to deal with daily challenges
         2.2.1.3. Act of balance of internal and external stressors
         2.2.1.4. Balancing problems
         2.2.1.5. Ability to Manage stress
         2.2.1.6. Ability to cope
            2.2.1.6.1. Effective coping in community and environment
            2.2.1.6.2. Ability to cope with emotional problems
      2.2.2. Social stability
   2.3. Positive attitudes to life
      2.3.1. Live positively
   2.4. Ability to make progress
      2.4.1.

3. Maintaining Autonomy/ Independence
   3.1. Ability to function
      3.1.1. Ability to carry on daily activities
      3.1.2. Ability to take care of self
         3.1.2.1. Ability to meet daily needs
         3.1.2.2. Ability to meet self-care needs
         3.1.2.3. Ability to fend for self
         3.1.2.4. Ability to meet needs according to Maslow’s
         3.1.2.5. Ability to maintain hygiene
      3.1.3. Support yourself and family financially
   3.2. Perform societal roles
   3.3. Ability to take responsibilities
3.4. Ability to coordinate
3.5. Ability to manage self
3.6. Self-understanding
   3.6.1. Understand influences of his/her behaviour
   3.6.2. Recognize own limitations
4. Ability to solve problems promptly
   4.1. Rational reasoning and judgment
      4.1.1. Effective problem solving
      4.1.2. Ability to make judgment
      4.1.3. Rational decision making
   4.2. Ability to make good independent judgment
   4.3. Ability to make right judgment
   4.4. Ability to identify own limitations
5. Form and maintain relationships
   5.1. Effective social interactions
      5.1.1. Ability to form friendly relationship
      5.1.2. Effective interpersonal relationships
      5.1.3. Effective communication and interaction
      5.1.4. Ability to make friendship
      5.1.5. Being friendly
      5.1.6. Ability to relate well
      5.1.7. Cooperate and socialize
      5.1.8. Maintain relationships
         5.1.8.1. Maintain interpersonal relationships
         5.1.8.2. Networking
         5.1.8.3. Be understood by others
      5.1.9. Considers interest of others
   5.2. Interaction with environment and society
6. Self-drive
   6.6.1. Has volition
   6.6.2. Self-appreciation
7. Holistic well-being
   7.1. Bio-psychosocial- spiritual well-being
   7.2. State of well-being
   7.3. Total well-being
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