ASSESSMENT OF MENTAL HEALTH CARE AND TREATMENT SERVICES IN PUBLIC HEALTH FACILITIES IN KIAMBU COUNTY, KENYA.

EVA KITUI LICHUMA
MPH/2020/70201

A THESIS SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF MASTER OF PUBLIC HEALTH DEGREE IN EPIDEMIOLOGY AND DISEASE CONTROL OF MOUNT KENYA UNIVERSITY.

JUNE, 2025

DECLARATION

STUDENT DECLARATION

I declare that this Thesis is my original work and has not been submitted to any other college or university for academic credit.

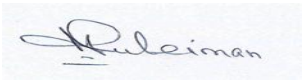
Signed:  Date: 23rd May, 2025

LICHUMA EVA KITUI

MPH/2020/70201

SUPERVISOR DECLARATION

We hereby confirm that we have jointly supervised the research, analysis, and writing of this thesis. Throughout the process, we have guided the student's progress, provided ongoing feedback, and supported the thesis development to completion.

Signed:  Date: 23rd May 2025

Prof. Suleiman Mbaruk

Department of Epidemiology and Disease Control

Mount Kenya University

1st Supervisor

Signed:  Date: 23rd May 2025

Dr. Dorminic Mogere

Department of Epidemiology and Disease Control

Mount Kenya University

2st Supervisor

DEDICATION

This study is dedicated to my parents, family, mentors, friends, and colleagues, whose unwavering support, encouragement, and guidance have been my strength throughout this research journey.

ACKNOWLEDGMENT.

My thesis is the final outcome of a great academic journey that has become reality thanks to many individuals. I would like to thank my academic supervisors Professor Suleiman Mbaruk and Dr.Dominic Mogere with all my heart for offering their priceless help and meaningful critique, Mount Kenya University specifically the School of Public Health for the academic support, and the Kiambu County Department of Health for allowing the researcher access to health facilities. I would like to wholeheartedly thank all the healthcare practitioners, patients, and caregivers who gave their time and experiences. I also appreciate the efforts made by the data analysts, and other colleagues who aided in data collection. Finally, I would like to thank my family and my parents Mr. and Mrs. Kitui who never stopped encouraging me. I would dedicate this work to all the mental health advocates working to ensure care is available, and above all the almighty God.

ABSTRACT

Despite the growing recognition of mental health as a critical component of overall well-being, mental health care services in public health facilities in Kiambu County, Kenya, remain under-researched and under-resourced. There is a lack of comprehensive data on the socio-demographic characteristics of healthcare workers, the availability of resources, and the challenges faced in delivering mental health services. This gap in knowledge hinders the development of effective policies and interventions to improve mental health care delivery and outcomes in the country. This study aimed to assess the state of mental health care and treatment services in public health facilities in Kiambu County, Kenya. This study employed a mixed-methods approach, collecting qualitative data through interviews and quantitative data via structured questionnaires from 165 healthcare professionals across 13 Kiambu County, Kenya public hospitals. Data analysis included descriptive statistics for quantitative data and thematic analysis for qualitative data. The workforce is predominantly female (57.6%) and relatively young, with 40.6% aged 40-49. The majority hold degrees (65.5%) and have significant experience in mental health care, but there are gaps in specialized training and a shortage of psychiatrists (6.1%). Mental health care resources in Kiambu County are insufficient, with uneven staff distribution, a shortage of specialists, and limited training opportunities. Insufficient training opportunities, along with inadequate policy and funding support, further hinder service provision. Inadequate referral systems, a lack of essential equipment and medications, and poor budget allocation further strain service delivery. There are major gaps in specialized training, a shortage of psychiatrists, insufficient resources, and inadequate policy and funding support which significantly hinder effective mental healthcare service delivery.

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LIST OF ABBREVIATIONS AND ACRONYMS

AFFIRM: Africa Focus on Intervention Research for Mental Health

AMARI: African Mental Health Research Initiative

AU: African Union

COVID-19: Coronavirus disease of 2019

HBM: Health Belief Model

LMICs: Low- and Middle-Income Countries

MHGAP: Mental Health Gap Action Programme

MOH: Ministry of Health

NACOSTI: National Commission for Science, Technology and Innovation

NGO: Non-Governmental Organization

NHS: National Health Service

PAPU: Pan-African Psychology Union

PHC: Primary Health Care

SHA: Social Health Authority

SMS: Short Message Service

SPSS: Statistical Package for the Social Sciences

UHC: Universal Health Coverage

UN: United Nations

WFMH: World Federation for Mental Health

WHO: World Health Organization

WPA: World Psychiatric Association

CHAPTER ONE

INTRODUCTION AND BACKGROUND

Introduction

Mental health is a very important aspect of the individual well-being, as well as the health of the society; however, it remains one of the most ignored and understudied aspects of health care systems in the low and middle-income countries (LMICs), in particular, in Kenya. Even though people with mental conditions continue to expand to high rates, accessibility to sufficient mental health care becomes restricted, especially in government-owned health care facilities (Mutiso et al., 2021). The problem is that the mental health situation in Kenya is still a priority because of the systematic consequences, like the lack of means of transportation, finances, highly underqualified professionals, and the stigmatization-driven laxity in implementing the healthcare policies (Ndetei et al., 2020). This national reality is evident in Kiambu County, where the number of people that require mental health interventions but cannot get relevant and adequate treatment in time keeps increasing. The study aimed at determining the availability, accessibility, quality and efficacy of mental health care and treatment services in the public health facilities across the county with focus giving high priority to the major systemic gaps as well as actionable recommendations to reform the situation.

The science about mental health has become more visible as a very serious challenge to all people in every country of the world, and the World Health Organization (WHO) has encouraged primary healthcare to embrace it (WHO, 2022). However, policy advancement has failed in many countries in Africa. In Kenya, despite the 2020 Mental Health Policy, which promotes local and human rights-based development of mental health services, the latter are still centralized and poorly organized (Othieno et al., 2020). Because of its closeness to Nairobi and the resulting growth in the urbanization process into a county, Kiambu county presents a special context whose health problems are encompassing the urban and peri-urban areas. In the current studies, it has been established that there are significant disparities in access to mental health care in the county particularly between rural and semi-urban areas (Kuria et al., 2022). These challenges necessitate an extensive empirical study of how the responses of the public health establishments to the increasing mental health needs were conducted in a scenario of limited capacity and resources.

