DETERMINANTS OF THE IMPLEMENTATION OF THE KENYA MENTAL HEALTH POLICY (2015 – 2030): A CASE OF KWALE COUNTY, KENYA

By

North Coast Medical Training College

Research Team

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DECLARATION

This research project is our original work done with the support of 4-Kenya - European Union Project to assess the level of implementation of the current Kenya Mental Health Policy in Kwale County. The outcome is intended to inform the Kwale Health Department to reassess its current health policy with a view to strengthening mental health care, as part of a comprehensive and integrated primary health care service, to achieve Universal Health Care.

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DEDICATION

This research project report is dedicated to the people and the County Government of Kwale for agreeing to support this research project, in view of the importance attached to mental health in the current Kenya Mental Health Policy.

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Our most sincere thanks go to our sponsors - 4-Kenya, who were insightful enough to pick our research project for funding. We hope the findings will meet the aspirations of Kwale County and assist it to improve mental health care services, in a manner responsive to the needs of its residents and as per the current KMHP (2015 – 2030). Finally, we want to thank Marianne Darwinkel for reading through our work and giving valuable feedback; Presley Nabie and Floris Bune for supporting us in data analysis.

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LIST OF ABBREVIATIONS

AM	Alternative Medicine
CAM	Complementary and Alternative Medicine
CM	Complimentary Medicine
CoG	Council of Governors
CHD	County Health Department
IHIS	Integrated Health Information System
KMHP	Kenya Mental Health Policy
MOH	Ministry of Health
NHSSP	National Health Strategic Plan
MHRS	Mental Health Reporting System
THP	Traditional Health Practitioners
USAID	United States Agency for International Development
WHO	World Health Organization

ABSTRACT

Mental Health is now globally acknowledged as a significant cause of human morbidity. It is postulated that by 2030 mental illness will be the largest contributor to the global health burden, if not properly addressed. In Africa, and by extension, in Kenya, various factors have been identified as being a hindrance to the achievement of reasonable mental health, among them being: lack of appropriate government policies to enable funding, manpower training, availability of relevant commodities and protection of the rights of mental patients. The aim of this study was to evaluate what Kwale County has done, since the inception of the KMHP in 2015 to address mental health issues. A cross-sectional survey was carried out. Qualitative and quantitative data was obtained from 65 out of 76 health facilities targeted. Stratified and random sampling methods were used to get sample facilities. Structured interviews with in-charges of facilities or their assistants was used to obtain data. Obtained data was cleaned, organized and analyzed by Excel programme. Descriptive and inferential statistics were used to analyze the data. Generally, the descriptive analysis demonstrated general lack of awareness, among facility in-charges, on matters of health policy of the county, such as existence of KMHP (82%) and County budget allocation to mental health (97%). 71% were not involved in county policy formulation; and only 14% considered a budget allocation for mental health in their facility budget formulation. There was a severe shortage of trained mental health workers: 97% of the facilities reported having no trained mental health worker of any cadre. 66% of facilities have less than five trained health workers who attend to few (1 to 3) mental patients who come to the formal health system per month, besides other medical patients. Over 95% of health facilities do not have diagnostic technology such as Brain scan and EEG at their disposal; neither are they able to offer specialized mental services such as professional psychotherapy and socio-support therapy. 20% of health workers in the formal system are aware of CAM activities in their locality; 11 – 15% know at least one form of CAM practitioner (Diviner, Faith Healer of Herbalist). 62% of formal health workers think CAM treatment is not effective. Only 12% of the facilities reported receiving referrals from CAM practitioners; and almost none from the formal system to CAM. 55% of the facilities keep mental records manually and 45% in standardized reports. On testing specific independent variables against selected dependent variables under the four main hypotheses, all except one hypothesis were rejected in favour of the null hypothesis. Chi-square tests were performed for each pair of variables and the outcome was as follows: Involvement of facility in-charges in policy formulation at county level in relation to years of management experience - hypothesis rejected at 95% significance ($X^2 = 1.019, dof=1, p=0.653$). Relationship between number of mental health workers and general health workers in facility - hypothesis rejected at 95% significance ($X^2 = 0.452$, $dof = 1$, $p=0.501$). Relationship between availability of psychotropic drugs and number of mental patients seen - hypothesis not rejected at 95% significance ($X^2 = 4.249$, $dof=1$, p=0.039). Relationship between staff training in health systems reporting and accessibility of mental health data - hypothesis rejected at 95% significance ($X^2 = 2,979$, $dof=1$, $p=0.084$). Relationship between awareness of CAM activity and referral of patients from CAM - hypothesis rejected at 95% significance ($X^2 = 0.143$, $dof=1$, $p=0.705$). The general conclusion is that very little, if any, has been achieved in implementation of KMHP in Kwale County. There seems to be no association between what is going on in the facilities and what the county is doing to implement KMHP. The county needs to invest in advocacy and awareness creation for mental illness; train more health workers and equip health facilities to manage mental illness. More research is recommended to understand the role of CAM practice and the community's views about the treatment of mental patients in the formal healthcare system in Kwale County.

Key Words: *Mental Health; Health Policies; Human resources for Mental Health; Non-human resources for Mental Health; Formal Healthcare System; CAM System; Mental Healthcare Reporting System.*

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

There is a growing consensus that mental health care is a neglected area of human health, the world over (WHO, 2006). In Europe alone about 83 million people suffer from mental illness. 27% of these people report having suffered at least one of a series of mental disorders in the past one year, that include problems arising from substance use, psychoses, depression, anxiety, and eating disorders episode of illness at least one year ago (WHO, 2018). In the USA over 40 million people, which translates to one in every five adults, have a mental illness (Mental Health America, 2018). In Sub-Saharan Africa, the situation is worse, in spite of the fact that no definitive figure can be cited from any source, to make a comparison. This is due to lack of research and interest by most African countries in the subject of Mental Health ((O. Sankoh, S. Servilie, M. Weston, 2018). Estimates are that, about one in every four adults in Africa suffer from some form of mental illness, with depression being reported as the most prevalent. 75% of these patients do not have easy access to the mental health care they need (Woldetsadik, 2018). A search for any published study done in Kwale County was not found, but Bitta et. Al did one in the neighbouring County of Kilifi in 2017. She reveals a severe need for mental care and recommends an urgent need to increase resources allocated for mental health, in particular infrastructure and human resource. Policy and legislation, also need to be established to protect the rights of people with mental illnesses, and mental health should be integrated with primary care to increase access to services (Bitta, 2017).

Efforts have so far been made by various governments and non-government organizations to bring mental health to the national agenda so far, with varying degrees of success. To improve the mental health globally, the WHO developed a Mental Health Action Plan (2013 – 2020). It is upon this action plan that the Kenya developed its current Mental Health Policy (2015 – 2030).

The Kenya Mental Health Policy (KMHP) was officially launched in June 2016. The objectives of the new policy are: to strengthen effective leadership and governance for mental health; ensure access to comprehensive, integrated and high quality, promotive, preventive, curative and rehabilitative mental health care services at all levels of healthcare; implement strategies for promotion of mental health, prevention of mental disorders and substance use disorders; and to strengthen mental health systems (MOH Kenya, 2018).

To achieve the four objectives, six strategies have been suggested. These include: developing a Mental Health Plan to operationalize the Mental Health policy; reviewing and revising the Mental Health Legislation; developing guidelines and standards on promotion, prevention and care of mental patients; treating and rehabilitating persons with mental, neurological and substance-use disorders; integrating of mental health into the Health Information System (HIS); investing in the mental health system for health financing, leadership, health products and technologies, health information and research, human resource, service delivery and infrastructure; developing a monitoring and evaluation framework for mental health services (MOH Kenya, 2018).

The role of Complementary and Alternative Medicine (CAM) is also recognized in the KMHP. The term Complementary Medicine (CM) is described as a group of diagnostic and therapeutic disciplines that are used together with conventional (formal) medicine. Examples of CM include homeopathy, naturopathy, Chinese medicine, massage therapy, among others. Alternative Medicine (AM), on its part, refers to a wide range of therapies considered to be outside the domain of conventional western medicine and the formal health care system. AM is mainly practiced by Traditional Health Practitioners (THPs), who include - diviners, faith healers and herbalists. KMHP recognizes THPs in principle and supports the integration of conventional and CAM activities in mental healthcare (MOH, 2015).

1.2 Statement of the Problem

Integrating mental health into the general health system, and particularly in the primary health care system, is viewed by many policy makers as the most viable approach, currently (WHO, Institute of Psychiatry, Kings College, 2010). This will nevertheless, require significant policy shift and investment by governments to enable the availability and accessibility of critical resources, such as trained manpower and relevant commodities for mental health, and supportive policies and guidelines to reduce stigma and protect the rights of mental patients (Marangu, et al, 2014).

Failure to properly address mental illness has a significant human and financial cost; and will likely lead to mental illness being the largest contributor to the global health burden by 2030 (MOH Kenya, 2018). Looking at the prevalence of mental disorders in Kenya and the number of detected mental patients receiving treatment in formal institutions, there is a gap that suggest that, either patients receive treatment elsewhere; or some do not receive treatment at all (Ndetei, et al., 2009). This conclusion is collaborated by a number of researches done in Kenya and elsewhere in Africa, for example: Ndetei et al, observes that only 4.1% of all mental illnesses are detected in the Kenya

healthcare system, mostly due to lack of basic knowledge in symptomology of mental illness. Mburu notes that mental health related stigma has been identified as a key impediment in seeking and provision of mental health Services (Mburu, 2007). Ombete in 2016 looked at stigma from the health workers view and observed that stigma towards psychiatric training among basic nursing trainees stood at 85,6%; which could explain the low enrolment into mental health training as a specialty by nurses and hence a low workforce-patient ration in Kenya (Ombete O. W., 2016).

Sorsdahl et al, in their assessment of the status of traditional healers in mental healthcare in South Africa, concludes, "Given the relatively low number of Western psychiatric practitioners, there may be value in working with traditional healers and spiritual advisors in this regard. Acknowledging the possible role of churches in providing care together with educating and working with church pastors may be an important way forward in improving mental health care" (Sorsdahl, 2011).

Several studies and literature has outlined a number of barriers to availability and accessibility of mental healthcare services among them being: the absence of mental health from the public health agenda; the current organization of mental health services, in particular the referral system that does hinder rather than support access to scarce specialized mental services; lack of integration within primary care; inadequate human resources for mental health; and lack of public mental health leadership (Bukusi, 2015). Others include: high cost of care; inadequate or total lack of insurance coverage; lack of availability of services; lack of culturally competent care (Office of disease prevention and health promotion, 2018).

The Kenyan government acknowledges shortcomings in its mental healthcare system, and through the KMHP (2015 – 2030) highlights most of the areas that require attention through its strategic objectives, as outlined above. It goes further to commit both the national and county governments to systematically implement the KMHP through policy and legislative alignment; resource mobilization and allocation; and training human resources for mental health.

It is, therefore, imperative that evidence is continuously gathered to establish the progress in making mental healthcare available, accessible and affordable to all communities in Kenya and all populations of the world by the year 2030, as anticipated by WHO.

This study assessed the implementation of some of the KMHP (2015 – 2030) strategies, specifically those that are implementable at the county level. This included aspects such as: leadership and governance structures and policies that support mental health; health financing and investment in the

mental healthcare system in the form of: human resources for mental health; health products and technologies; service delivery and infrastructure; and the Health Information System (HIS).

1.3 Purpose of the Study

The aim of this study was to evaluate determinants of the implementation of the Kenya health policy in Kwale County. The purpose of the study are to inform implementation activities of mental healthcare in public health 1facilities in Kwale County, as part of its mandate under KMHP (2015 – 2030).

1.4 Objectives of the Study

The study was guided by the following objectives:

i. To establish the influence of the Kwale County Health Policies on the implementation of the current KMHP (2015 – 2030).
ii. To determine the extent to which the level of investment by Kwale County in human and non-human resources for health has influenced the implementation of the current KMHP (2015 – 2030).
iii. To establish the extent to which collaboration between workers in the formal healthcare system and those in the CAM system, within Kwale County, has influenced the implementation of the current KMHP (2015 – 2030).
iv. To determine the extent to which the existing Mental Healthcare Reporting System (MHRS) in Kwale County has influenced the implementation of the current KMHP (2015 – 2030).

1.5 Research Questions

The following research questions were answered by the study:

i. To what extent has the Kwale County Health Policies influenced the implementation of the current KMHP (2015 – 2030).
ii. To what extent has the level of investment by Kwale County in human and non-human resources influenced the implementation of the current KMHP (2015 – 2030).
iii. To what extent has the collaboration between workers in the formal healthcare system and those in the CAM system within Kwale County influenced the implementation of the current KMHP (2015 – 2030).
iv. To what extent has the existing Mental Healthcare Reporting System (MHRS) in Kwale County influenced the implementation of the current KMHP (2015 – 2030).

1.6 Research Hypothesis

This study had a qualitative and quantitative component. The quantitative component was guided by the following alternative hypotheses which were tested at 95% significance level.

i. **$H_1$1:** The Kwale County Health Policies have significantly influenced the implementation of the current KMHP (2015 – 2030).
ii. **$H_1$2:** The level of investment by Kwale County in human and non-human resources for mental health has significantly influenced the implementation of the current KMHP (2015 – 2030).
iii. **$H_1$3:** The relationship between workers in the formal healthcare system and those in CAM system has significantly influenced the implementation of the current KMHP (2015 – 2030).
iv. **$H_1$4:** The existing MHRS has significantly influenced the implementation of the current KMHP (2015 – 2030).

1.7 Significance of the Study

This study will contribute to the understanding of the current mental healthcare system in Kwale County. The following parties can benefit from the information generated by the study: firstly, the Kwale county government that could use the information from the research to address possible existing gaps in the implementation of the current mental health policy; secondly, the Kwale community that could benefit from the mental health education and structured mental health system that is likely to be put in place as a result of implementing the recommendation and lessons learnt from study; thirdly, training institutions which could use the information from the study to adjust their training curricula to address identified human resources needs and gaps in the current mental healthcare system; and fourthly, the formal and the CAM healthcare systems which could increase their collaboration based on recommendations derived from the study.

1.8 Delimitations of the Study

The study was conducted in Kwale County and targeted all the public health facilities in all the four sub-counties, namely: Kinango, Matuga, Msambweni and Lunga Lunga. Port Reitze Mental Hospital in Mombasa County was to be included, being the regional referral hospital. Officials of Kwale county health department were to be interviewed on policy matters, being the likely custodian of such information. Data on operational level questions, such as the number of available trained staff for mental health, availability of drugs and other supplies, patient attendance and referrals at the facility level; and collaboration with other stakeholders, were directed to the health facility in-charges or their representatives on the ground.

1.9 Limitations of the Study

Kwale is a diverse county in terms of topography, climate and socio-economics. This diversity has implications on health service delivery in terms of availability, accessibility and affordability, particularly for mental health services. Furthermore, sub-regional believes and cultural health practices; remoteness of some areas and the lack of access roads; few health facilities and scarce qualified staff, accentuates the diversity even more. Nevertheless, effort was made to access all public facilities sampled and similar data collection methods and tools were used to get a uniform impression of the level of implementation of the KMHP (2015 – 2030) in the county.