A considerable lack of human resources increases the problem of mental health care in Kenya. The country has only about 0.19 psychiatrists and 0.01 clinical psychologists per 100 000 people, significantly less than the standard found by WHO (Muga & Jenkins, 2020). Even in Kiambu, where some institutions have attempted to ensure the integration of psychiatric care, ongoing improper funding and disregard of mental health wards results in inferior patient results, a high rate of relapse and burnout of care providers (Khasakhala et al., 2021). General health practitioners, including mental health nurses, often have no targeted training that provide them with exact knowledge of recognizing and controlling psychiatric ailments, thus ending up misidentifying them or offering inadequate treatment. Moreover, the funding of the mental health units within the governmental institutions is sometimes insufficient, and these units lack essential medications, diagnostic tools, and therapeutic services that contribute to the further vulnerability of patients and affect the continuity of care (Chengo et al., 2021).

In this chapter, the background and setting, as well as the key theoretical aspects, on which inquiry of mental health care and treatment services in the public health facilities in the Kiambu County was conducted, has been outlined. The chapter put the research problem to the broader health system issues in Kenya, defined the scope and objectives of the research as well as clarified the theoretical background on which the research is based. The introduction laid the foundation in the understanding of the complexity of mental health care delivery in the county that preceded the following sections which investigate the problem statement, research objectives, study justification, and methodology framework. The next section was focused on defining the comprehensive background of the study, and offering the comprehensive review of the related literature that was utilized to formulate the research question.

Background of the Study

The state of mental health has rapidly grown by becoming a global public health concern because of its rising incidences and the immense social and economic thresholds they impose. According to the World Health Organization, one side of the world is struggling with a mental condition every eight, and more than 75 percent of these persons in the low- and middle-income nations lack access to therapeutics facilities (Vigo et al., 2022). These inequities have been worsened by the historical management of mental health at the policy and funding level, which has placed an unequal focus on the communicable and maternal health in low- and middle-income countries (LMICs) (Saraceno et al., 2021). Despite the global trend of adoption of universal health coverage, inclusion

of mental health treatment in primary care remains inappropriate, largely because of inefficiency in the structure, stigmatization, and lack of well trained experts (Semrau et al., 2021). Studies have also pointed to the dire need of countries to adopt detailed mental health strategies that disperse services and encourage culturally competent care (Kakuma et al., 2021). Such gaps in mental health service rendered themselves more noticeable ever since the COVID-19 pandemic, which placed a considerable strain on mental health infrastructure and revealed the universal underfunding of psychosocial services (Patel et al., 2021).

Structural, economic, and cultural barriers cause a major challenge in delivering proper mental healthcare services in the African continent. The burden of diseases in Sub-Saharan Africa includes a significant portion of mental illnesses; however, policies of public health and budget funding are generally unsatisfactory (Gureje et al., 2020). The history of the former colonial psychiatry, ignoring the community-based model of care often giving place to the model of institutionalization, continues to affect the modern African mental health system (Bhana et al., 2022). More than 90% of the sub-Saharan Africa region suffers the treatment gap in mental health, and most of the countries spend less than 1 percent of their total health expenditures on mental health care (Sankoh et al., 2022). Efforts such as the WHO Mental Health Gap Action Programme (mhGAP) are designed to overcome this gap by training primary care professionals to diagnose and treat the most common mental illnesses; nevertheless, implementation is nevertheless slow and uneven across the continent (Sikweyiya et al., 2020). It is also true that stigmatization, spiritualization of mental illness and inadequate political will continues to block policy enforcement and community participation in mental health initiatives (Abbo et al., 2021). These shortcomings emphasize the need to conduct research specific to contexts in order to evaluate current systems and prescribe context-specific, long-term improvements.

Matters of mental health in Kenya have become a national priority; however, the development is inconsistent and insufficient. The 2020 report provided by the Taskforce on Mental Health became a turning point as it has declared the situation with mental illnesses a national emergency and suggested major changes in financing, staff, and service integration (Mutiso et al., 2021). Despite such policy developments, the mental health services remain concentrated in urban referral hospitals like Mathari National Teaching and Referral Hospital, and it has led to a situation where counties have poorly equipped systems (Khasakhala et al., 2021). The study has revealed that up

to 25 percent of the population in Kenya is affected by a mental disorder at any one time, yet few of them receive appropriate diagnosis and treatment because of stigma, lack of financial resources, and inadequacy of well qualified mental health professionals (Ndetei et al., 2020). Even though policy is introduced at the community health level to boost the outreach, unequal standards in the quality and availability of treatment services available in the county-level facilities are notable, with Kiambu County as the most obvious example of the same (Othieno et al., 2020). The decentralization of health services has been a part of the 2010 Constitution of Kenya, which sought to improve accessability to care services to populations; however, the lack of investment in the sphere of mental healthcare in county health budgets remains an obstacle to further development (Wambua et al., 2023).

The case of Kiambu County provides a significantly convincing avenue, which will determine the state of care of mental health within a given society. Located next to the capital city, Nairobi, Kiambu is a highly-populated county where the urban environment is rapidly evolving, and, as a result, cases of mental health problems, including depression, substance use, and post-traumatic syndrome related to gender-based violence are on the rise (Kimani et al., 2020). It is common to find that the county, as well as its public health facilities, face scarse available resources, a scarce number of mental health professionals and an overburdened primary care that does not sufficiently diagnose and treat psychosocial disorders (Chengo et al., 2021). In addition, cultural myths, religious beliefs and misinformation affect the way people in Kiambu perceive mental illness further suppressing the help-seeking behavior (Muriithi et al., 2022). Despite the available mechanisms of integrated treatment, mental health services are often independent, have no proper supervision, and are considered ancillary to general health services. These dynamics are an indication that there is an urgent need of having empirical assessments examine accessibility, cost, and responsiveness of mental health treatment services in the public health institutions of Kiambu. Such study will support the evidence-based planning and the efforts of the county to achieve the mental health equity and resilience.

Statement of the Problem

Over the past decade, Kenya has witnessed a dramatic surge in the number of reported mental illnesses as has happened in many other countries around the world, and in particular Kiambu County. Such increase may be attributed to the combination of socio-economic reasons, changing

cultural trends, and increasing awareness and diagnosis (Mwangi et al., 2022). The rapid urbanization in Kiambu as well as the high rate of youth unemployment, domestic challenges, substance abuse, and increased social isolation, has resulted in the expansion of mental illness, depression, anxiety, and substance use disorders. Besides, unemployment, loss, and lack of access to support services weakened mental health before the COVID-19 epidemic and deepened mental illnesses because of COVID-19 (Kamau et al., 2021; Wambui & Njeri, 2024).

Although there has been a growing recognition of mental health as one of the key components of overall wellness, development of appropriate mental health-care services in giving and treatment facilities presents significant challenges to public health institutions in a number of low- and middle-income regions, including Kenya. The number of mental health disorders contributes to the disease burden immensely in Kiambu County; however, the scale and level of the issue remain as fragmented, insufficiently funded and lack of coordination with the rest of the health-care systems (Mwangi et al., 2022; Otieno & Kariuki, 2023). A wide body of evidence shows that mental health infrastructure, trained personnel, and access to psychotropic medications of good quality are insufficient in public facilities, leading to poor patient outcomes and high prevalence of untreated mental disorders (Kamau et al., 2021; Wambui & Njeri, 2024). The existing gap between the needs and disparities in mental health services reaffirm the highly crucial importance of assessing the existing state of affairs, particularly in the realm of the Kiambu local health system, in order to inform any evidence-guided improvement and policymaking (Mutiso et al., 2023).

In addition, the stigmatization, cultural misconceptions, and the deficiency of awareness about mental health are critical impediments of service use in hospitals, including those related to public health, which often remain the first point of contact of at-risk individuals (Njoroge et al., 2021; Ochieng & Mwangi, 2022). Even though the global mental health systems advocate the integrated community-based model of care, it is not clear to what extent this has been incorporated in Kiambu County. According to the current evidence, many mental health programs in similar settings lack a decent community engagement and a referral system, which causes delays in the diagnosis procedure and treatment initiation (Kimani & Odera, 2022; Wainaina et al., 2023).

The most prevalent mental health disorders recorded in the Kiambu County public health facilities include depression, anxiety ailments, cases of substance abuse (especially alcohol abuse), schizophrenia, and bipolar disorder. The most common disorders that are diagnosed are depression

and anxiety, which, in most cases, are linked to socio-economic stress factors, such as unemployment, domestic abuse, poverty, and urbanization stresses (Njoroge et al., 2021). The instance of substance use issues, especially alcohol and cannabis, has been reported more and more in young and middle-aged individuals, having significantly impacted the mental health problems (Kimani & Odera, 2022). However, cases of schizophrenia and bipolar disorders, though not as prevalent as mood disorders, are normally handled in referral hospitals and specialized mental health facilities, in the county (Mutiso et al., 2023). The lack of awareness, stigmatization, and limited access to early intervention treatments have enhanced the progress of these conditions, explaining why it is extremely important to develop mental health infrastructure and community-awareness campaigns in Kiambu (Mwangi et al., 2022). It indicates one of the most serious gaps in the access to quality, accessible, and culturally competent mental health care, which this study will focus on analyzing.

Moreover, some aspects of the health system, such as the capacity of the workforce, governance, and financing do continue to hinder the effective delivery of mental health care in the public health care sector in Kenya (Gachari et al., 2022; Ndegwa & Mutua, 2024). This lack of mental health professionals and proper training on the general practitioners of health coupled with faulty policy enforcement have been cited as being a major barrier to effective service delivery in Kiambu County (Kamau et al., 2021; Mutiso et al., 2023). The issue of the local production of empirical evidence on how these systematic problems translate into concrete forms of care deflation, particularly within the hospitals serving large numbers of the population, is rare. The study will fill this knowledge gap because it will propose a comprehensive assessment of the availability, quality, and responsiveness of services, which should guide specific health system improvements.

The issue of the disparity in mental health treatment is worsened by the lack of proper monitoring and evaluation mechanisms which fail to measure the outcome of the patients and effectiveness of services provided by the public health setting (Otieno & Kariuki, 2023; Wainaina et al., 2023). Without effective data systems and quality assurance structures, those making decisions lack the evidence that they need to place mental health high up on the agenda in broader agendas on health. Such a deficit obstructs the ability to track the status of national and global mental health goals and reduces accountability. The research was able to systematically assess the current mental health care and treatment services in the public health facilities of Kiambu thereby providing

workable ideas that can guide the policies makers, health managers and stakeholders to fund the resources in the county, organization of their resources as well as patient-centred care.

Purpose of the Study

The paper conducted an in-depth evaluation of the status of mental health care and treatment services in all the public health institutions in Kiambu County in order to establish specific gaps in service delivery, service access, resource levels, and competencies among healthcare providers that hinder the effective care delivery within the field of mental health. The study was aimed at generating empirical data on the existing structural and functional shortages that will guide the development of the health policies at the county level, and will also guide the strategic planning to improve the mental health interventions. The results were to guide in the development of setting-based, evidence-based, results the integration of mental health services in primary care, equitable access, and supporting preparedness of the workforce. The thesis was intended to provide practical knowledge to policy makers, health practitioners and development partners to build a more embracive, efficient and culturally sensitive mental health treatment system in Kiambu County.

Objectives of the Study

Broad objective: This study aimed to evaluate the availability, accessibility, and quality of mental health care and treatment services at public health institutions in Kiambu County, Kenya. The study sought to assess the present condition of service delivery, identify prevailing challenges, and examine the correlation between available resources and the efficacy of mental health interventions throughout the county.

The following were the specific research objectives that guided the study:

i. To determine the social demographic characteristics of healthcare service providers for mental healthcare and treatment services in Kiambu County, Kenya.
ii. To identify the available resources for mental healthcare and treatment services in public healthcare facilities in Kiambu- County, Kenya.
iii. To assess the current mental healthcare and treatment services being offered within public health care facilities in Kiambu County, Kenya.
iv. To establish the challenges between institutional and systemic factors and the challenges experienced in the delivery of mental healthcare and treatment services in public health care facilities in Kiambu County, Kenya.

v. To evaluate the relationship between the availability of mental healthcare resources and treatment services offered at public health care facilities in Kiambu County, Kenya.

Research Questions

The following were the research questions that guided the study:

i. What are the social demographic characteristics of healthcare service providers for mental healthcare and treatment services in Kiambu County, Kenya
ii. What are the available resources for mental healthcare and treatment services in public healthcare facilities in Kiambu- County, Kenya?
iii. What are the current mental healthcare and treatment services being offered within public health care facilities in Kiambu County, Kenya?
iv. What is the challenge between institutional and systemic factors and the challenges experienced in the delivery of mental healthcare and treatment services in public health care facilities in Kiambu County, Kenya?
v. Is there a relationship between the availability of mental healthcare resources and treatment services offered at public health care facilities in Kiambu County, Kenya?