1.10 Assumptions of the Study

While undertaking this study, the following assumptions were kept in mind:

i. The Kwale CHD offices were functional and able to provide policy level data, given that they have been in existence for more than five years now since devolution of healthcare by the Kenyan constitution (2010) took effect.
ii. Facility managers or their representatives at the facility level were available and had current and accurate information concerning their facility.
iii. Required records were available and legible enough to enable extraction of the required data.
iv. Information from all sources was truthful.

1.11 Definition of Significant Terms

The following concepts, constructs and variables, as used in the study, were defined as follows:

Mental Health: According to WHO mental health is a state of well-being in which individuals recognize and realize their abilities; are able to cope with normal stresses of life and work productively and fruitfully, to positively contribute to their own wellbeing, families and communities (Galderis, Heinz, Kastrup, Beezhold, & Sartorius, 2015). It's manifestation in an individual is assessed in terms of stability and consistence in emotional, cognitive and behavioural expression, and a person's social interactions and relations (F.A, 2009) (Gross, 2011).

Health Policies: According to Maris Martinson (ResearchGate, 2017), generation of policies, structures and systems; and ensuring they are implemented is a core leadership and governance function. It through policies that the leadership can direct and guide the implementors on how to achieve the mission and vision of a government.

Human resources for Mental Health: Mental health is a specialized area of medicine that requires specialized training. Therefore, investment in training staff to effectively manage mental patients is key for implementation of KMHP.

Non-human resources for Mental Health: The goal of KMHP (2015 – 2030) is to attain the highest standards of mental health through investment in key technological and specialized areas of non-human nature, such as diagnostic machines, referral infrastructure and admission facilities.

Formal Healthcare System: Conventional medicine is practiced in formal setups using modern medicines. It uses scientific knowledge to understand and modify mental malfunctions attributable to certain mental illnesses. Most government public health systems fall under the formal healthcare system.

CAM System: Mental health has been an aspect of human health attributed to many causes; and therefore, many approaches to treat them have been devised by various mental practitioners, including traditional medicine men, spiritual healers and conventionally trained health workers. In view of that, biases and prejudices have inevitably arisen with some groups of healers, specifically the traditional healers claiming superior expertise, learned from generations to generations, to effectively manage mental illness; while spiritual healers claim superior power from God to exorcise any bad omen or curse upon the mentally ill.

Mental Healthcare Reporting System: Data collection is key to any functional system because it helps to make realistic decisions which can improve the effectiveness and efficiencies in the system; and the Mental Healthcare System is not exceptional. With the advent of computer technology, data from many sources can be synchronously collected, collated, computed and summarized in ways that suit the various users' needs; and hence the use of the term Integrated Health Information System (IHIS).

1.12 Organization of the Study

The study was organized in five chapters as follows:

Chapter one presents the introduction and covers the background of the study, the statement of the problem, research questions, study hypothesis and the significance of the research. It also highlights delimitations and limitations of the study, outlines the assumptions; and defines the key terms used in the study

Chapter two covers empirical and theoretical literature on mental healthcare, in terms of the knowledge, attitudes and practices that have influenced the current status of mental healthcare, globally, regionally and in Kenya.

Chapter three covers research methodology and design, target population, sampling procedure, description of research instruments, validity and reliability of research instruments, methods of data collection, procedures for data analysis, operational definition of variables and ethical considerations.

Chapter four covers data analysis methods, presentation and interpretation of study findings.

Chapter five contains a summary of the study findings, discussion on the findings of the research, draw conclusions, give recommendations; and suggest areas of further research.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The literature review, in this case, was confined to understanding key constructs and variables around mental health, such as the mental healthcare system globally, regionally and in Kenya; the current Kenya Mental Health Policy (2015 – 2030); availability and accessibility to quality mental health care; the role of complementary and alternative medicine in mental health; and the various concepts and variables within the constructs that influence performance in terms of input, output and outcomes.

2.2 The Concept of Mental Health

Human beings in whatever environment – developed or un-developed, are continuously being subjected to threatening situations that affect their mental stability and wellbeing. But at the same time, human beings have an inherent protective and adaption (coping) mechanism that enable them survive a torrent of social, physical and psychological upheavals in their everyday lives. In some instances, adaptation is inhibited by individual vulnerabilities, such having an anxious personality; disruptive environments, for example marital discord; or loss through death, of loved ones (Hodgson et al, 1996).

Mental health, as an aspect of human health, is currently a subject of priority globally. The WHO, as a lead global policy maker in health matters, has stated its position on the global mental health situation; and gave direction and guidance on what to do – No matter what resources constraints exist, says WHO, every country can do something to improve the mental health of its people. What is required is the courage and commitment to take the necessary steps (WHO, 2001). In its report– "New Understanding, New Hope" – the WHO urges governments to move away from large mental hospitals and towards community health care by integrating mental health care into primary health and the general health care system (WHO, 2001).

2.2.1 Availability and Access to Quality Mental Health Care

Quality in health, as defined by the Institute of Medicine, is the degree to which health care services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge (M. Funk, 2009).

"Poor quality mental health services can violate basic human rights, lead to negative therapeutic outcomes and prevent people from enjoying the highest standard of physical and mental health" (M.

Funk, 2009). This responsibility is hinged on the constitutional authority that defines health services to Kenyan citizens as a human right (Kenyan Government, 2010).

Persons with mental disorders and their families can be greatly disadvantages by a number of issues in the formal health care systemic. For example, access to formal care can be a major determinant of the patient's and family's decision on where to seek help – formal or traditional remedies. Access can be hindered by either lack of formal health systems and facilities; or lack of commodities, like drugs, to manage mental conditions; or simply because the interaction with the care givers deters or diverts patients' help seeking (Dowrick C, 2009).

Improving the quality of care requires addressing both effectiveness of and access to healthcare (Campbell S, 2000). Access to healthcare is a complex concept that is difficult to define. For operational purposes, access can be restricted to concerns about availability of facilities and resources for managing diagnosed conditions; and recognition of mental health disorders by primary care workers (Mosadeghrad M, 2012). Rodgers et al, go ahead to give an elaboration of the complex issues of access by explaining the main concepts and principles involved, namely: candidacy, navigation, adjudication and recursity.

Candidacy is defined as people's eligibility for healthcare. It involves a jointly negotiated interaction between individuals and healthcare services. It is a dynamic and contingent process, constantly being defined and redefined through interactions between individuals and professional. Navigation follows determination of candidacy. Individuals undertake navigation to enter the healthcare system. It includes actions such as appearing at healthcare service points, through individual-initiated actions or through invitations, where people respond to the need for healthcare services. Adjudication on its part refers to professional judgment about the presentation of an individual for an intervention or service, influenced by categorizations made by professionals with reference to current services and relationships. Adjudication leads to an offer (or non-offer) of a healthcare service, which may be accepted or rejected. Lastly, recursity captures how the response of the system to individuals may reinforce or discourage future health behaviour (Rogers A, 1999).

The importance of focusing on quality is that it helps to ensure that the latest scientific knowledge and new technologies are put into use. For example, a lot of evidence has been generated to demonstrate effective interventions for mental disorders but a gap still exists between the knowledge base and the practice at the service delivery point. Community-based services with known efficacy are neglected, resulting in poor life conditions for millions of people. Many people with mental disorders face human

rights abuses in their homes, communities and in the health services that are meant to help them. Quality improvement mechanisms are, therefore, urgently needed to change the current (Dowrick C, 2009).

2.2.2 Burden and Prevalence of Mental Disorders

Given the highly volatile environment that the world population live in, prevalence of mental illness globally now stands at about 450 million; placing mental disorders among the leading causes of ill-health and disability worldwide (WHO, 2001) (Marangu, Sands, Rolley, Ndetei, & Mansouri, 2014). Although there is inadequate data and information on the prevalence of mental disorders in Kenya, it is estimated that about 4% of the population is at risk of having a major mental disorder. About 25% of outpatients and up to 40% of in-patients in health facilities suffer from some form of mental illness (Ndetei, et al., 2009). The most commonly diagnosed mental conditions are depression, substance abuse, stress and anxiety disorders; with 1% of the population suffering from psychosis, which is the severe form of mental illness. Poverty, unemployment, internal conflict, displacement, HIV/AIDS are cited as some of the triggers that exacerbate mental illness (Hodgson et al, 1996).

There is compelling evidence that certain populations or subgroups, particularly in the developing parts of the world in Africa, Asia and South America are at higher risk of mental disorders than others. Social, economic and environmental factors, interrelated with gender and cultural practices puts some groups of people at higher risk. This disadvantaged position starts before birth; accumulates and becomes evident during adult life. It is, therefore, evident that it requires a life-course approach to understand and tackle such life predictive situations. A life course approach requires actions to ensure the conditions in which people are born, grow, live, work and age are safe and caring (WHO, 2014).

Circumstances such as insecurity, socio-political turmoil, extreme poverty, lack of proper nutrition and physical illness, currently associated with strive stricken areas such as Southern Sudan in Africa, Syria in the Middle East and in some Latin American countries, contribute significantly to mental illness burden of the world. Other triggers include substance abuse, violence, and abuses of women and children such as is the case in some South American cultures. Mental, social and behavioural health problems may therefore, interact to intensify their effects on behaviour and mental well-being (WHO, 2005).

Therefore, any credible promotive, preventive and rehabilitative effort must address the root causes of mental illness. This has to do with paying attention to poverty eradication, employment and public

health policies. Research has also shown that mental health can be affected by non-health policies and practices, such as housing, education and child care (WHO, 2005) (WHO, 2014).

2.2.3 Mental Health Care System in Kenya

The formal health system in Kenya refers to hierarchy of public health care services that range from level one to six in the Kenya health care system (2nd NHSSP, 2005) . The sixth level is the highest and mainly represents national referral hospitals. Mathari Hospital, which is the largest mental hospital in Kenya, falls under this category. There are other regional referral hospitals, such as Port Reitz mental hospital, which covers the coast region. Below these mental referral hospitals, are general health facilities that manage all sorts of conditions, starting from the community (level 1); dispensary (level 2); health centre (level 3); sub-county hospital (level 4) and County referral hospital (level 5). The primary level includes level one, two and three activities as described in the formal health system, and also includes CAM activities. The secondary level includes level four and five, which are described in the current devolved dispensation as sub-county and county hospitals, respectively. Level 6 is the tertiary level and consists of all health facilities that carry out highly specialized services; or cover a large catchment area; and are perceived as being national referral facilities. (Kareem, 2018) (2nd NHSSP, 2005). According to WHO mental health services are supposed to be integrated at all these levels of healthcare, and particularly in the primary health care system, to make it accessible to individuals and families in the community and provided as close as possible to where people live and work (WHO, 2001).

Among the roles and responsibilities of counties are: to integrate mental health in the County Integrated Development, Strategic and Annual Implementation Plans. Counties are also required to mobilize resources, monitor and evaluate health programmes; conduct capacity building and give technical assistance for effective implementation of the central government health policy at the county level (MOH, 2015).

For a country like Kenya, with many competing health priorities, such has high incidences of communicable diseases, resource allocation for mental health services is often a big challenge (Luoma M, Doherty J, Muchiri S, et al., 2010). So far, no significant data is available on prevalence and detection rates of psychiatric disorders in the Kenyan healthcare system. It is therefore, not easy to convince policy makers to assign required resources, such as budgetary allocation and mental health personnel across the healthcare system, as suggested by the WHO and the KMHP (2015 – 2030). Jenkins argues that health administrators, such as the Ministry of Health (MOH) and County Health Department (CHD) personnel in Kenya, need to play an active role in influencing politicians at the

national and county levels, to take a more active role in advocating for mental healthcare. This is in recognition of the WHO policy that suggests that integration of mental health into the national (and county, in case of Kenya) strategic plans at every level of the healthcare system, is likely to lead to better, more sustainable and positive health outcomes.

There is only a 4.1% detection rate for mental illness in Kenya, which means that most psychiatric disorders in general medical facilities remain undiagnosed and therefore, unmanaged (Ndetei M., 2009). Untreated psychiatric illness is associates with increases morbidity, long admission stays in hospital and hence making health services, ineffective and inefficient, in the long run (Musisi S., 2001). Therefore, effort is required by the county healthcare system in Kenya, to facilitate training of non-psychiatric medical personnel, given the shortage of trained mental health works and stigma associated with the training and working in a mental health facility, to be able to detect symptoms of mental disorders early enough, manage what they can and make appropriate referrals for patients, since it is unlikely that enough psychiatrists will be trained in the foreseeable future, in Kenya (Gomez, 1987).

2.2.4 Highlights of the Kenya Mental Health Policy

The Kenya Mental Health Policy (KMHP) (2015 – 2030), which is an off-shot of the Kenya Health Policy (KHP) (2012 – 2030), provides a framework for interventions for securing mental health system's reforms in Kenya. It aims to address systemic challenges, ensure adoption of emerging trends and technologies in order to lessen the burden of mental health problems and disorders. The role of Complementary and Alternative Medicine (CAM) is recognized in the KMHP. The term Complementary Medicine (CM) describes a group of diagnostic and therapeutic disciplines that are used together with conventional (formal) medicine. Examples of CM include homeopathy, naturopathy, Chinese medicine, massage therapy, and others. Alternative Medicine (AM), on its part, refers to a wide range of therapies considered to be outside the domain of conventional western medicine or the formal health care system. AM is mainly practiced by Traditional Health Practitioners (THPs), who include - diviners, faith healers and herbalists (Zabow, 2007). KMHP recognizes THPs and in principle, supports the integration of conventional and CAM activities. This is in recognition of the fact that conventional facilities, which are mostly supported by government, are scanty in terms of numbers; and most of the times short of human and non-human resources. CAM activities, on the other hand, are prevalent and also effective and efficient in a number of ways: they are easily accessible, cheaper and sometimes reported to provide humane and personalized client-care services to the satisfaction of recipient customers (Assad et al, 2015) (Ndetei, et al., 2009) (Nattras, 2005).

2.3 Effective Policies for Quality Mental Health Healthcare

Another key message from the WHO report of 2005, is that mental health is everybody's business. Particularly important are the decision-makers in governments at national and local levels, whose policies affect mental health in ways that they may not realize. Therefore, one of the pillars for quality universal mental care, as cited in the current KMHP (2015 – 2030) is effective leadership globally, at national and grassroots level that can drive the agenda for mental health. For example, African leaders, faced with the brain-drain from their countries, resolved to build a workforce for the health system and stem unplanned professional emigration (WHO, 2006). Therefore, strong country strategies require both solid technical and political leadership. National strategies are likely to be successful if they embrace three priority areas, namely: acting now, anticipating the future and acquiring critical capabilities (WHO, 2006). International bodies, such as the WHO, can ensure that countries at all stages of economic development are aware of the importance of mental health to community development. They can also encourage them to assess the possibilities and evidence for intervening to improve the mental health of their population (WHO, 2014).