Justification of the Study

Assessment of mental health care and treatment services within the county of Kiambu at the public health institutions is highly needed, and it is important to note that mental health disorders are increasingly becoming prevalent in Kenya. According to the World Health Organization (WHO), mental and drug use conditions present more than 13 percent of the overall global burden of illness with the depression rate declared to be the chief cause of non-fatal health loss worldwide (WHO, 2021). In Kenya, every fourth patient looking to receive medical care is diagnosed with a mental illness but only 29 percent of the patients who need mental health services get the services (Ministry of Health [MOH], 2020). Inadequate resources, stigma and the lack of competent mental health practitioners contribute to this large treatment gap thus widening it. The situation in the Kiambu County is the same nationally. In a recent situational report on mental health carried out in 2019 by the Kenya Mental health Taskforce, mental illness was found to be highly prevalent in both left and right-hand sides especially among the rural population, with depression, anxiety and substance addiction being found to be the most prevalent illnesses (MOH, 2020). The county lacks adequate mental health facilities, and there is a shortage of psychiatrists and psychologists, and the

only major referral center, offering expert services, is one. This emphasizes that there is an urgent need to evaluate availability, accessibility and quality of services offered by the public health organizations.

This research is very essential in making evidence-based policymaking and practices. The study aims at revealing strengths and systematic gaps in the mental health care system through the evaluation of service delivery, staff, infrastructure, and resource distribution. Such results will contribute to the creation of interventions that are customized to enhance service delivery, especially in under-resourced populations. Mental health diseases are linked to socio-economic weaknesses, where people with low-income earners are disproportionally affected by these diseases and are probably unable to resort to private care (Kiburi et al., 2022). Therefore, the care of people with mental problems in the population has to be improved to promote health equity. Mental illness left untreated has far reaching repercussions in the society. It is estimated that depression and anxiety disorders inflict an annual cost of USD 1 trillion on lost productivity to the economy (Chisholm et al., 2016). The unaddressed mental disorders in the local setting have been linked to rising institutions of suicide, violence between individuals, high numbers of dropouts in schools, and improper use of substances (Ndetei et al., 2021).

This research will collect data that will inform the preventive strategies, early intervention, and mental health interventions in the community that would mitigate these effects. This research fits into the national health plan of Kenya and the Mental Health Policy 20152030, that sets out that the integration of mental health into primary healthcare and devolution of the services to the county level must become the key priorities (MOH, 2020). The outcomes will serve as a benchmark to determine progress and improvement of strategies to meet the changing needs of the population. The study appraises the current mental health care being offered at the public health facilities at Kiambu County to support the policy changes, resource allocation, and creation of an effective, participatory, and patient-oriented system of mental health care.

Significance of the Study

The main user of the study is mainly the policymakers and the health planners in the government, both the national and the county level. The aspect of mental health remains an underrecognized area in the Kenyan national health management agenda, despite its growing evidence of the socio-economic implication. The paper will present practical recommendations on how to develop

responsive mental health policies that can be based on the organizational structure and provision of treatment in the public institutions of health in Kiambu. It highlights existing gaps in service provision, resource distribution, as well as institutional readiness, so that policymakers could develop focused interventions, which were grounded in objective reality. This is more critical particularly in a decentralized system of governance whereby county governments are charged with the responsibility of translating the country health policies into customized service delivery formats. The results of the study can be used to improve the institutional framework, inform the budgetary processes, and legislative practice inclusiveness and equity associated with mental health care.

To the mental health professionals and service providers such as clinical psychologists, psychiatric nurses, counselors and general healthcare practitioners under integrated care it is to a significant degree of importance. These practitioners often operate in a limited system characterized by a lack of resources, high caseloads and ineffective psychological support structures. The analysis critically evaluates the effectiveness and the limitations of the current treatment techniques by providing empirical evidence to be used by the practitioners to facilitate the changes and improvement in their respective work environments. Additionally, the knowledge gained will help the professionals improve their care models by incorporating the patient-centered approach and the use of flexible strategies that respond to particular needs of the community. In the end, this helps practitioners take care of patients in the most efficient way possible and that they are involved 29 in the evidence-based practice, which is inevitable when the aim is the sustainable improvement of mental health systems.

The study offers major academic input to scholars and other researchers in the field of public health and mental health research. Research on mental health in sub-Saharan Africa is in an infant stage, and much is still unexplored particularly in the county and facility setting. This paper will bring an important gap in the localized academic writings since it has presented data-based findings on the content of a particular area that can be used to compare with other areas, refinement of theoretical models, and hypothesis development. The methodological methodology as well as the results will particularly be helpful to future researchers who may be dealing with the problem of systemic health disparities, the outcomes of patients and indicators of service delivery in resource-collapsed settings. Moreover, by locating the data against the background of the complexity of the

devolved healthcare system of Kenya, the study creates a part of an empirical base that supports the research relying on the experience of the African reality, instead of focusing more on the Western-centered paradigms of examining mental health care systems.

The targeted populations to whom this research is adapted include both users of psychological services and ordinary people living in Kiambu County, who rely on public centres in order to adequately maintain their health. Many people have to struggle with mental problems due to stigma and financial problems and due to the lack of information about the treatment. The study can empower people and make them more effective adepts of their rights through understanding the structural and human factors that influence access to care and their quality. Moreover, it acts as a platform where it enables the expression of certain community-specific views that have always been locked out in deliberations of health systems. The research forms a contribution to academia and social justice because it enhances the voice of users and raises those who have traditionally been excluded or ignored in health planning activities. The research is a tool of empowering people, grassroot level support and involvement in civic activities, and long term advocacy of mental health.

Scope of the Study

This paper has evaluated the mental health care and treatments of the sick in the Kenyan Kiambu County health facilities. The researchers directly looked into four attributes that included the accessibility of the mental health resources, effectiveness of the mental health services, barriers in service dispensations, and the relationship that exists between the availability of the resource and the quality of the emanating mental health treatment. These variables formed the picture against which the research objectives were addressed as well as collection and analysis of empirical evidence. This target population of the study included 3643 health officers of 13 named public institutions in Kiambu County. The professionals were the medical superintendents, clinical officers, psychiatric nurses, psychologists, general practitioners as well as involved directly or indirectly in the provision of mental health care services. In this study, 255 health workers in this demography were randomly selected because they have a role in the provision of mental health services. This was the method applied in ensuring that participants are exposed to adequate exposure, knowledge and understanding of the realities of mental health care within the public health sector in the county.

The total sample size was given by the use of the sample size determination formula of Fisher et al. (1998) which was 169 respondents. They believed that this sample was statistically significant and sufficient to provide the relevant answers and maintain the balance between the coverage and ease of management of the sample. The sample approach was mostly purposive type that targeted health professionals who were directly involved in the mental care provision work; that is why the depth and relevance of collected data is guaranteed. Data collection was done through the implementation of standardized questionnaires and comprehensive interviews. The quantitative data about the accessibility of the services, their budgetary allocations, the availability of qualified staff, infrastructural facilities, and service uptake was obtained through questionnaires that were distributed among selected health workers. Important informants like medical superintendents and senior mental health professionals were interviewed semi-structurally in order to obtain qualitative data which put context and fleshed out knowledge of systemic and institutional challenges.

The data collection tools were carefully tested and proven to assure reliability and consistency of responses. All the ethical considerations including the informed consent, confidentiality and voluntary participation were closely respected when collecting the data. The analysis of quantitative data performed with the help of Statistical Package of Social Sciences, SPSS, version 25. The data were summarized using descriptive statistics, frequencies, percentages, and the means, and inferential statistics, i.e., Pearson correlation and chi-square tests, were used to analyze correlations between variables. Thematic analysis was performed on qualitative data transcribed as a result of interviews, whereas impression was first categorized and then analyzed to determine the repeated trends and also to develop an interpretation of the quantitative findings. The geographical area of the study was restricted to Kiambu County, public health facilities. Even though the research provided full knowledge on the mental health system of the region, it also presented data that results might not apply to the case of the private hospitals or other counties too. The research developed crucial grounds upon which future comparative studies and policy formulations aimed at developing mental health care services in Kenya can be conducted.

Limitations of the Study

i. The research was faced with lack of response of some respondents, who were afraid that the study would be used to their disadvantage as far as their privacy was concerned.

ii. Disclosure of information related to mental healthcare provision within the public health facilities was considered confidential hence the respondents feared that the sensitive information could be compromised in case of collecting the information by the wrong individuals thus some of the participants are not keen to open up freely.

iii. Data collection of respondents during working hours was a challenge since it was found that most respondents were often busy with their official duties and were not easily accessible and willing on participating on the study.

Delimitations of the Study

The study centred on Kiambu County with research limited in public health facilities within the county, that mainly focused on mental health care services and treatment given by the facilities. It targeted only those related to the provision of mental health care such as the doctors, psychiatrists, psychologists, psychiatric nurses, clinical officers and general practitioners thus excluding other workers who are not involved in responsibility that characterize mental health. The study restricted itself to assess the presence of services, their accessibility, adequacy of resources and treatment quality, thus putting out of consideration privately operated health facilities, traditional healers, and the community-based informal care system. Patient satisfaction and long-term patient outcomes were not fully explored or determined due to constraints on both time and resources. Besides, it did not include the seasonal or policy-related changes that might affect the delivery of services. The parameters, which were chosen deliberately to maintain the manageable scope of the research, where chosen to ensure that the study would be rich and relevant to the topic of systemic issues that affect the provision of mental health services within the public health system of Kiambu County.

Assumptions of the Study

i. It was presumed that mental health resources were accessible in healthcare facilities throughout Kiambu County, Kenya.

ii. It was presumed that adequate mental health services were provided in these healthcare facilities.

iii. It was anticipated that several problems were encountered in the provision of mental healthcare services within these public health institutions.

iv. The study posited that a substantial correlation exists between resource availability and the mental health treatments provided in public healthcare facilities in Kiambu County, Kenya.

Operational definition of Key Terms

Mental health: denotes a person's psychological and emotional health, including their capacity to handle stress, interact with others, make decisions, and cope with daily events. Mental health transcends the mere absence of mental illness; it is a fundamental aspect of general well-being and cannot be only characterized by its lack. Positive mental states are widespread. Mental health refers to a dynamic balance of characteristics including personal resilience, good coping mechanisms, and a supportive environment. Mental health influences cognition, emotion, and behavior; elements such as heredity, life experiences, and neurochemistry clarify mental health. The research study indicates that optimum mental health allows individuals to achieve their potential, manage daily problems, perform efficiently, and positively influence their surroundings. Maintaining mental health requires self-awareness, getting help when needed, and destigmatizing conversations about mental well-being; it is a continuum. A holistic approach to health emphasizes the need of cultivating a society that prioritizes mental health awareness, understanding, and access to suitable treatment and resources, acknowledging the connection between mental and physical well-being.

Mental care: consists of diverse collection of care and treatment to maintain and enhance good mental health. The study involves issues of psychological, emotional, and social aspects of an individuals mental health. Psychiatrists, psychologists, counselors and social workers in conjunction with other mental health professionals carry out assessments, diagnosis and treatment of a number of mental health disorders. Research might involve psychotherapy, medication therapy, counseling, and any other forms of therapy to suit the uniqueness of every person. Moreover, mental healthcare focuses on education and prevention measures meant to provide people with knowledge and control of mental health. The overall goal is to enhance the lives of individuals with mental health problems, thus encouraging hardiness, tolerance, and feelings of power. Mental health is vital in improving the general well-being of the population and, thus, making our society much caring and supportive.

Public health facilities: Companies are adhering to improving and safeguarding the health of the people. These institutions play a major role in the provision of healthcare services that address the needs of patients and help prevent the onset of certain conditions, as well as educate the population. Hospitals, clinics, community health centers and governmental health departments, among others, fall in the categories of the public health facilities. Their key purposes include prevention of

disease, promotion of health and complete community welfare. In relation with the research, public health facilities usually involve in conducting immunisation programs, tests, health education campaigns as well as control of diseases which are communicable. They are very important in the management of health crisis as well as handling outbreaks as well as preparing health programs to give a limited damage of health hazards. The respect given to accessibility, equity and community engagement within the arenas of public health makes these institutions focused on both the overall community well-being in the society and the treatment of individual patients, and is aimed to contribute to and protect the overall health of more diverse populations.