Devolution of health in Kenya, for example, was to go hand in hand with devolved authority and power to set up systems and drive the processes to deliver quality care to residents in those counties. The county leadership, therefore, is obliged to adopt and learn the art of leadership and governance for health and more so in mental health, as a critical area of human development. Just the way national leaderships may rely on global solidarity, County governments can create synergies on at least three fronts: catalyzing knowledge and learning, striking cooperative agreements and responding to workforce crises (WHO, 2006). The spirit of solidarity can be seen in the Council of Governors (CoG) forum as constituted under the Kenya laws - Section 19 of the Intergovernmental Relations Act (IGRA 2012). The CoG comprises of the Governors of the forty-seven Counties and their main functions are the promotion of visionary leadership; sharing of best practices and; having a collective voice on policy issues; promote inter – county consultations; encourage and initiate information sharing on the performance of County Governments with regard to the execution of their functions; collective consultation on matters of interest to County Governments (Council of Governors, 2018). Building on the CoG strengths, mental health can get a place on the county development agenda.

2.4 Investment in the Mental Health System to Improve Availability and Access to Quality Mental Care

Health Systems (HS) strengthening has become a top priority of many global and national health policies. The attributes and building blocks of health systems include: health financing; governance

and leadership; health workforce; health services; medical products and technologies; and health information (USAID, 2012). While each building block of the WHO framework is important to improving health systems and ultimately health outcomes, quality and timely data from health information systems forms the foundation and the basis upon which the health system's decision, as a whole, can be effectively made (Boerma, 2005).

WHO in a cross-sectional analysis of mental health in selected low- and medium-income countries, came up with several critical conclusions: The gap between low-income countries and upper-middle-income countries is enormous. Spending per capita on mental health is 70 times higher in the upper-middle-income countries, the ratio of beds in community-based inpatient units is 24 times higher, there are 10 times more outpatient contacts, and 8 times more mental health staff.

Mental health systems, particularly in under-developed countries, are providing care to only a small proportion of all who need care. The median treated prevalence rate of 0.67% of the population per year, stated in the WHO study, is a small fraction of what would be expected from community epidemiological studies. The corresponding rate for children is even lower – 0.16% of the population.

Moreover, the data suggest that 7 out of 10 people with schizophrenia are not receiving treatment. The move from institutional to community care is slow and uneven. Inpatient care is predominant in the majority of the reporting countries with 0.7 outpatient contacts per day spent in inpatient care. Day treatment and community residential facilities are scarce. Mental health resources are scarce. The median number of mental health professionals per 100 000 population is 6 – a mere fraction of the number required for the provision of basic care.

The median mental health spending for all the participating countries is US$ 0.30 per capita, whereas estimates for a cost-effective package of treatment for common mental disorders is estimated to be US$ 3–4 per capita for low-income countries. Mental health resources are inefficiently used. Of all psychiatric beds, 8 in 10 are located in mental hospitals, yet these facilities treat only about 7% of all service users. The median proportion of mental health finances spent on mental hospitals is 80%, leaving little money for community care (WHO, 2009).

Shield et al, in their article – Quality indicators for primary care mental health services – summarizes a number of indicators for quality mental care. They include: access to mental care services; practice policies and procedures; information for patients and care givers; medical records; patient-staff relations; confidentiality and consent; comprehensive assessments; patient involvement in treatment plans; psychotropic prescribing; psychological treatment; and follow up of patients (Shield T, 2003).

Although these indicators are specifically contextualized for Great Britain, they can be adopted, or used as a starting point in the development of any situational related indicators. According to the KMHP, a core set of indicators shall be defined accordingly to monitor and evaluate its implementation towards the achievement of quality mental health at 5-year intervals (MOH, 2015); and in this case, the Shield's indicators may be generically used as a guide.

2.4.1 Availability and accessibility of trained manpower for mental health

It is well established that human resources for health, and more so for mental health, is in great shortage, particularly in low and middle-income countries. It is estimated that there are 0.05 psychiatrists and 0.45 nurses per 100,000 people in low-income countries (Bukusi, 2015). In contrast, high in-come countries have 170 times the number of psychiatrists and 70 times the number of nurses, as compared to the low-income countries (KNA, 2018).

In spite of the fact that some formal system exists that facilitate management of mental cases in Kenya, major challenges exists; among the main ones being severe shortage of mental health workforce in most regions of Kenya (Marangu, Sands, Rolley, Ndetei, & Mansouri, 2014). The shortage is likely to take a very long time to fill, going by the small number of health professions undergoing training in mental health that stands at about 5 to 6 psychiatrists per year; and a net shift of only 9 mental health nurses in the last 9 years. These dismal numbers are based on comparative figures of a longitudinal study, by Ndetei et all, that estimated the total number of psychiatrists (n=54) and mental health nurses (n=418) to be 472 in 2007. In 2016, the Cabinet Secretary for Health in Kenya, Cleopa Mailu, while launching the Kenyan Mental Health Policy (2015 – 2030), estimated the total number of the two cadres to be 515, consisting of 88 Psychiatrists and 427 Mental Health Nurses (Daily Nation, 2016).

In spite of this scarcity, there are internal inequities in the distribution of these already low numbers of mental health workers. Available professionals are concentrated in cities and teaching hospitals, which are often in the capital cities, while rural areas are left with far fewer professionals (WHO, 2005). This situation is compounded by cultural taboos that stigmatize mental patients. Existing literature suggest that stigma cuts across social and class lines. For example, Ombete established 85.6% stigma level among undergraduate students, who could potently specialize as mental health nurses. Established reasons for their negative perception ranged from what they perceived as poor patient environment, short exposure to the clinical sites and general lack of motivation from the qualified mental health staff (Ombete W. O., 2016). The situation on the ground is compounded by the low mental health literacy amongst the existing health workers at all levels; absence of mental health from the public agenda; the current organization of mental health services, in particular the inefficient

referral system; lack of integration within primary care; and lack of public mental health leadership (Ministry of Health, 2016).

2.4.2 Availability and accessibility of psychotropic drugs and other forms of treatment for mental patients

Insufficiency of resources for mental health needs in most low-income countries is a fundamental problem. A recent estimate put the total health budget spent on mental health at 0.06% in low-income countries (Rashod & al, 2017). The primary source of mental health financing is out-of-pocket expenditure by the patient or family, taxes, social insurance and private insurance respectively (Rashod & al, 2017). Not only is access to public sector care very limited in such countries, but poverty prevents people with long-term mental health problems or their families from affording the newer medications or other effective treatments.

Although the average cost of psychotropic drugs is not comparatively very high, they are generally prescribed for long durations of time due to the chronic nature of mental illness; a factor that negates the benefits of lower cost. This problem is compounded by the fact that most of these costs are out of pocket expenses met by the clients and their families (Knapp M, 2006), most of whom are already poor. Unlike in the developed countries where social support structures are part of the government agenda, and stipends are provided to all person proved not capable of earning an income for one reason or another, poorer countries generally do not provide disability benefits to people with mental health problems (WHO 2003d). The situation is exacerbated by the fact that most formal insurance companies are also reluctant to cover costs of chronic illness and more so, mental illness. There also seems to exist some lethargy by leadership in developing countries to put the mental health on the governance agenda.

The World Health Organization in its 2001 report urges governments to improve access to a limited selection of essential psychotropic medicines that meet the mental healthcare needs of their populations. According to WHO, the selection of these drugs should be with regard to public health relevance, evidence of their efficacy, safety and comparative cost-effectiveness (WHO, 2005).

2.4.3 Referral systems and mechanisms for mental patients

In Kenya there is a Kenya Health Sector Referral Policy (KHSRP) covering the period 2014 to 2018 that has been translated into a Kenya Health Sector Referral Strategy to cover the same period of operation. The overall aim of the referral system, as stated in KHSRP, is to increase the use of services at the lower levels of the healthcare system and reduce self-referrals to the high levels of care. To

achieve these objectives, the referral policy requires both the central and the county governments to invest in the following key areas: development of service providers' capacity to offer services and appropriately refer at each level of the health care system; improve the health system's ability to transfer clients, client parameters, specimens and expertise between the different levels of the health care system; improve supportive supervision, thereby ensuring up-to-date management practices are in use across the country; improve referral performance monitoring and coordination; improve preparedness and response to emergencies and disasters; improve counter referral and referral feedback information system and strengthen out-reach systems for provision of referral health services to marginalized and vulnerable populations; and provide quality emergency health services at the point of need, regardless of ability to pay (MOH, 2014 - 2018).

2.5 Role of Complementary and Alternative Medicine in Mental Health Care

The concept of mental disorder is viewed and explained in as many diverse ways as there are diverse cultures. This could be attributed to the fact that; historically mental illness has been with man since time immemorial and hence man has established ways of explaining and coping with this strange phenomenon called mental disorder. Available literature suggests a number of factors that influence the current perception and practices towards mental illness; and they include historical context, cultural influence, level of scientific knowledge and capacity to carry out scientific enquiry, level of education in certain circumstances, and many others (Njenga, 2007)

The perception of mental health and the interpretation vary from culture to culture. Some cultures believe mental illness is a curse from god and therefore only divine intervention can cure it. There are some cultures, mostly Southeast Asians, who think that supernatural forces are responsible for mental illness and consider it as a result of wrath or denial of spirit or deities. A study conducted in Switzerland, with psychiatric patients, revealed that demons were considered the main cause of mental health problems (Fahad Riaz Choudhry, 2016).

The cultural context is therefore important when studying beliefs regarding mental illness. People's perception of illness explains their help-seeking behavior or lack thereof (Fahad Riaz Choudhry, 2016). For example, Ndetei et al found that majority of patients consulted western medical practitioners as well as traditional and faith healers; and therefore, concluded that the two forms of practices were complimentary (Ndetei, et al., 2009). Faith and traditional healers were generally well accepted by the communities and were considered to be doing god's work (Ndetei, et al., 2009).

Another factor that reduces the preference of clients to the conventional facilities, which are mostly supported by government, is that they scanty in terms of numbers; and most of the times short of human and non-human resources. CAM activities, on the other hand, are prevalent and also effective and efficient in a number of ways: they are easily accessible, cheaper and sometimes reported to provide humane and personalized client-care services to the satisfaction of recipient customers. Furthermore, efforts to improve access to mental healthcare services should take into consideration the cultural beliefs of the people (Patel V, 2013) and existing systems of treatment (Eaton et al., 2011).

2.6 Integrating the Mental Healthcare into the Health Information System

Proponents of an Integrated Health System (HIS) argue that a good health system must be able to capture all health parameters in a single data base. This is for the obvious reason that - discrete data is no data. Information generated from a health system should be for decision making; and not collecting data for the sake of it. Individuals and institutions must have the capacity and supporting structures to regularly gather, analyze, interpret, share, store, and use such data (USAID, 2014).

Policy makers, as leaders in the discourse on health matters need prompt and concise information to guide implementation of health programmes. Stakeholders, such as community leaders, non-governmental organizations, journalists and watchdog organizations requires sources of information in order to monitor accountability. High-functioning systems will facilitate data access, synthesis, sharing, and use across stakeholders and stimulate coordination and collaboration between all actors contributing data to the system (USAID, 2014).

2.7 Theoretical Framework

This study will be anchored on two theories: the systems theory and the ecological theory of changing healthcare delivery and promoting healthy living.

2.7.1 The Health System Theory

The health system is conceptually organized and principally operated, just like any other organic system. Important elements of most systems are: goals, inputs, outputs, processes, feedback and environment.

The goal is the overall purpose for which the system exists. Many organizations translate the overall goal into a mission for the system.

Inputs can be raw material of some kind: information, money, energy, time and individual effort. They can also be in the form of government policies and laws, budgetary and financial allocation, manpower, commodities, leadership and management skills.

The processes are used by the system to convert input into output. Output is what comes out as direct products of input. They could be in the form of decisions made, policies, guidelines or physical products. Processes can inform the design of organizational frameworks, such as the organization structures, job descriptions and remuneration structures.

Feedback is information about some aspect of data or products produced by the system, that can be used to evaluate and monitor the system performance, with the aim of making it better. Feedback mechanisms need to be put in place to assess client and patients' views on the care and services given by a healthcare system.

Around any system, there is always is an environment that interacts with it. The environment can be described as social, cultural, economic or political environment; all of which have profound influence on how the health system works.

2.7.2 The Ecological Theory

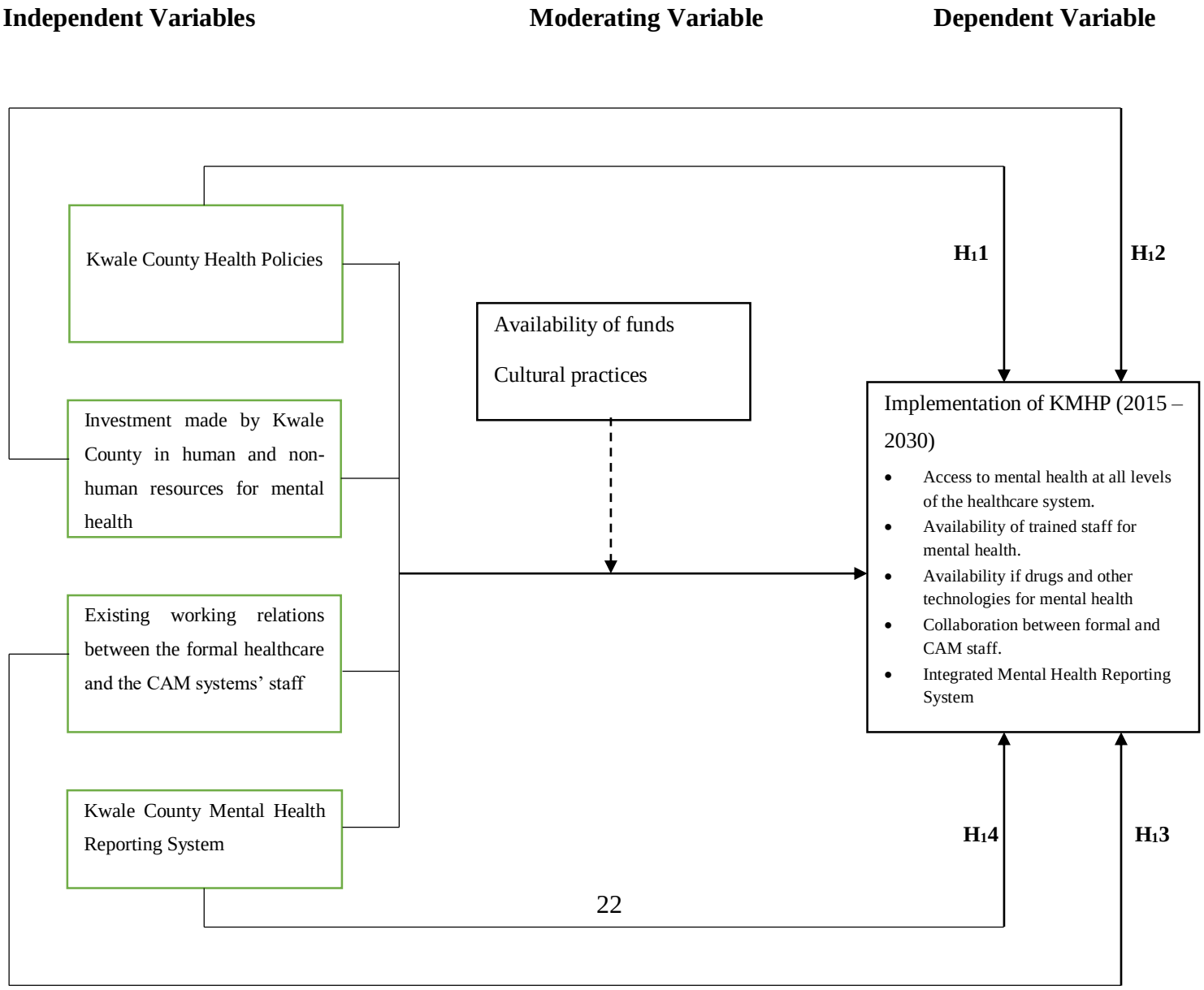
The ecological theory recognizes that there are several levels of influence on health behaviour. This includes: intra-personal or individual level where factors such as knowledge, attitude, beliefs and personality are key for consideration; interpersonal level where social interactions and support is required to promotes healthy behaviour; community level where norms and values exist that limit or enhance healthy behaviour; institutional and organizational level where rules, regulations, policies and formal structures are required to condition people to observe health practices; and lastly the public policy level, which can be local, state, federal and universal policies and laws are designed to regulate or support health actions and practices for disease prevention including early detection, control, and management.

The relevance of this theory, in the context of mental health, is that both organizational and public policy levels are crucial in ensuring that policies such as the current KMHP are implemented. This is considering the many challenges, such as discrimination and stigmatization that mental patients tend to experience. As the WHO report observes, every country must prioritize mental health on its national health agenda, considering the high prevalence of mental illness, its low diagnosis rate and the high human and opportunity cost of not treating it appropriately (WHO, 2005).

2.5 Conceptual Framework

The conceptual framework highlights the key constructs that will be the subject of investigation, namely: the leadership and governance plans; inputs in terms of investments of the county health department; the integration processes of mental health in all levels of the health system; existing working relationships between the formal and the CAM systems; and the Mental Healthcare Reporting system, as part of an integrated health reporting system. Several intervening variables that may come into play to influence the processes of implementing the KMHP (2015 – 2030), namely: relevant supportive legislation by the county, equitable distribution of resources, continuous training of health workers, among others. The interrelations between the independent, intervening and dependent variables are therefore, conceptually illustrated in the conceptual framework below.

Figure 1: Conceptual Framework



2.6 Relational highlights of the conceptual framework

County health policies are key to enabling the implementation of KMHP. Stakeholders need to be aware of such policies, if they are to be effectively implemented at the health facility level. The outcome of such policies are better services that are accessible to all. This aspect is to be tested by the alternative hypothesis **$H_1$1.**

Investment into the mental health system by the National Government and the CHDs is one key recommendations by the KMHP (2015 – 2030). The County's investment should aim at making mental healthcare services available and accessible to as many patients as possible, within the whole spectrum of healthcare system, particularly at the primary and secondary levels. The tertiary level is left under the management of the national government's ministry of health. The output of such investment should be quality healthcare; which should translate into improved outcomes as evidenced by improved mental health indicators, such as reduced incidence and prevalence of mental illness. This relationship, between investment and anticipated improvement in the state of mental healthcare in Kwale County will be tested by **$H_1$2**.

Scarcity of formal mental healthcare services, compounded by lack of leadership and investment has largely left alternative practice to thrive and become an integral part of the mental healthcare system in many countries, particularly the less developed ones (Fahad Riaz Choudhry, 2016) (Dowrick C, 2009). The KMHP (2015 – 2030) recognizes this gap and suggests formal recognition of traditional healers and CAM practitioners, to enhance availability and accessibility to quality mental healthcare. The envisaged working relationship between the formal and CAM system is to be tested by the alternative hypotheses **$H_1$3**.

Integrating the mental health system reporting into the general county HIS is considered an important step towards improving the use of mental health data for decision making at the county level. This anticipated input, in the form of mental health data and output in the form of information for decision making is to be tested by the alternative hypothesis **$H_1$4.**

The Knowledge Gap

On literature review, from various authorities, the following findings and gaps were identified.

TABLE 1: FINDINGS AND GAPS IN LITERATURE

Objective	Author, year and title of study	Findings	Identified Knowledge gaps
Mental health leadership and governance policies	(Bukusi, 2015) (KNA, 2018) (Kenya, 2005)	There exists a mental health policy in Kenya, that outlines the government's commitment to integrating mental health into primary health care. There is acknowledgement of shortcomings in the healthcare system to accommodate mental care.	There are no documented mental health policy guidelines to operationalize the role of leadership and governance, particularly at the primary and secondary levels of the health structure.
Investment into the mental health system by Kwale CHD	(WHO, 2009) (Campbell, 2000) (WHO, 2009)	Improving the quality of care requires addressing both effectiveness of and access to healthcare Mental health systems are providing care to only a small proportion of all who need care. The gap between low-income countries and upper-middle-income countries is enormous.	Data on actual spending on mental health per se in Kenya is difficult to come by.
Integration of mental health into various levels of the health services	(WHO, 2001)	Governments should move away from large mental hospitals towards community healthcare by integrating mental health into primary health care system	Very little knowledge exists about what counties in Kenya have so far done, in terms of integrating mental healthcare into the formal health system, particularly at primary level.
Existing working relations between the formal healthcare and the CAM systems' staff	KMHP 2015 – 2030	The role of Complementary and Alternative Medicine is recognized by KMHP	No literature exists to demonstrate what the devolved system of health in Kenya, has done to integrate CAM activities in the formal health system
Integrated Mental Health Reporting System integrated into County IHIS	USAID, 2014	Mental health reporting is key to improving service provision and policy decisions	Little evidence exists to demonstrate the use of mental health data for decision making

2.8 Summary of Literature Review

The review of literature covered existing empirical, theoretical and conceptual data. Evidence from all sources suggested that mental illness is a global phenomenon that requires government effort and strategic planning to combat.

Kenya has made effort to formulate the KMHP to guide implementation of mental health strategy by devolved county systems. Among the main objectives of the new policy are: to strengthen effective leadership and governance for mental health; ensure access to comprehensive, integrated and high quality, promotive, preventive, curative and rehabilitative mental health care services.

Empirical evidence exists, both in Kenya and beyond, that outlines the challenges of addressing mental health in the developing world; among them being socially and culturally instigated stigma; lack of leadership and advocacy for mental health; lack of resources, both human and non-human. Nevertheless, WHO and other global organizations mandated to deal with health issues, has come out clearly to rally countries across the global to rethink their strategy on addressing mental health, as a matter of priority.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The research methodology part highlights the main research design strategies that were used to answer the study questions and research hypothesis. This includes the design, study area, target population; sampling methods; sample size; and data analysis.

3.2 Research Design

A mixed method, cross sectional-survey design was used. This was due to the wide scope of attributes and indicators required to give a complete picture of the achievements of the general implementation of the KMHP. Both quantitative and qualitative data was collected. Quantitative data was used to measure various investment and service-related deliverables within the period the current mental health policy came into operation. Qualitative data was used to get participants' views and perceptions around quantifiable and unquantifiable issues related to mental healthcare in the County.

3.3 Target Population

The units of study were the Kwale county health department and all public health facilities under its jurisdiction. Therefore, the study targeted all facilities at primary, secondary and tertiary levels that are found in Kwale County, with the exception of Port Reitze Mental Hospital, which is located in Mombasa county, but serving as a referral centre for Kwale County.

A preliminary appraisal of Kwale County, using web-based data, was done before the main study was implemented. It showed that there were a total of 75 public health facilities spread across the County boundaries; out of which: 64 were dispensaries, 9 health centers and 2 hospitals. The facilities were distributed over the 4 sub-counties as follows: Matuga - 16 dispensaries and 5 health centers; Kinango - 24 dispensaries and 1 health center; Lunga Lunga - 14 dispensaries and 2 health centers; and Msambweni - 10 dispensaries and 1 health center. All dispensaries had an equal chance to be selected randomly for purposes of data collection. The County health department, County and Sub-county Hospitals and Port Reitz mental hospital were all be included in the study,

purposefully, due to the fact that they are very few in number and act as referral points for all health centres and dispensaries in the county.

3.4 Sample Size and Sampling Procedure

3.4.1 Sample Size

A total of 76 respondent facilities were targeted. The Krejcie and Morgan's (1970) table was used to calculate the size of the sample for each stratum. From the table, a sample size that corresponds to 72 respondent facilities (health centres and dispensaries) is 61. The sample size corresponds well with the results from the simplified formula by Yamane (1967): $n = N/\{1+N(e)^2\}$ at 95% level of confidence and a degree of variability p of 50% - where n is the sample size, N is the population size and e is the sampling error. Applying a sampling error of 5% the sample size obtained is: $n = 72 / \{1+72(0.05)^2\} = 61$. The two methods, therefore, gives the same sample size of 61 respondent facilities.

TABLE 2: TARGET POPULATION AND SAMPLE SIZE

Stratum	Sub-Stratum	Target Population	Sample Size
Matuga	Dispensary	16	14
	H-Centre	5	5
	Hospital	0	0
Kinango	Dispensary	24	19
	H-Centre	1	1
	Hospital	0	0
Lunga Lunga	Dispensary	14	10
	H-Centre	2	2
	Hospital	0	0
Msambweni	Dispensary	10	10
	H-Centre	1	1
	Hospital	1	1

Mombasa	Hospital	1	1
Kwale CHD	-	1	1
Total		**76**	**65**

The sample size from both the Krejcie and Morgan (1970) table and purposive sample are as indicated in the table 2 above. Nevertheless, effort was made to include more facilities (all if possible), time and resources allowing, because the total target population is less than 100.

3.4.2 Sampling Procedure

Purposive, stratified and random sampling techniques were used. The Kwale CHD was purposively chosen because it is the implementer of the government health policy and it is the custodian of all health-related data at the county level. Port Reitze Mental Hospital was included by virtue of being the main referral mental hospital for the coastal region, including Kwale county. The two hospitals (Kwale and Msambweni) were also purposively included by virtue of lack of more facilities at that level. The remaining 72 health facilities (Health Centres and Dispensaries) were categorized into six strata, defined by the sub-county region within the larger kwale county, namely: Matuga, Kinango, Lunga Lunga and Msambweni.

Each facility within each stratum was assigned a serial number. The numbers were put in a box, mixed and randomly selected, without returning the picked number, until the corresponding number, for each stratum was achieved.

3.5 Methods of Data Collection

Data was collected using a structured questionnaire (see Annex A). The questionnaire comprised questions derived from thematic areas highlighted in the Kenya Mental Health Policy (2015 – 20300), namely: leadership and governance structures; investment in the mental health system for health financing; health products and technologies; human resources for mental health; service delivery and infrastructure; development of monitoring and evaluation frameworks for mental health services; and integration of CAM practitioners in the county mental healthcare system.

3.5.1 Pilot-testing of the Research Instrument

Testing of the questionnaire was done with a small sample of respondent health facilities in Kilifi County. Feedback from the in-charges of the respondent facilities was used to adjust the clarity, relevance and applicability of the questions. Feedback from the exercise was used to improve the survey tool.

3.5.2 Validity of the Research Instrument

Construct and content validity were tested through peer review of the questionnaire and by at least two experts – one in mental health and another one in research methodology. The aim was to ensure that the instrument measured what it was intended to measure, by ensuring that the questions were simple, concise and understandable in the commonly used local language (Swahili).

3.5.3 Reliability of the Research Instrument

The split-half method was used to test internal reliability of questionnaire. The questionnaires were split in two equivalent halves and subjected to two groups at the same time. A correlation coefficient for the two halves was computed and adjusted to reflect the entire questionnaire using the Spearman-Brown prophecy formula; $r_{sb} = 2r_{hh}/(1+r_{hh})$; where r_{hh} is the correlation coefficient between the two halves and r_{sb} is the adjusted correlation, known as Spearman-Brown reliability.

3.5.4 Data Quality Assurance

The data collectors were trained in a 3-day workshop, in which the general idea about the study were introduced; the content and details on how each question was to be asked; and the process of approaching and interviewing participants, face to face, were practiced. Collected data was verified by the data collection supervisor before it was entered into the excel computer system.

3.6 Data Collection Procedure

A visit to Kwale County Health Department was done to seek permission to collect data in the county, get preliminarily information on: logistical issues such as the exact location of health facilities and the contact of facility in-charges was done satisfactorily. Data collectors were assigned health facilities and made telephone contact with the in-charges of the facilities to make appointments. Each facility was visited by at least two data collectors. Qualitative data was

collected from facility in-charges and any other person involved in providing mental healthcare services. Quantitative data was collected from facility records.

3.7 Data Analysis

Excel program was used to enter qualitative data, organize and analyze it. The Chi-square test was used to establish the presence or absence of relations between various quantitative independent and dependent variables.

Qualitative data was gathered, analyzed using manual deductive approaches, for lack of a software. Coded thematic lines were established; descriptions and explanations for various themes were logical given in relations to the main objectives of the study.

3.8 Operationalization of Variables

Operational definitions of both independent and dependent variables, as used in the study are as shown in table 3 below.

TABLE 3: OPERATIONALIZATION OF VARIABLES

Objective	Variable	Type of variable	Data source	Indicators	Measurement Scale	Data analysis technique	Methods/Tools of data collection
Establish the influence of Kwale County Health Policies on the implementation of KMHP	The Kwale County Health policies	Independent / Qualitative	Kwale CHD Leadership	Examples of developed health policies	Nominal	Descriptive Statistics	Recorded Semi-structured Interview.
Determine the extent to which investment in human and non-human resources for mental health by Kwale County has influenced the implementation of the KMHP	Human and non-human investment resources for mental health	Independent / Quantitative	• Employment records • Budget records • Training records • Supplies records	• No. of mental health personnel employed • Amount financial resources budgeted for mental health • No. of trainings conducted on mental health • Amount and types of supplies orders for mental health	Ordinal/ Ratio	Correlational Statistics using Chi-square test	Structured Questionnaire
Establish the extent to which of collaborations between formal and CAM workers has influenced the implementation of KMHP (2015 – 2030)	Existing relationship between workers in the formal healthcare system and workers in the CAM system.	Independent / Qualitative	Facility Managers / Mental healthcare givers at the facility	• No. of registered CAM • Referrals from CAM to formal system • Referrals from formal system to CAM	Nominal	Descriptive Statistics	Recorded Semi-structured Interview
Determine the extent to which the existing Mental Healthcare Reporting System (MHRS) has influenced the implementation of the KMHP (2015 – 2030).	Ways in which mental healthcare data is captured at various levels of the healthcare system	Independent / Qualitative	Mental healthcare activity records at various levels of the healthcare system	Accessible mental healthcare records • Outpatient records • Diagnostic records • In -patient management records • Patients' follow up and review register • Patient referral records • Patients' critical incident records	Nominal	Descriptive Statistics	Recorded Semi-structured Interview

3.9 Ethical Considerations

The research proposal was reviewed by Pwani University Ethical Board, being the local agent of NACOSTI, for ethical approval.