Summary

This chapter establishes the underlying framework for the study by addressing the critical topic of mental health care in public health facilities in Kiambu County. It articulates a distinct and pressing problem, highlighting the escalating mental health crisis and the deficiencies in treatment delivery that demand targeted investigation. The chapter delineates the study's purpose and objectives, correlating them with the overarching necessity for enhanced mental health outcomes in the region. This underscores the study's significance within the realms of public health policy, service provision, and community welfare. Furthermore, it delineates the principal assumptions underpinning the research, recognizes any limitations, and specifies critical words to guarantee conceptual clarity. This chapter delineates the importance of the study and prepares for a thorough, evidence-based evaluation of mental health care services in Kiambu County.

CHAPTER TWO

LITERATURE REVIEW

Introduction

In this chapter, the theoretical framework, detailed basis of information, and empirical evidence concerning the provision of mental health treatment services and care within the public health facilities within Kiambu County, Kenya was presented within the academic framework. The existence of mental health treatment and care services within the walls of public health institutions is vital towards the entire occurrence of a health care system. To successfully manage the welfare of the people of Kiambu County, Kenya with its diverse sociodemographic profile and various health obstacles, the mapping of the mental health facilities in the area was established as a prerequisite. This literature study aimed at exploring and assessing the current body of knowledge about mental health care services and treatment offered in the Kiambu County at the public health sector. The aim of this chapter was to give a current review of mental health therapy by examining pertinent researches, reports and other scholarly writings. It was meant to bring out an in-depth evaluation of the existing situation of mental health care, gaps in the same and provide meaningful discussion on the matter which may have an impact in practice, establishment of policy and other studies of the same serious field. Critical issues raised were accessibility, quality of service provided, cultural issues, and the effectiveness of the programs. The main objective was to achieve thorough knowledge of existing possibilities and barriers in the system of mental health care in Kiambu County. Exhaustive exploration of the literature enables the implementation of the concepts of similar situations on the local, national or international level. This informed our quest of finding workable models and solutions to apply in circumstance almost like in Kiambu County. It also revealed that there have been significant challenges to efficacy of mental health treatment.

Theoretical Framework

Theoretical framework is a combination of concepts, their definitions, sources to the related academic materials, and existing theories that are used to explain a particular research (Hair et al., 2015). The theoretical framework should also be elaborated fully by showing the comprehension of the subject matter of theories and concepts regarding your research topic, as well as connecting to the broader domains of knowledge under consideration (Swanson, 2014).

Health Belief Model (HBM)

Health Belief Model (HBM) first emerged in 1950s formulated by Social psychologists, Hochbaum, Rosenstock and Kegels within the U.S. Public Health Service. This model was established in order to clarify why people are not taking part in prevention and detection campaigns against diseases such as tuberculosis screening campaigns (Rosenstock, 1974). It is based on the psychological and behavioral theories especially those that explain either making decisions in an ambiguous environment (Becker, 1974). Health Belief Model has transformed during the decades into one of the most widespread conceptualizations of understanding the health behavior. The concepts of the model have been applied in various settings such as vaccination acceptance measures, management of chronic diseases, mental health treatments and campaigns on health promotion (Janz & Becker, 1984; Skinner, Champion, 2008). The evolution of historical development was accompanied by shift to a more person-oriented models of change in behavior (1970s, 1980s) emphasizing the individual autonomy and the sense of self-efficacy (Glanz et al., 2008).

This model suggests that a number of perceptions are critical in the determination of health-related behavior including perceived susceptibility (the belief about risk of contracting a disease), perceived severity (the belief about seriousness of the illness), perceived benefits (the belief in the usefulness of recommended action in the reduction of risk), perceived barriers (the cost or obstacles of performing the behavior), cues to action (the stimuli needed to prompt action), and self-efficacy (the ability to execute the behavior) (Rosenstock, 1974; Janz & Becker, 1984). Every factor has its own involvement in shaping of health behavior. To illustrate the point, a person might perceive a health issue to be an extreme one, but still fail to act on it unless the preventive activity related to it seems to her or him beneficial and neither too difficult or costly (Champion & Skinner, 2008). The existence of these conceptions has been supported in many studies of public health (Glanz et al., 2008; Carpenter, 2010), where the multifactorial character of health behavior decision-making processes was reported.

The key asset of the HBM lies in its straightforward nature and its relative ease of application in multiple health contexts, even the one of mental health intervention. It provides an effective model in assessing reasons why people choose to engage or avoid health-promoting behaviors (Janz & Becker, 1984; Champion & Skinner, 2008). The predictive action of the model has been proved in numerous empirical studies in different populations and environments, particularly the preventive

health behavior (Carpenter, 2010). However, Health Belief Model (HBM) has been criticized because it focuses mostly on individual cognitive factors failing to consider broader social matters such as socio-cultural and environmental factors that can influence behavior (Glanz et al., 2008). Moreover, it lacks sufficient attention to habitual behaviors or emotional reactions that could have a significant impact on decisions of mental health. Critiquers argue that the paradigm assumes that people are rational and logic, which cannot always be true in a practical setting, especially where stigma or poor health facilities prevail (Rosenstock et al., 1988).

Health Belief Model (HBM) would be of relevance to this study because it offers a theoretical modeling that one can use to understand the implication of the attitude of both the patients and the provider on the access and usage of mental health care in general health establishments within Kiambu. Many individuals can consider mental health problems a low priority or a stigmatised issue thus reducing their chances of seeking help. Using this paradigm, the study is able to examine the psychological and cultural boundaries, as well as the assessment of how behavioral tissues can modify health care policies, education, and treatments provided at facility level.

Neo-materialist theory

The neo-materialist theory, that exists within the confines of sociology and critical health studies, provides an important paradigm in analyzing mental health care and treatment services in health institutions that are publicly owned (Zimmerman, 2008). This theory puts an emphasis on the relationship between socio-economic systems, power and health drawing the attention to the fact that material conditions and social imbalances have a tremendous impact on both individual and community well-being (Glymour, 2008). When the theory of neo-materialism is applied to mental health care assessment in disaster prone or social health related institutions, it requires the investigation of the extent to which superordinate social factors such as income disparity, social basis of organizing support, and resource accessibility affect the effectiveness and affordability of mental health services (Lynch, Smith, Kaplan, & House, 2000). The neo-materialist approach to the study of the problems of public health facilities requires the understanding of the influence of structural factors, which contribute to mental health outcomes. This includes analysis on monetary allocations, resource allocation and policy that would affect the quality of mental health care services (Drabo, 2011). In addition to that, the theory encourages the investigation of the

interaction between social and economic inequality and mental health disparities, which can lead to unequal services and differences in the outcomes of treatments (Zimmerman, 2008). Applying a neo-materialist perspective in measuring mental health care in the public health setting brings out the need of taking in consideration both the structural determinants and individual health needs in the macro-level and the micro-level respectively (Glymour, 2008). Such an approach may be used to inform policy suggestions and actions meant to alleviate health inequities and enhance the general effectiveness of mental health programming in the provision of public health services (Drabo, 2011).