A formal request to contact the study in Kwale County was send to Kwale County Health Department.

Informed consent was elicited from all respondents after explaining to them the aim and purpose of the study. A code system was used to identify participating institutions and individuals for purposes of maintaining confidentiality.

CHAPTER 4

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

The chapter presents the outcome of data collection and analysis. Information is presented in tables and interpretation done based on each stated objective.

4.2 Questionnaire Response Rate

The questionnaire response rate shows the number of questionnaires filled and analyzed, as a result of visiting health facilities and successively collecting data using a guided interview. Efforts to get an appointment with the Kwale county health department officials for interview did not succeed. Most officials were busy in and outside office for a better part of August, September and October when the data was being collected. Up to now there is still a pending appointment to be fulfilled. A visit to Port Reitz Mental Unit was also not possible due to delays for approval by the county research department to allow data collection at the facility, despite submitting requests and copies of the proposal several times. Therefore, only data from the primary and secondary facilities was collected, analyzed and presented in this report. The outcome of the response rate is presented in table 4 below.

TABLE 4: QUESTIONNAIRE RESPONSE RATE PER FACILITY TYPE

Level of Health Facility	Frequency	Valid Percentage	Cumulative Percentage
Dispensary	51	78.46	78.46
Health Centre	10	15.38	93.84
Sub-County Hospital	3	4.62	98.46
County Referral Hospital	1	1.54	100
Referral Hospital	0	0.00	
Total	**65**	**100**	

A total of 65 health facilities were visited in a span of two weeks, between 20th and 30th August 2018. This represent 100% of the anticipated sample size, which is an excellent response rate. Nevertheless, two more primary health facilities were visited, beyond the expected 63. This compensated for the two unsuccessful visits to Kwale County Health Department and Port Reitz Mental Hospital. About 78.5 %

(n=51) were Dispensaries; 15% (n=10) Health Centre; 4.6% (n=3) Sub-County Hospitals and 1.5% (n=1) County Referral Hospital.

4.3 Spatial Distribution and the Target Population of Health Facilities

Yes / No questions were asked to the facility in-charges to establish the distribution of facilities in the county, taking the County Headquarters, in Kwale town, as the reference point. The outcome of the questions is presented in table 5 below.

TABLE 5: SPATIAL DISTRIBUTION AND TARGET POPULATION OF HEALTH FACILITIES

Range	Frequency	Valid Percentage	Cumulative Percentage
<5km	1	1.54	1.54
5 to 10 km	3	4.62	6.15
11 to 15Km	3	4.62	10.77
16 to 20Km	5	7.69	18.46
> 20Km	53	81.54	100.00
Total	**65**	**100**	

Most health facilities (82%) were situated more than 20 km from the County headquarters. A total of eight data collectors worked in pairs and traversed all the four sub-counties in Kwale using public means of transport (matatus and motor bikes) to reach the target facilities. They carried a file of all the filled questionnaires and entered the raw data into a pre-programmed excel sheet, upon return to the office. This was contrary to what was initially planned, because the SPSS programme that was to be used for data entry and analysis was not delivered on time due to the long time it took for it to be delivered.

4.4 Target Population and Functional Level of Health Facilities

Yes/No questions were asked to get an impression of the target population of each health facility and their functional level, as per the Kenya Health Service Delivery System. The outcome is presented in table 6 below.

TABLE 6: TARGET POPULATION AND FUNCTIONAL LEVEL OF HEALTH FACILITIES

Range	Frequency	Valid Percentage	Cumulative Percentage
Target Population			
5000 and less	16	24.62	24.62
5001 to 10000	35	53.85	78.46
10001 to 15000	4	6.15	84.62
15001 to 20000	4	6.15	90.77
20000 and more	6	9.23	100.00
Total	**65**	**100**	
Facility Functional Level			
Dispensary	51	78.46	78.46
Health Centre	10	15.38	93.85
Sub-County Hospital	3	4.62	98.46
County Referral Hospital	1	1.54	100.00
Referral Hospital	0	0.00	100.00
Total	**65**	**100**	

Most health facilities (54%) served a target population of between 5,000 to 10,000 people; and about 79% of them are Dispensary level facilities.

4.5 Kwale County Health Policies

4.5.1 Descriptive statistics on Kwale county health policies

In spite of the fact that the data collection team did not succeed to visit the County Health Department to get views about the policy issues related to mental health in the county, dichotomous (Yes / No) questions were asked to the facility in-charges to establish their involvement and / or awareness about policies domiciled in the county and intended for implementation of KMHP. The outcome is represented in table 7 below.

TABLE 7: INVOLVEMENT IN AND AWARENESS ABOUT COUNTY HEALTH POLICY ISSUES BY THE FACILITY IN-CHARGES

Response	Frequency	Percentage	Cumulative Percentage
Involvement in Policy Making at the County Level			
Yes	19	29.23	29.23
No	46	70.77	100.00
Total	**65**	**100**	
Awareness of KMHP			
Yes	9	13.8%	13.8
No	56	86.2%	100
Total	**65**	**100**	
Awareness of County Budgetary Allocation for Mental Health			
Yes	2	3.1%	3.1%
No	63	96.9%	100.0%
Total	**65**	**100**	
Deliberate Allocation of Budget for Mental Health			
Yes	9	13.8%	13.8%
No	56	86.2%	100.0%
Total	**65**	**100**	

About 71% of the respondents affirmed their lack of involved in policy making processes at the county; 82% were not aware of the existence of KMHP; 97% were not aware about the allocation the county makes to mental health; and only about 14% make a deliberate effort to include mental health issues in their facility budget.

4.5.2 Inferential Statistic on policy making at the county level of the facility in-charges

TABLE 8: INVOLVEMENT OF FACILITY IN-CHARGES IN POLICY FORMULATION AT THE COUNTY LEVEL BASED ON THE YEARS IN MANAGEMENT POSITION

	Involved in policy formulation	Not involved in policy formulation	Total
Less than 3 years in facility management position	9	19	28
More than 3years in facility management position	10	27	37
Total	19	46	65

X^2=1.097, 1 degree of freedom, p=0.653

Based on the above Chi-square test with one degree of freedom, the alternative hypothesis suggesting an association between experience in facility management and involvement in county policy formulation can be rejected at 95% significance level, and the null hypothesis of no association is supported.

4.6 Investment in Human Resources for Mental Health

4.6.1 Descriptive statistics on the investment in human resources for mental health

To get an idea about the quality of management at the facility, Yes / No questions were asked to establish the attributes of the person in-charge of the facility, in terms of their profession and duration of being in-charge. The outcome is presented in table 9 below.

TABLE 9: ATTRIBUTES OF FACILITY IN-CHARGES

Profession	Frequency	Percentage	Cumulative Percentage
Profession			
Certificate level nurse	4	6.15	6.15
Diploma level nurse	39	60.00	66.15
Clinical officer	19	29.23	95.38
Medical officer	3	4.62	100.00
Total	**65**	**100**	
Duration of being In-Charge in the Facility			
Less than 3 years	38	58.46	58.46
More than 3 years	27	41.54	100.00
Total	**65**	**100**	

The data shows that most facility in-charges (60%) are diploma level nurses and most of them (59%) have been in management position for less than three years.

To establish the number of health workers, those trained as generalists and those with mental health as a specialty, Yes / No questions were asked. The outcome of the questions is presented in table 10 below.

TABLE 10: NUMBER OF TRAINED HEALTH WORKERS IN THE FACILITIES

No of Trained HW	Frequency	Percentage	Cumulative Percentage
Trained General Health Workers			
Less than 5	43	66.2	66.2
5 to 10	11	16.9	83.1
10 to 20	4	6.2	89.2
More than 20	7	10.8	100.0
Total	**65**	**100**	
Trained Mental Health Workers			
None	63	96.9	96.9
One	2	3.1	100.0
Total	65	100	Total
Number of General Health Workers Assigned the Duty to See Mental Patients			
Less than 2	21	32.3	32.3
2 to 5	32	49.2	81.5
More than 5	12	18.5	100.0
Total	**65**	**100**	

Almost all the general health workers are the ones that attend to most of the mental patients who visit the formal health facilities due to lack of trained staff in mental healthcare. Only two staff have undergone some training in mental health in the whole county.

4.6.2 Inferential Statistic on policy making at the county level of the facility in-charges

TABLE 11: INFERENTIAL STATISTICS ON NUMBER OF MENTAL HEALTH WORKERS AND GENERAL HEALTH WORKERS IN THE FACILITY

	Mental health specialist present	No mental health specialist	Total
Fewer than 10 health workers	2	50	52

More than 10 health workers	0	11	11
Total	2	63	65

**X^2=0.452, 1 degree of freedom, p=0.501*

Based on the above Chi-square test with one degree of freedom, the alternative hypothesis suggesting an association between the total number of health workers in the facility and the presence of staff with specialist training in mental health can be rejected at 95% significance level, and the null hypothesis of no association is supported.

4.7 Continuous Professional Activities

4.7.1 Descriptive statistics on continuous professional activities

To establish whether CPD activities are organized within facilities or staff are allowed to attend CPD on mental health organized elsewhere, Yes/No questions were asked, and response is presented in table 12 below.

TABLE 12: CONTINUOUS PROFESSIONAL DEVELOPMENT ACTIVITIES

Response	Frequency	Valid Percentage	Cumulative Percentage
Organized Within the Facilities			
Yes	0	0.0	0.0
No	65	100.0	100.0
Total	**65**	**100.0**	
Staff Attendance of CPD in the last 3 Years			
Yes	3	4.6	4.6
No	62	95.4	100.0
Total	**65**	**100.0**	

None of the facilities organized any CPD in mental health in the last three years; and only three staff (4.6%) were able to attend CPD that were organized in other facilities outside Kwale County.

4.8 Investment in Non-Human Resources for Mental Health

4.8.1 Descriptive statistics on investment in non-human resources for health

To establish the extent of investment in non-human resources for mental health, Yes/No questions were asked to establish the supplies and availability of drugs used in mental illness (Psychotropic) and availability of technological services requiring special equipment. The outcome is presented in table 13 below.

TABLE 13: INVESTMENT BY KWALE COUNTY INTO NON-HUMAN RESOURCES FOR MENTAL HEALTH

Response	Frequency	Percentage	Cumulative Percentage
Availability of Psychotropic Drugs			
Yes	34	52.3	52.3
No	31	47.7	100.0
Total	**65**	**100.0**	
Access to Brain Scan			
Yes	3	4.6	4.6
No	62	95.4	100.0
Total	**65**	**100.0**	
Access to EEG			
Yes	1	1.5	1.5
No	64	98.5	100.0
Total	**65**	**100.0**	
Access to Psychotherapist Specialist Clinic			
Yes	3	4.6	4.6
No	62	95.4	100.0
Total	**65**	**100.0**	
Access to Social Support Clinic			
Yes	2	3.1	3.1
No	63	96.9	100.0
Total	**65**	**100.0**	
Access to Child Mental Clinic			
Yes	0	0.0	0.0
No	65	100.0	100.0
Total	**65**	**100**	
Access to Adolescent Mental Clinic			
Yes	1	1.5	1.5
No	64	98.5	100.0
Total	**65**	**100.0**	
Drug Rehabilitation Clinic			
Yes	1	1.5	1.5
No	64	98.5	100.0

Total	**65**	**100.0**

Availability of psychotropic drugs is 52%; while access to specialized technology and services such as Brain CT-Scan, EEG, Psychotherapy and Social support are very minimal (1.5 to 4.6%).

4.8.2 Inferential statistics on investment in drugs and attendance of mental patients

TABLE 14: RELATIONSHIP BETWEEN AVAILABILITY OF PSYCHOTROPIC DRUGS AND NUMBER OF MENTAL PATIENTS SEEN

	Seeing none or maximum 1 mental patient per month	Seeing several mental patients per month	Total
Psychotropic drugs available in facility	18	16	34
No psychotropic drugs available in facility	24	7	31
Total	42	23	65

$*X^2=4.249$, 1 degree of freedom, p=0.039

Based on the above Chi-square test with one degree of freedom, the alternative hypothesis of an association between availability of psychotropic drugs and the frequency of mental patients seen at the facility is supported at 95% significance level, and the null hypothesis of no association is rejected.

4.9 Collaboration between Formal Healthcare and Complementary and Alternative Medicine

4.9.1. Descriptive statistics on collaboration in mental health between the formal healthcare system and the CAM system

In order to establish the existing relationship between staff in the formal healthcare system and those in the CAM system, questions on patient referral from one system to and from the other were asked. Staff in the formal system were also asked to express their opinions on CAM activities. The outcome is presented in table 14 below.

TABLE 15: KNOWLEDGE AND OPINIONS OF STAFF IN FORMAL HEALTH SYSTEM ON CAM

Response	Frequency	Valid Percentage	Cumulative Percentage
Health workers aware of CAM Activities in the locality			
Yes	13	20.0	20.0
No	52	80.0	100.0
Total	**65**	**100.0**	
Aware of specific CAM Practitioners - Diviner			
Yes	7	10.8	10.8
No	58	89.2	100.0
Total	**65**	**100.0**	
Aware of specific CAM Practitioners – Faith Healers			
Yes	8	12.3	12.3
No	57	87.7	100.0
Total	**65**	**100.0**	
Aware of specific CAM Practitioners – Herbalists			
Yes	10	15.4	15.4
No	55	84.6	100.0
Total	**65**	**100.0**	
Staff Opinion about Outcome of CAM Treatment			
Effective	9	13.8	13.8
Not Effective	40	61.5	75.4
No Opinion	16	24.6	100.0
Total	**65**	**100.0**	
Referrals CAM in the locality to the health facility			
Yes	8	12.3	12.3
No	57	87.7	100.0
Total	**65**	**100.0**	

4.9.2. Inferential statistics on knowledge on CAM and referrals from CAM

TABLE 16: THE RELATIONSHIP BETWEEN KNOWLEDGE OF CAM AND REFERRALS

Knowledge CAM	Facility gets referrals from CAM	Facility does not get referrals from CAM	Total
Knowledge on CAM in the facility	2	11	13
No knowledge on CAM in the facility	6	46	52
Total	8	57	65

**X^2=0.143, 1 degree of freedom, p=0.706*

Based on the above Chi-square test with one degree of freedom, the alternative hypothesis of an association between knowledge on the CAM practitioners in the locality and the referral of mental health patients from CAM practitioners to the facility can be rejected at 95% significance level, and the null hypothesis of no association is supported.

4.10 Mental Healthcare Reporting System

4.10.1 Descriptive statistics on the mental healthcare reporting system

In order to get data on the mental healthcare system, Yes/ No questions were asked on systems of reporting mental patients, including the Integrated Health Information System, and the possibility of retrieving records three years before and after the KMHP was established.

TABLE 17: THE HEALTH INFORMATION SYSTEM ON MENTAL HEALTH

Response	Frequency	Percentage	Cumulative Percentage
Methods of Record Keeping			
Manual Reporting	36	55.4	55.4
Standardized Report Form	29	44.6	100.0
Electronic HIS	0	0.0	100.0
None	0	0.0	100.0
Total	65	100.0	
Staff Trained in IHIS			
Yes	8	12.3	12.3
No	57	87.7	100.0
Total	65	100.0	
Possibility to Access Data from 2015 to 2017			
Yes	49	75.4	75.4
No	16	24.6	100.0
Total	65	100.0	
Possibility to Access Data from 2012 to 2014			
Yes	43	66.2	66.2
No	22	33.8	100.0
Total	65	100.0	

Manual record keeping is more used (55%) than other methods; about 88% of staff not trained in IHIS; it was possible to retrieve recent data (2015 – 2017) by 75% of the facilities compared to 66% of the facilities that could also retrieve older data (2012 – 2014).

4.10.2 Inferential statistics on staff training and accessibility of mental health data

TABLE 18: THE RELATIONSHIP BETWEEN STAFF TRAINING AND ACCESSIBILITY OF MENTAL HEALTH DATA

Data access	Staff trained in health information systems	No staff trained in health information system	Total
Data 2015-2017 accessible	8	41	49
Data 2015-2017 not accessible	0	16	16
Total	8	57	65

**X2=2.979, 1 degree of freedom, p=0.084*

Based on the above Chi-square test with one degree of freedom, the alternative hypothesis suggesting an association between staff trained in health information systems and the ability to access data on mental health patients for the period 2015-2017 after the KMPHP was introduced is rejected at 95% significance level, and the null hypothesis of no association is supported. It should be noted, though, that the p-value is not very high (0.084 versus 0.05 as the cut-off value) and in view of the relatively small sample size (n=65), further investigation of the association could still be informative.

CHAPTER FIVE

SUMMARY OF FINDINGS, DISCUSSIONS, CONCLUSSIONS AND RECOMMENDATIONS

5.1 Introduction

The chapter summarizes the findings, discusses the main outcomes, and makes conclusions and recommendations based on the study objectives set out at the beginning of the study.

5.1.1 To establish the influence of the Kwale County leadership and governance plans on the implementation of the current KMHP (2015 – 2030)

Besides the 65 health facilities that the study targeted, the Kwale County Health Department (KCHD) and Port Reitz Mental Hospital were also purposefully chosen to be included in the study sample. Data from KCHD was to answer policy level questions touching on budgetary allocation, legislation and policy formulation for the county. Port Reitz was chosen for being the main referral hospital in the coast regions. Data from the referral hospital was to answer questions around staff needs, treatment protocols and the referral system for mental health. Therefore, failure to get data from these two crucial sources delimits the study to primary and secondary health facilities only; and hence reduce the scope of question one that was intended to elicit policy level views on mental health and the status of implementation of KMHP in the Kwale County, and the referral and patient management systems across all levels of the health care system. It also negates the assumptions that the county will be functional and able to provide policy level data, given that it has been in existence for more than five years now, since the devolution of healthcare by the constitution in 2010.

Based on data collected from health facilities though, it seems doubtful if any added value will be derived from making further effort to interview the County Health Department officials. Justification for that doubt is exemplified by the established evidence from this study that there is little awareness, amongst primary healthcare facility in-charges on health policy matters affecting their work at the grassroots. For example, only 14% and below, of all the facility in-charges interviewed were aware of the existence of the KMPH, the county's and facility's deliberate effort to budget for mental healthcare; and any other sources of finances going into mental healthcare. This may explain the low priority mental healthcare has been given in facility budgetary, drug supply and human resources allocations in over 84% of the facilities included in the study. This situation is compounded by the acknowledgement by 72% of the facility in-charges that

they are not involved in any way in the county policy formulation process. This phenomenon is highlighted by Jenkins (2017) who opines that health administrators need to take an active role in influencing politicians and policy makers to put the health agenda on government plans, otherwise, it can be neglected for lack of appreciation of its importance and consequences to other sectors of human development.

5.1.2 To what extent has the level of investment by Kwale County in mental healthcare facilities influenced the implementation of the current KMHP (2015 – 2030)

85% of health facilities were located more than 20 km from the county headquarters. These may suggest an even dispersion of health facilities within the county, to serve the more than 649,931 residents of Kwale, according to the 2009 census. 74% of these facilities are Dispensaries; 50% of them serving a target population of between 5000 and 10,000; 34% of them managed by Kenya Registered Community Health Nurses (KRCHN) with less than two years management experience; most of them staffed with less than 5 trained health workers; and majority of them do not have a trained mental health worker. 95% of the facility have community health workers attached to them; 69% of the community health workers work on voluntary basis; and 30% of them are involved in mental care in the community.

These findings are in concurrence with available literature. For example, expanding primary health care facilities, as Kwale County has done, and integration of various services at the primary healthcare level are highly recommended by the WHO (2001), as the most feasible way to increase access to healthcare services, including mental health care. But as Luoma, et al (2010) observes, there are often many competing priorities such as high prevalence rates of communicable and non-communicable diseases in developing countries, like Kenya, that overshadow the need to allocate resources to areas like mental health. This seems to be the case in Kwale, where there is clear under-allocation of human and non-human resources in mental health care. For example, most of the staff whose main training and assignment in the facilities is to see general medical patients, are the once also expected to see mental patients. This is in spite of the fact that their training in mental health, which is a specialized are of medicine, is not comprehensive enough to enable them deal effectively with common mental disorder. Besides, there are no plans, as evidenced in this study, to improve the skills of the current staff, through Continuous Professional Development (CPD) activities so that they can manage mental cases more effectively.

The budgetary allocation to most facilities is acknowledged as being very minimal by 88% of the respondent health facility in-charges. This may explain why very few activities related to mental health are carried out in public health facilities. For example, no facility reported having organized any

Continuous Professional Development activity on mental health; only one facility has sent a staff for a mental care CPD in the last three years. Only bare minimum drugs are used; patients cannot access services such as psychotherapy, EEG and other diagnostic tests; and patients are referred by their own hired means of transport, instead of ambulances; and there are hardly any admission beds for mental patients in the primary and secondary level facilities, which implies that most mental patients in Kwale, must seek admission in specialized hospitals, like Port Reitz Mental Hospital. This agrees with the WHO report (2009) that puts per capita spending in low income countries to a paltry USD 0.30 against and estimated optimum of USD 3 to 4; and 8 in 10 psychiatric beds are found in major mental hospitals, yet these facilities serve only 7% of all patients requiring mental services. This is in contrast to the situation in developed countries where per capita spending on mental health is 70 times higher in upper income countries; in-patient bed capacity is 24 times higher; outpatient visits are 10 times more; and mental health staff are more by a factor of about eight.

There are also proportionately very few mental patients seeking services in the formal public healthcare system. Most Dispensaries and Health Centres see an average of one to two patients; and Sub-count and County hospital see less than five patients in a month. This reflects Ndetei et al (2009) assertion that there is a gap between the known prevalence rate of 4% of the Kenyan population at risk of suffering from one form or another of mental illness to the turn out rates at the public health facilities for services; suggesting that either patients receive treatment elsewhere; or do not receive treatment at all. The is supported by the WHO report (2009) that observes that a very small proportion of mental patient seem to use the formal healthcare system in the under-developed countries, going by the median treatment prevalence rate of 0.67% of the adult and 0.16% of the children population per year.

Evidence from this study shows that over 95% of all facilities visited do not have a single trained mental health worker, of any cadre. This means that most of the patients are seen by staff that is not specifically trained in diagnosing mental illness. This observation is supported by Ndetei's (2009) observation that only 4.1% of all mental illnesses are detected in Kenyan healthcare system, mostly due to lack of basic knowledge in symptomology of mental illness. Asked, in this study, if they can recognize a list of common mental illnesses, half of the respondents confess not being able. This professional weakness in the mental healthcare system is manifested in other forms like: staff ordering and using only the very basic drugs; referring some patients without any treatment, and generally not viewing mental care as an important element in their work.

5.1.4 To what extent has the collaboration between workers in the formal healthcare system and those in the CAM system within Kwale County influenced the implementation of the current KMHP (2015 – 2030)

KMHP (2015 – 2030) recognizes the role of Complementary and Alternative Medicine (CAM) in mental health, and suggests its integration in the healthcare system. Evidence from this study indicate very minimal, if any working relationship exists between the two systems. For example, assessing the referral pathways shows that hardly any patient is referred from CAM to the formal system; and vice versa. In fact, 64% of formal healthcare staff think CAM services are not effective.

5.1.5 To what extent has the existing mental healthcare reporting system in Kwale County influenced the implementation of the current KMHP (2015 – 2030)

Prompt access to healthcare data is vital for decision making. To paraphrase the WHO report (2001), data is required to convince policy makers to allocate more resources to mental healthcare. Evidence from this study show that about 55% of respondents acknowledge keeping records for mental care. 81% keep records manually in registers; about 19% keep records in standardized report forms. There is none that reports using an integrated health management system. Ability to access mental health data seems to become less as time goes by. This could be attributed to manual and paper nature of record keeping.

5.2 Conclusions

Based on the study the following conclusions are made:

There seems to be no concrete county health policies, as of now, to implement KMHP (2015 – 2030). Lack of awareness about county health policy matters by facility in-charges and their lack of involvement in the decision making at the county on matters effecting mental health, does not seem to help the KMHP implementation process.

What is happening in the health facilities seems to be by default rather than by design, because there is no evidence from the study that shows a deliberate and unified effort to allocate budgetary resources, train man-power for mental health and integrate mental health in primary health care. Furthermore, the turnout of mental patients at the health facilities is also very low than would be expected. Data show that most facilities see only one to three patients in a month. This cannot attract any serious investment in the sector,

unless the Count policy framework explicitly recognizes mental health as a hidden problem, due to stigma associated with it, and therefore, make deliberate effort to sensitive the community, provide mental health friendly services and train or recruit staff to specifically champion and compressively manage mental cases.

There seems to be no effort from the formal health system side to encourage collaboration with the CAM; this is in spite of the fact that some facility in-charges acknowledge the existence of CAM activities within their localities, and even some formal facilities receive referrals, though few, from the CAM side of healthcare.

There exists a reporting system that captures mental patients' records. Just like all patients who come to the health facilities, mental patients are entered into the existing record systems. For most facilities in Kwale, records are kept manually and, in a few cases, standardized reports are filled as part of the reporting system. Lack of an integrated system could contribute to lack of a clear summative figure of those diagnosed or referred due to suspected mental illness. This coupled with lack of recognition of CAM practitioners make it difficult to get a true incidence and prevalence picture of mental illness in the Kwale community.

5.3 Recommendations

On the basis of the findings and conclusions made, the following are recommended:

1. A champion for mental health, focused on implementing the KMHP, needs to be identified to create awareness and espouse the need for investing in mental health by the county government. This can be in the form of trained county staff, non-governmental agency or any individual, partners or activists.
2. In the short term, the county government needs to invest resources in creating awareness and demystifying mental illness amongst the community and health workers alike. In the medium- and long-term plan, it needs to train human resources for mental health, both formally and as part of continuous professional development.
3. The current momentum to build and equip more primary level facilities should be encouraged. Training of primary level health workers in ways that empower them to engage communities,

families and individuals in health promotion and disease prevention will be important in the long run, but this must include mental health activities.

4. The CAM system seems to be doing what the formal system is not doing, in terms assisting mental patients, which may explain the low turnout in the formal health facilities. It is important that CAM activities are therefore, officially recognized through a professional registration system. In which case, their activities can be regulated and the practitioners can be educated to treat what they can and refer what they cannot to the formal system.
5. In tandem with other medical records, mental health information needs to be incorporated into an integrated health management system, so that data is able to be collected, collated and correlated easily, for prompt retrieval and use in decision making, both at institutional and County level.

5.4 Suggestion for Further Research

Based on the outcomes of this study, more research is required to understand the mental situation in Kwale County from the various stakeholders' perspectives. For example:

- To understand the policy level views on mental health and their efforts so far to implement the KMHP 2015 – 2030.
- To understand the implications and the methods used by of CAM practice on management of mental illness in Kwale County.
- To understand the community members' views on the formal systems' treatment of mental patients.

REFERENCES

2010, N. I. (2005). *2nd NHSSP.* Nairobi: Ministry of Health.

Assad et al. (2015). Role of traditional healers in the pathway. *Internal Journal of Social Psychiatry*, 1-8.

Bitta. (2017). An overview of mental health care. *International Journal for Mental Health Systems*, 11-28.

Boerma, A. &. (2005). Health information systems: the foundations of public health. *Bull World Health Organ*, 578–583.

Bukusi, D. (2015). Kenya Mental Health Policy 2015 - 2030. Towards attaining the highest standard of mental health.

Campbell S, R. M. (2000). Defining quality of care. Social Science and Medicine. *PubMed*, 51:1611–1625.

Council of Governors. (2018, March 31st). *go.ke*. Retrieved from The Council of Governors: http://cog.go.ke/

Daily Nation. (2016). *Health experts warn of mental illness crisis.* Nairobi: Nationa Media Group.

Dowrick C, G. L. (2009). Researching the mental health needs of hard-to-reach groups: managing multiple sources of evidence. *BMC Health Services Research*, 9: 226.

F.A, H. (2009). Psychology well-being: Evidence of its causes and consequences. *Applied Psychology: Health and Well-Being*, 137 - 164.

Fahad Riaz Choudhry, V. M. (2016). Beliefs and perception about mental health issues: a meta-synthesis. *PMC*, 2807–2818.

Galderis, S., Heinz, A., Kastrup, M., Beezhold, J., & Sartorius, N. (2015). Towards a new definition of mental health. *World Psychiatry*, 231 - 233.

Gomez, J. (1987). *Liaison psychiatry: mental health problems in the general hospital.* Benkenham, UK: Croom and Helm Publications.

Gross, I. B. (2011). Don't hide your happiness. *Journal of Personality and Social Psychology*, 738 - 748.

Health Policy Project, F. G. (2014). *Devolution of Healthcare in Kenya: Assessing the County systems readiness in Kenya: A review of selected counties.* Nairobi.

Hensher M, P. M. (2006). Disease Control Priorities in Developing Countries. *Facility Management*, 1230 - 1231.

Hodgson et al. (1996). Effective Mental Health Promotion: A literature review. *Health Education Journal*, 55-74.

Kareem, P. A. (2018, February 11). *primary, secondary and tertairy healthcare*. Retrieved from arthapedia: http://www.ies.gov.in/myaccount-profile-view.php?memid=234

Kenya, M. (2005). *2nd NHSSP.* Nairobi: Ministry of Health Kenya.