Discussion of Theories in Relation to Mental Health

Using the Health Belief Model (HBM) would provide an important psychological framework in examining how individual beliefs and perceptions affect seeking of care in the process of assessing mental health care and treatment services in the Kiambu County across the public health facilities in this region. Many residents will have a mental health problem but delay or avoid seeking help because of the perceived stigma, a sense of invulnerability, or reduced sense of the harmfulness of mental conditions. In addition, perceived barriers-including cost, availability or provider attitude negativity- may suppress engagement in treatment services. This paper analyzes the impact of patient-related cognitive and behavioral dimensions of care consumption on the framework of the Health Belief Model especially in under-resourced or culturally sensitive cases like Kiambu. HBM provides the scope of investigating the role of the health publicity campaign, community-based education, or the initiatives founded by health professionals as signals to action that changes perspective and promotes a higher involvement of mental illness treatment getting.

Conversely, the Neo-materialist Theory brings out a more comprehensive structural and socio economic model that complements the micro focal point of HBM. It appreciates that mental health disparities are often based on the system located imbalances such as poverty, unemployment, poor housing, unequal access to education and health care. These structural determinants could constructively limit access to mental health care by the people, regardless of their opinions or desires in Kiambu County. These are compounded by the lack of finances, poor infrastructure, and few workers at the public health institutions who are poorly equipped to handle their task. Neo-materialist theory carries the research further than individual agency and emphasizes the need to study institutional and policy-level drivers, i.e., the distribution of funding, health system

governance, inter-county disparities in resources, etc., that shape the access, quality, and fairness of mental health services to provide.

The combination of these theories together constitutes an impressive analysis system with which to offer both academic interpretation and social activism. The Health Belief Model ascertains the hindrances and driving forces inside the population, whereas the Neo-materialist Theory makes it rather clear that the external structural forces are also critical. Such a dual-theoretical method allows in the assessment of mental health care in the Kiambu County to put into consideration both personal choices of individuals and institutional settings that make the choices. It accentuates that there is the necessity to both modify the behaviour of service consumers and change within the system of the public health establishments to achieve the improvement on the mental health outcomes.

General Literature

Introduction

Mental heath is an essential or a significant part of general wellbeing which influences the thoughts, feelings, and actions of humans in their daily lives to a great extent. Mental health issues across the world make up a significant morbidity load resulting in disability and premature death (Patel et al., 2020). Mental health conditions in Kenya, as they are in many low- and middle-income countries, are often underdiagnosed and inadequately treated, mainly because of limited availability and inadequacy in the prioritization of resources in the health systems (Kigozi et al., 2021). Kiambu County is a region with very diverse and wide-ranging population, and hence it has certain issues in its public health institutions in terms of mental health care and treatment provision, and it has to get critically evaluated and strategically improved.

Many factors, such as social, economic, and environmental attributes, combine and influence mental wellbeing of people and populations (Lund et al., 2020). The health care facilities catering to the public are the primary method through which most of these individuals receive the mental health care especially in an atmosphere that is resource-lean where most individuals would not be able to achieve the same in a privately managed health care. The availability of funds, the lack of educated specialists, and the lack of infrastructure often prevent providing quality and accessible mental health care, which combines to impact the mental health care (Mbwayo et al., 2022). The

following issues explain the need to conduct stringent reviews of the existing services to inform policy and allocation of resources in Kiambu County.

Stigma and the lack of awareness make mental health care challenging and reduce health-seeking behaviour and treatments compliance (Mutiso et al., 2023). The interface of these social complications and the institutional shortcomings predetermines a significant barrier to achieving equitable mental health outcomes. The review of the current state of mental health care and treatment services in the Federal Health Care facilities of Kiambu County therefore, plays a pivotal role in identifying the gaps and informing the health system to better achieve their performance and ultimately influence the welfare of the citizens.

Definition of Mental Health

The state of mentalizing health is an unstable state of harmony of the inner world enabling a person to manifest his/her abilities within the frames acceptable to social norms, cope with the challenges usually arising in everyday life, and contribute to society in a meaningful way (WHO, 2022). It also includes not only the absence of mental diseases but also psychological strength, emotional health and the skill to maintain a fruitful relationship. This overall knowledge highlights mental health as a primary constituent of human functions and social harmony, which are indispensable to long-term development, especially in the field of public health such as Kiambu County, whose social determinants largely affect health outcomes.

It is accepted that mental health is a complex phenomenon that is determined by biological, psychological, and social factors that are in constant interaction with each other during a person life (Patel et al., 2020). Mental health incorporates subjective well-being, perceived self-efficacy, autonomy, competence, and the ability to realize one potential, said World Health Organization (2022). This in-depth understanding creates the need to have mental health care systems that not only treat sickness but also promote mental wellness by preventing, intervening on early stages of the condition, and offering community-based support services. The holistic approaches are critical in all the public health facilities within Kiambu County since they require optimization of the scope and quality of mental health services provided with limited resources available.

Mental Health vs. Mental Illness

In order to come to terms with the extent, and the objectives of mental health care services it is imperative to distinguish between mental health and mental illness. The idea of mental health is used to refer to a preferred state of mental and emotional safety, enabling individuals to work well within their environments. Mental illness is a clinically definable ill condition that is characterized by alterations in cognition, affections, or behavior and which either causes distress or dysfunctionality (American Psychiatric Association, 2022). This difference accommodates the recognition that mental health is not a dichotomous variable, and so where we have a person who experiences a mental illness, they are not experiencing the entirety of mental health.