Kenyan Government. (2010). *Constitution of Kenya* . Nairobi: Government Printers.

KNA. (2018, March 11). *Kenya Launches Mental Health Policy for the year 2015-2030*. Retrieved from Kemya News Agency: http://kenyanewsagency.go.ke/en/?p=118926

Knapp M, M. F. (2006). Economic barriers to better mental health practice and policy. *Health Policy and Planning*, 157 - 170.

Luoma M, Doherty J, Muchiri S, et al. (2010). *Kenya health systems assessment 2010.* Bethesda, MD: Health Systems 20/20 Project.

M. Funk, C. L. (2009). Improving the quality of mental health care. *International Journal for Quality in Health Care*, 415–420.

Marangu, E., Sands, N., Rolley, J., Ndetei, D., & Mansouri, F. (2014, October 10). Mental Health In Kenya: Exploring optimal conditions for capacity building. *African Mental Health Foundation*, pp. 1-5.

Marangu, et al. (2014). Mental healthcare in Kenya: Exploring optimal. *AOSIS Open Journal*, 1-5.

Mburu, M. (2007). *STIGMA TOWARDS MENTAL ILLNESS AND THE MENTALLY ILL IN RURAL kENYA.* Nairobi: University of Nairobi.

Mental Health America. (2018, October 1). *The State of Mental Health in America*. Retrieved from Mental Health America: http://www.mentalhealthamerica.net/issues/state-mental-health-america

Ministry of Health. (2016). *The Kenya Mental Health Policy.* Nairobi: Ministry of Health.

MOH. (2014 - 2018). *Kenya Health Sector Referral Strategy.* Nairobi: MOH.

MOH Kenya. (2018, March 11). *Towards Attaining the Highest Standard of Mental Health*. Retrieved from MOH: http://healthservices.uonbi.ac.ke/sites/default/files/centraladmin/healthservices/Kenya%20Mental%20Health%20Policy.pdf

MOH, K. (2015). *Kenya Mental Health Policy.* Nairobi: MOH.

Mosadeghrad M, A. (2012). A conceptual framework for quality of care. *Mater Sociomed*, 251 - 261.

Musisi S., T. J. (2001). Psychiatric consultation liaison at Mulago Hospital. *Makerere Univ Med School Journal*, 35:4–1.

Nattras, N. (2005). Who consults Sangomas in Khayelitsha? An Exploratory Quantitative Analysis. *Social Dynamics*, 161 - 182.

Ndetei M., L. I.-O. (2009). The prevalence of mental disorders in adults in different level general medical facilities in Kenya: a cross-sectional study. *Annal of General Psychiatry*, 8: 1.

Ndetei, M., Khasakala, L., Kurya, M., Mutiso, V., Ongecha-Owuor, F., & Kokonya, D. (2009). The prevalence of mental disorders in adults in different level general medical facilities in Kenya: a cross sectional study. *Annals of General Psychiatry*.

Njenga, F. (2007). The concept of mental disorder: an African perspective. *World Psychiatry*, 166–167.

O. Sankoh, S. Servilie, M. Weston. (2018, February 16). *Mental Health in Africa*. Retrieved from The Lancet Global Health: https://www.thelancet.com/journals/langlo/article/PIIS2214-109X(18)30303-6/fulltext#articleInformation

Office of disease prevention and health promotion. (2018, JUNE 6). *Access to health services*. Retrieved from HealthPeople.gov: https://www.healthypeople.gov/2020/topics-objectives/topic/Access-to-Health-Services

Ombete, O. W. (2016). *ASSESSMENT OF CORRELATES OF STIGMA IN MENTAL HEALTH NURSING*. Nairobi: University of Nairobi.

Ombete, W. O. (2016). *ASSESSMENT OF CORRELATES OF STIGMA IN MENTAL HEALTH NURSING*. Nairobi: University of Nairobi.

Patel V, B. G. (2013). Grand Challenges: Integrating Mental Health Services into Priority Health Care Platforms. *PLOS Medicine*, 1371.

Rashod, S., & al, e. (2017). Mental Health Service Provision in Low- and Middle-Income Countries. *Health Service Insights*, 10.

Rethink Mental Illness. (2018, June 6). *Rethink.org*. Retrieved from Talking Therapies - Types of Therapies: https://www.rethink.org/diagnosis-treatment/treatment-and-support/talking-treatments/types-of-therapy

Rogers A, H. K. (1999). *Demanding Patients? Analysing the Use of Primary Care.* Milton Keynes: Open University Press.

Shield T, S. C.-G. (2003). Quality indicators for primary care mental health services. *Qual Saf Health Care*, 100 - 106.

Silvana Gardelisi, A. H. (2015). Toward a new definition of mental health. *World Psychiatry*, 231–233.

Sorsdahl, e. a. (2011). TRADITIONAL HEALERS IN THE TREATMENT OF COMMON MENTAL DISORDERS IN SOUTH AFRICA. *Journal of Nervous and Mental Disorders*, 434 - 441.

USAID. (2012). *Measure Evaluation Special Report: Improving Data Use in Decision Making - An Intervention to Strengthen Health System.* Chapel Hill: USAID.

USAID. (2014). *Resource Guide: Data Analysis and Guide.* Washington DC: USAID.

WHO. (2001). *New Understanding, New Hope.* Geneva: NMH Communication.

WHO. (2005). *Mental Health Policy and Service Guidance Package: Improving Access and Use of Psychotropic Medicines.* Geneva: WHO.

WHO. (2005). *Mentql Health Policy, Plans and Programmes.* Geneva: WHO.

WHO. (2005). *Promoting Mental Health: Concepts, Emerging Evidence and Practice.* Geneva: WHO.

WHO. (2006). *Working together for health.* Geneva: WHO.

WHO. (2009). *Mental health systems in selected low- and middle-income countries: a WHO-AIMS cross-* . Geneva: WHO press.

WHO. (2014). *Social Determinants of Mental Health.* Geneva: WHO press.

WHO. (2018, October 1). *WHO*. Retrieved from Prevalence of Mental Disorders: http://www.euro.who.int/en/health-topics/noncommunicable-diseases/mental-health/data-and-resource

WHO, Institute of Psychiatry, Kings College. (2010). Integrating Mental Health Into Primary Health Care in Kenya. *World Psychiatry*, 118 - 120.

Woldetsadik, M. A. (2018, October 1). *The Rand Blog*. Retrieved from Mental Health Care in Sub-Saharan Africa: Challenges and Opportunities: https://www.rand.org/blog/2015/03/mental-healthcare-in-sub-saharan-africa-challenges.html

Zabow, T. (2007). Traditional healers and mental health in South Africa . *International Psychiatry* , 81-83.

APPENDIX 1: Questionnaire

Implementation of KMHP (2015 – 2030) in Kwale County Health System

INSTRUCTION AND INTRODUCTION TO DATA COLLECTION

This questionnaire has two parts **– Part A and B.**

Part A is to be filled by the policy level management of Kwale County Health Department, preferably by Officers in Charge / Appointed Staff from the County Director of Health Services; County Health Office, County Executive of Health, who will be required to answer questions on policy level implementation of KMHP.

Part B is to be answered by the Health Facility Heads or their representatives, who will be required to answer questions on implementation of KMHP at institutional level.

INTRODUCTION BY DATA- COLLECTOR (S)

I'm …… acting on behalf of North Coast Medical Training College, the research agency, in this case

As we are aware, mental health is one aspect of health that has not been mainstreamed well in the current healthcare system. In an effort to improve on the current situation, the Kenyan Government came up with a policy - the **Kenya Mental Health Policy (2015-2030)**.

We are carrying out a study with the aim of understanding the extent to which the Kenya Mental Health Policy (2015-2030) has been implemented by Kwale County Health department.

The questions I/We will ask you are derived from the policy strategies highlighted in the KMHP.

It is our hope that several parties will benefit from the information gathered from the study: Firstly, Kwale county government which could use the information to address possible existing gaps in provision of mental health services.

Secondly, health facilities have an opportunity to express their success and challenges related to managing mental patients.

Thirdly, the community of Kwale, which may benefit from the improved mental health services based on the actions that may be taken on the basis of the outcome of this study.

Fourth and last, training institutions may utilize the information from this study to adjust the training curriculum to address the identified needs and gaps in the current mental health care system.

Getting Consent

If you approve of this study, do you mind signing for us a consent agreement, as a matter of protocol.

Signed Consent – *Yes (1) or No (2)*

PART A: POLICY LEVEL QUESTIONS

Objective-1.0: To establish the influence the Kwale County Health Policy on the implementation of the KMHP (2015 – 2030

1.0 Now that health services are devolved under the current Kenyan Constitution, do you think as a county you have been able to take up the role as anticipated?

a) Fully (1)
b) Partially (2)
c) Not at all (3)
d) Not sure (4)
e) Explain your answer (5) ……

1.1 To what extend do you think you have been able, as a county, to adopt the requirements of the current Kenya Mental Health Policy?

a) Fully (1)
b) Partially (2)
c) Not sure (3)
d) Not at all (4)
e) Explain why you think so. (5) ……

1.2 As a county, do you have any documented plan(s), so far, to implement the requirements of Kenya Mental Health Policy?

a) Yes (1) / No (2)
b) Explain why you think so. (3) ……

1.3 *(If the answer to Q1.3 above is Yes)* - What have you achieved, so far, with your plan (s)? …….

2.0 Are you aware of any health legislation that has been passed by the County Assembly?

a) Yes (1) / No (2)
b) If "Yes" – which one(s)? (3) …….

2.1 Have you as a County Health Department initiated passage, reviewing or adoption of any legislation or policies related to mental health by the County Assembly?

a) Yes (1) / No (2)
b) If "Yes" – which one(s)? (3) …….

2.2 If "Yes" - Are any of the following among the key highlights of your plans / legislation / policies?

a) Increase financing and budgetary allocation of mental health services (6) – *Yes (1) or No (2)*
b) Make mental health services available at all levels of the healthcare system (1) – *Yes (1) or No (2)*
c) Ensure the Rights of mental patients to access mental health services without out pocket payment (2) – *Yes (1) or No (2)*
d) Creation of vacancies or scheme of service for trained mental health workers (4) – *Yes (1) or No (2)*
e) Make available adequate medication and other forms of treatment for mental patients (5) - *Yes (1) or No (2)*
f) Avail means for referring mental patients from lower level facilities to higher level facilities (6) - *Yes (1) or No (2)*
g) Ensure the few available specialists carry out out-reaches to provide mental services in peripheral facilities (7) - *Yes (1) or No (2)*
h) Inclusion of mental healthcare data into the health information systems (8) –*Yes (1) or No (2)*
i) Recognition and incorporation of Complementary and Alternative Medicine (CAM) in the formal system (9) – *Yes (1) or No (2)*

2.3 Do you have a printed copy of the legislation (s) / policies passed, for perusal by interested parties?

a) Yes (1) / No (2)

b) *If the answer is "Yes"* – May I/We have a look at the document - Given to look at (3) / Not Given (4)

c) *If the answer is "No" Could you have a* reason for that? (5) ……

2.4 Are you aware of any champions / advocates / supporters of mental health in the county – both within and outsides the formal government health system?

a) Yes (1) / No (2)

b) If "Yes" – which one(s)? (3) …….and in which category do they fall into (4): Public organization / Private organization / NGO / Individuals

2.5 Do you have a health sector leadership / management organization structure for the county health system?

a) Yes (1) / No (2)

b) *If the answer is "Yes"* - Does the organization structure incorporate mental health leadership or management?

2.6 *If the answer is "Yes"* – May I have a look at the document?

a) Given to look at (3) / Not Given (4)

b) *If the answer is "No" Could you have a* reason for that? (5) ……

2.7 Is there someone in-charge of mental health issues at the following levels of the county health system:

a) County Health Department (1) - Yes (1) / No (2)

b) Sub-county health department level *(2) - Yes (1) / No (2)*

c) County hospital level *(3) - Yes (1) / No (2)*

d) Sub-county hospital level *(4) - Yes (1) / No (2)*

e) Health Centre level *(5) - Yes (1) / No (2)*

f) Dispensary level *(6) - Yes (1) / No (2)*

g) Community level *(7) - Yes (1) / No (2)*

h) *(If the answer is "No" to any of the above) (8)*- Can you explain why you do not have someone in-charge at level (…)

2.8 Are you aware of the sources of finances that support mental health services in the county?

a) *Yes (1) or No (2)*

b) *If "Yes"* – name the sources (3) …….

2.9 In the budget for the county that you make, do you have an allocation for mental health services? *Yes (1) or No (2)*

2.10 *If "Yes"* – what proportion of the budget is allocated to mental healthcare?

a) Substantial (1a) / In figures if any (1b) …….

b) Minimal (2a) / In figures if any (2b) …….

c) Very minimal (3a) / In figures if any (3b) ……..

2.11 *If "No"* – what are the reasons for not considering mental health in the budget?.....

2.12 Given that the current mental health policy covers the period 2015 up to 2030; has there been any observable difference in mental health services since 2015, as compared to the period before, in terms of the following:

In-put	Difference between the period 2015 onwards and before 2015: ○ No difference (1) ○ Minimal difference (2) ○ Moderate difference (3) ○ A lot of difference (4)
No. Of policies / legislation on mental health passed by County Assembly	
Budgetary Allocation	
Employed mental health personnel (specialists only – Nurses, psychiatrists, psychologists and others)	
Number of trainings on mental health	
Types and amounts of medicines for mental illness supplied	

Number of patients seen at all levels of the formal healthcare system	
Number of mental patient referrals within the formal healthcare system	
Availability and usability of mental healthcare data	
Number of CAM practitioners registered by the county government	

2.13 What do you think is the future of mental healthcare in Kwale county?.....

2.14 As a county, are you willing to partner with any interested party to implement the current mental health policy? ...

2.15 What should one do to partner with the county to implement the current mental health policy? ……

PART B: FACILITE LEVEL QUESTIONS

Question 1: Facility Profile and Background Information

1.1 How far is this facility to the County Health Headquarters?

- < 5km (1) / between 5 & 10km (2) / Between 10 &15km (3) / Between 15 & 20Km (4) / Over 20Km (5)

1.2 What level is this facility?

a) Dispensary (1)
b) Health Centre (2)
c) Sub-County Hospital (3)
d) County Hospital (4)
e) Referral Hospital (5)

1.3 Who is the in-charge of the facility?

a) In terms of profession - ECN (1) / KRCHN (2) / Clinical Officer (3) / Medical Officer (4)
b) How long has the in-charge been in this facility? - 1yr (1) / 2yrs (2) / 3yrs (3) / More than 3yrs (4)
c) How long has the in-charge been in facility management position – here and anywhere else? - 1yr (1) / 2yrs (2) / 3yrs (3) / More than 3yrs (4)

1.4 Does the facility have Community Health Workers (CHW)?

a) *Yes (1) or No (2)*
b) If "Yes" - Are they on:
c) Permanent employment (2a) - *Yes (1) or No (2)*
d) Temporary contract (2b) - *Yes (1) or No (2)*
e) Work on Incentive Basis (2c) - *Yes (1) or No (2)*
f) Purely Voluntary (2d) - *Yes (1) or No (2)*
g) What is the role of community Health Works? (2e) .....
h) Does their work entail mental health care? (2f) .....

1.5 Is the in-charge involved in making the following activities:

a) Policy decision at the county level (1) - *Yes (1) or No (2)*
b) Overall management and reporting to the Sub-county / County Administration (2) - *Yes (1) or No (2)*
c) Formulation of the strategic plan of the facility (3) - *Yes (1) or No (2)*

d) Formulation of the facility budget (4) - *Yes (1) or No (2)*

e) Ordering of drugs and other stores (5) - *Yes (1) or No (2)*

f) Referral of patients outside the facility (6) - *Yes (1) or No (2)*

1.6 What is the catchment area population of this facility? ……

1.7 How many patients / clients are seen in this facility in a month, on average? ….

Question 2: To determine the extent to which the level of investment by Kwale County in health facilities has influenced the implementation of the KMHP (2015 – 2030).

2.1 Awareness and knowledge about the current KMHP by staff at facilities

a) Are you aware of the existence of the current Kenya Mental Health Policy?
   - *Yes (1) or No (2)*

b) If the "Yes" – what are the key highlights of the Kenya Mental Health Policy?.....

c) Do you have an idea about the effective period or duration covered by the current mental policy? *Yes (1) or No (2)*

d) Guess the effective period – from when to when?.....

2.2 Financing and budgetary allocation to mental healthcare services

a) Are you aware of the sources of finances that support mental health services in this facility? *Yes (1) or No (2)*

b) *If "Yes"* – name the sources…….

c) Are you aware of how much money or proportion of the county budget go towards mental healthcare services?
   a. *Yes (1) or No (2)*
   b. *If "Yes"* – how much or what proportion? …….

d) In the budget for the facility that you make, do you have an allocation for mental health services? *Yes (1) or No (2)*

e) *If "Yes"* – what proportion of the budget is allocated to mental healthcare?
   a. Substantial (1a) / In figures if any (1b) …….
   b. Minimal (2a) / In figures if any (2b) …….
   c. Very minimal (3a) / In figures if any (3b) ……..

f) *If "No"* – what are the reasons for not considering mental health in the budget?.....

g) Do you get any budgetary / financial support from other external sources, besides the county, to finance mental health services in this facility? *Yes (1) or No (2)*

h) Is there any form of insurance that covers the cost of treating mental health patients that you know of?

   a. *Yes (1) or No (2)*
   b. If "Yes" – specify and explain how it works?…….

2.3 Human Resources for Mental Health

a) How many trained health workers do you have currently in this facility? --------

b) How many health workers are trained in mental healthcare?.....

c) How many health workers are generalists by training, but assigned the duty to see mental health patients? ……

d) Which categories of health workers do you have in this facility?

- Mental Health Nurse - *Yes (1) or No (2)* No……..
- Psychiatrist - *Yes (1) or No (2)* No……..
- Psychologist - *Yes (1) or No (2)* No……..
- General Medical Officer but attending to mental patients - *Yes (1) or No (2)* No……..
- General Nurse but attending to mental patients - *Yes (1) or No (2)* No……..
- General Clinical Officer but attending to mental patients - *Yes (1) or No (2)* No……
- Others….(Specify…….)

2.4 Mental Health Products and Technologies (Supplies)

a) Do you receive any medicines for mental illness from the County drug supplies system? – *Yes (1) or No (2)*

a) If "Yes" in which category of medication are the drugs that you recieve from the county central supplies for treating mental ilness?

- Antipsychotic - *Yes (1) or No (2)*
- Anti-depressants - *Yes (1) or No (2)*
- Anti – anxiety - *Yes (1) or No (2)*
- Stimulants - *Yes (1) or No (2)*

- Mood stabilizers - *Yes (1) or No (2)*
- Substance abuse medication - *Yes (1) or No (2)*

b) Do you ever use any of these drugs in this facility; how often do you use them; and is the supplies you get from the government adequate for the demand of the drug?

Name of drugs	Used: ***Not at all (1)*** ***Often (2)*** ***Very often (3)***	Adequacy of supplies: ***Not adequate (1)*** ***Adequate (2)*** ***Very adequate (3)***
Chlorpromazine		
Fluphenazine		
Haloperidol		
Risperidone		
Clozapine		
Amitriptyline		
Fluoxetine		
Carbamazepine		
Lithium Carbonate		
Valproic Acid		
Diazepam		
Clomipramine		
Nicotine Replacement Therapy		

Methadone

c) Can mental patients that you see have access to any of the following services:
    - Brain CT-Scan – *Yes (1) or No (2*
    - EEG – *Yes (1) or No (2*
    - Psychotherapy by a specilist – *Yes (1) or No (2*
    - Social support by a specialists – *Yes (1) or No (2)*
d) Do you have any guidelines, from the County, National Government or Non-Governmental Organization on how to manage mental illness? *Yes (1) or No (2)* (*If "Yes" specify……..)*
e) Do you have this facilities / services in your facility?
    - Child mental clinic - *Yes (1) or No (2)*
    - Adolescent mental clinic - *Yes (1) or No (2)*
    - Drug rehabilitation Services - *Yes (1) or No (2)*
    - Community psychotherapy disaster response team - *Yes (1) or No (2)*

2.5 Continuous Professional Training in Mental Health

a) Are there any CPDs organized within the facility? - *Yes (1) or No (2*
b) If 'Yes" - Is there any CPDs on mental healthcare organized in this facility in the last one year? - *Yes (1) or No (2)*
c) Is there any health worker in the facility who has attended any CPD on mental health outside the facility in the last one year? - *Yes (1) or No (2)*

Question 3: To examine the extent to which formal integration of mental health services has influenced the implementation of the KMHP (2015 – 2030).

3.1 Service Delivery and Infrastructure

a) About how many mental patients do you see per month in this facility?
    - 0 – 5 -------
    - 6 – 10 -------
    - 11 – 15 -------

- Over 15 -------

b) Have you ever made any of the following diagnoses?
    a. Psychosis - *Yes (1) or No (2)*
    b. Depression - *Yes (1) or No (2)*
    c. Anxiety - *Yes (1) or No (2)*
    d. Mood disorders - *Yes (1) or No (2)*
    e. Substance Abuse - *Yes (1) or No (2)*

c) How do you manage mental patients when you receive them?
    a. Give medication - *Yes (1) or No (2)*
    b. Give psychotherapy - *Yes (1) or No (2)*
    c. Refer them after giving them some treatment - *Yes (1) or No (2)*
    d. Refer them without any treatment - *Yes (1) or No (2)*
    e. Admit them if they are severely ill. - *Yes (1) or No (2)*

3.2 In case you refer mental patients, where do you refer them?

a) To a national hospital - *Yes (1) or No (2)* (Specify…..…..)
b) To a county hospital - *Yes (1) or No (2)* (Specify……..)
c) To a sub-county hospital - *Yes (1) or No (2)* (Specify……..)
d) A specialized mental hospital / clinic - *Yes (1) or No (2)* (Specify……..…..)
e) To a CAM practitioner - *Yes (1) or No (2)* (Specify..…...)

3.3 Do you as a facility ever get referrals from:

a) To a national hospital - *Yes (1) or No (2)*
b) To a county hospital - *Yes (1) or No (2)*
c) To a sub-county hospital - *Yes (1) or No (2)*
d) A specialized mental hospital / clinic - *Yes (1) or No (2)*
e) To a CAM practitioner - *Yes (1) or No (2)*

3.4 What are some of the reason for your referral of mental patients?

a) Lack of expertise in mental health - *Yes (1) or No (2)*
b) Lack of drugs for mental health - *Yes (1) or No (2)*

c) Lack of testing facilities - *Yes (1) or No (2)*

d) Lack of admission facilities - *Yes (1) or No (2)*

3.5 By which means do you refer mental patients?

a) By an ambulance of the facility - *Yes (1) or No (2)*

b) By an ambulance from other facilities - *Yes (1) or No (2)*

c) By other means paid by the county health department - *Yes (1) or No (2)*

d) By other means paid by the patient's relatives - *Yes (1) or No (2)*

e) Relatives choose whichever means that is available and affordable - *Yes (1) or No (2)*

Question 4: To establish the extent to which collaboration between the workers of the formal system and those CAM has influenced the implementation of the KMHP (2015 – 2030)

4.1 Recognition of Complementary and Alternative Medicine (CAM)

a. Do you know of any person or organization practicing CAM in mental health in this locality? *Yes (1) or No (2)*

b. If "Yes" what category of CAM practice do they fall into:

   i. Traditional Health Practitioners (Traditional Medicine Men) - *Yes (1) or No (2)*

   ii. Psychotherapists - *Yes (1) or No (2)*

   iii. Faith Healers - *Yes (1) or No (2)*

   iv. Others - *Yes (1) or No (2)*

c. What is your position on the role of CAM practice in mental health?

   i. Important (1) - *Yes (1) or No (2)*

   ii. Not important (2) - *Yes (1) or No (2)*

   iii. No position (3) - *Yes (1) or No (2)*

   iv. Explain your position……

d. What is your opinion about the outcome of their treatment?

   i. Effective - *Yes (1) or No (2)*

   ii. Not Effective - *Yes (1) or No (2)*

   iii. No opinion - *Yes (1) or No (2)*

   iv. Explain your position……

e. As a facility, do you ever receive referrals from CAM practitioners?
Yes (1) or No (2)

f. If "Yes" which CAM practitioners do you send to?
   i. Spiritual healers - *Yes (1) or No (2)*
   ii. Traditional healers - *Yes (1) or No (2)*
   iii. Homeopathy - *Yes (1) or No (2)*
   iv. Others - *Yes (1) or No (2)*

g. As a facility, do you ever refer patients to CAM practitioners?
Yes (1) or No (2)

h. If to "Yes", which CAM practitioners do you send to?
   i. Spiritual healers - *Yes (1) or No (2)*
   ii. Traditional healers - *Yes (1) or No (2)*
   iii. Homeopathy - *Yes (1) or No (2)*
   iv. Others - *Yes (1) or No (2)*

Question 5: To determine the extent to which the existing Mental Health Reporting system has influenced the implementation of the KMHP (2015 – 2030)

5.1 Do you report mental cases that you see in this facility? - *Yes (1) or No (2)*

5.2 Which system do you use to report mental cases from this facility?

a) Manual report writing - *Yes (1) or No (2)*
b) Manual standardized report form - *Yes (1) or No (2)*
c) Electronic HIS *Yes (1) or No (2)*
d) None - *Yes (1) or No (2)*

5.3 Has any member of staff in this facility trained on how to report mental cases in the Integrated Health Information System (IHIS)? *Yes (1) or No (2)*

5.4 Can you access data from your facility on mental cases recorded in the following years?

a) In 2017 *Yes (1) or No (2)*
b) In 2016 *Yes (1) or No (2)*
c) In 2015 *Yes (1) or No (2)*
d) In 2014 *Yes (1) or No (2)*
e) In 2013 *Yes (1) or No (2)*

f) In 2012 *Yes (1) or No (2)*

Thank you for your participation

APPENDIX 2: Table for determining sample size for a given population

TABLE 19: TABLE FOR DETERMINING SAMPLE SIZE

Table for Determining Sample Size for a Given Population

N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	246
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	351
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	181	1200	291	6000	361
45	40	180	118	400	196	1300	297	7000	364
50	44	190	123	420	201	1400	302	8000	367
55	48	200	127	440	205	1500	306	9000	368
60	52	210	132	460	210	1600	310	10000	373
65	56	220	136	480	214	1700	313	15000	375
70	59	230	140	500	217	1800	317	20000	377
75	63	240	144	550	225	1900	320	30000	379
80	66	250	148	600	234	2000	322	40000	380
85	70	260	152	650	242	2200	327	50000	381
90	73	270	155	700	248	2400	331	75000	382
95	76	270	159	750	256	2600	335	100000	384

Note: "N" is population size
"S" is sample size.

Source: Krejcie & Morgan, 1970

APPENDIX 3: Proposal Submission Form – Pwani University

PWANI UNIVERSITY ETHICS REVIEW COMMITTEE (PU-ERC)

Part A (TO BE FILLED FOR EACH NEW PROPOSAL AT SUBMISSION TO THE ERC OFFICE)

Title: *Mental Health Care in Kwale County*

An Assessment of the extent to which the Mental Health Policy (2015 – 2030) has been implemented since its inception in 2016 by the Kwale County Health Department

Institution: North Coast Medical Training College

Research Programme (S) _____

Field of Study: Mental Health

Type of Study/Design: Qualitative cross-sectional research design

Protocol Version number and date: _____

Name of Principal Investigator(s): Reuben Waswa Nabie, Director of Academics- NCMTC

Contact phone number for Principal Investigator: 0723912914

E-mail address for Principal Investigator: da@northcoastmtc.net

Institutional Affiliation: North Coast Medical Training College

Study Implementation County(s): Kwale County, Kenya

Expected source of funding: Stichting 4 Kenya

Total amount of funds needed: KSH 1,250,000

APPENDIX 4: Template for letter requesting for data collection interview

Reuben Waswa Nabie
P.O Box 1045-80109
Mtwapa
6th August, 2018

Dear Respondent,

RE: REQUEST TO PROVIDE RESEARCH INFORMATION

I am a Master's student at the School of Continuing and Distance Education at the University of Nairobi. I am currently conducting a research study **to evaluate the implementation of the Kenya Mental Health Policy (2015 – 2030) in Kwale County**.

You have been selected as one of the respondents to assist in providing the requisite data and information for this undertaking. I kindly request for an appointment with you on …. at …….to interview you on the same.

The information obtained will be used for academic purposes only, and will be treated with utmost confidentiality. Your identity will be anonymous and your name shall not be recorded.

Your positive response will be appreciated

Yours faithfully,

Reuben Waswa Nabie

APPENDIX 5: Consent Form

Instruction: Read the content of the consent form and, if you agree to the study, fill in your personnel details and signature in the box below the page.

Content Consent Form:

I understand the research project I am about to be involved in is to do with evaluating the extent to which the Kenya Mental Health Policy 2015-2030 has been implemented by Kwale County Health department.
I also understand that consent to participate in the research means agreeing to use the information I share during the interview to inform the Research Project objectives.

I have been given sufficient information and if I had any questions, they have been answered satisfactorily.
I understand that my participation in the interview is entirely voluntary.

The consent document together with all study data will be kept at NCMTC, in a safe and secure place.

I have understood all that has been explained to me.

I confirm that I have read out the above text in this consent form in full to the informant and that the informant thereafter agreed to participate in the research project.

Person administering consent form and the subsequent interview:
Name:…… Signature:
Organization: ……
Date: ……. Place: …….

APPENDIX 6: Authorization Letter from the University