This theoretical difference influences the way the service is provided because the mental health care encompasses not only the promotion of proper well-being but also the management of issues. The prevention and early intervention initiatives place priority on maintaining mental health and preventing the onset of illness, and treatment services focus on relieving the symptoms and supporting the rehabilitation of diagnosed mental patients (Kola et al., 2021). In the Kiambu County institutions of public health, this dual approach requires the continuation of mental health promotion processes in conjunction with clinical care to achieve total coverage of the services, considering that the promotion of mental health can make a difference in the presence and intensity of mental diseases.

The Continuum of Mental Health

Instead of thinking simply in terms of a healthy and an ill state, mental health has much more to do with a continuum which extends on one side to extreme mental illness and on the other to the optimal level of well-being. This notion of a continuum means that people could easily move to various states pertaining to their mental health given life conditions, stress or availability of resources (Keyes, 2020). On one end of the continuum is flourishing mental health (defined by improvements in emotional and psychological functioning as well as experiences of well-being) and at the other end is languishing or mental illness (defined by high degrees of distress, dysfunction). Such a view is relevant in terms of emphasizing the need of early interventions as a means of fostering resilience and preventing the escalation of the problem to more serious illnesses, particularly in low-resource public health systems like those existing in Kiambu County.

The continuum approach emphasizes the need to have mental health services able to meet different needs, including universal mental health promotion as well as special clinical services. The method

allows combining prevention and treatment efforts to keep people at a higher level longer (Slade, 2021). The perception of mental health as a continuum in healthcare facilities can help the medical workers to implement individualized interventions related to fluctuating dimensions of mental health, including psychosocial care, counseling, and medication, thus, enhancing patient outcomes and system performance.

Factors Influencing Mental Health

The majority of psychological disorders are functions of a complicated array of biological, psychological, as well as social factors, which impact the ability of a psychological state of wellness in a person. Biological causes include genetic backgrounds, neurochemistry problems, and physical health problems, which can make people more vulnerable to mental illnesses (Walker et al., 2021). The psychological aspects such as coping responses, personality traits, historical traumatic experiences among others play significant roles towards affectation of mental health. Social determinants, like poverty, educational status, occupation role, and social support networks are significant predictors in relation to mental wellness contributing to moderating or increasing stressors among participants (Lund et al., 2020). The recognition of these attributes in the public health facilities in Kiambu county is important in coming up with therapeutic approaches that can address the cause of the mental health problem, and not just the symptoms.

The determinants of mental health are worsened by environmental and community variables particularly in resource constrained settings. Cultural attitudes, prejudice, and social stigma could hamper access to mental healthcare, decrease the help-seeking process (Mutiso et al., 2023). The availability and quality of mental health services are limiting due to economic instability and inadequate infrastructure in the systems of community health. An ecological approach that involves individual, interpersonal, community and systemic influences of people is of key importance to holistic planning of mental health treatment in Kiambu County. This approach enhances designing multi-sector initiatives that integrate health, education, social protection and involvement of the community as a way of improving mental health results.

Common Misconceptions about Mental Health

Despite the rising awareness, mental health is still a matter of shame and misunderstanding that causes hindrance toward proper care and support. The biggest myth is that mental health ailments

are related to personal weakness or moral failings making it a stigma and discouraging individuals in seeking help (Corrigan & Watson, 2021). This myth undercuts appreciation of the validity of mental health illnesses as a state of medical conditions requiring many different causes and influences, such as hereditary, environmental and neurobiology. Such beliefs can even lead to late treatment, reduced compliance to care, and poor relationship between patients and their providers in the end compromising health outcomes in Kiambu County in its health facilities.

One of the most common fallacies is that mental disease is not common or there are some few individuals who are affected by mental illnesses. Based on epidemiological data, mental disorders are everywhere in the world, causing much disease burden to the world (Steel et al., 2020). Such under estimation lessens the urgency of adding mental health services to primary care and allocating sufficient resources. The only way of mending these beliefs is by introducing therapeutic community education, awareness creation, and training medical practitioners to create an environment whereby mental illness is a common problem and taken as seriously as physical health.

Importance of Mental Health Awareness

Another important strategy of improving health outcome and reducing stigma in the communities is increase in mental health awareness. Mental health awareness activities educate the population about the issue, common conditions, and available interventions to intervene at an early stage, which contributes to the early detection of symptoms and help-seeking behavior (Patel et al., 2021). There is a greater need to realize that in Kiambu County where the concept of mental health treatments is still hitting its infancy stages in the public health system, increased knowledge will allow individuals and families to overcome cultural barriers and assumptions that often stop them from seeking treatment. Also, raising awareness contributes to the normalization of the discussion about mental health, resulting in more open and congenial those situations in the field of healthcare and among the population.

Knowledge of mental health is capable of not just offering benefits at the individual level but also transformational at the system level through informing the policy agenda and allocation of resources. The greater the awareness of the mental health needs raised through advocacy and education by governments and healthcare providers, the more likely they will be to integrate mental health into non-specialized healthcare systems and increase funding on specialist

treatments (Jenkins et al., 2022). This can lead to better infrastructure, competent individuals, and the provision of all kinds of services within the institution in Kiambu County, and, thus, generate better mental health among the community. The awareness of mental health is a preventive and facilitating element that bridges the gap of unmet needs and available care of high quality.

Social Demographic Characteristics for Mental Healthcare and Treatment

Socio-demographic characteristics of service providers in the health care segment are instrumental in the determination of the process of delivery and accessibility and the efficacy of mental health care services within the confines of the health institution. The age, gender, educational achievement, and work history were the attributes that strongly affected how providers perceived mental health and their possible success in working with patients and being competent in providing proper care (Alegria et al., 2020). In Kiambu County, young healthcare practitioners can be more knowledgeable about new training methods and have fewer prejudices, but they often do not have much experience in the field. Elder providers, on the contrary, were usually more clinically knowledgeable at the cost of older concepts of mental illness, particularly in culturally sensitive instances. The aspect of gender also came into play with the female healthcare staff usually displaying a higher score in being more approachable and understanding in mental healthcare exchanges and this could be a contributing factor in having higher disclosure rates of the patient and in males showcasing more tendency of being clinical and being attracted towards gender roles as defined in the traditional sense (Mojtabai et al., 2021).

Educational level and occupation of healthcare professionals affected the capability of providing mental health services. Providers with higher level credentials, i.e. doctoral degree in psychiatry, psychology or nursing, often had better mental health literacy and were better able to conduct accurate diagnosis and handle complex psychiatric cases (Chen et al., 2023). People with only a general medical or nursing education, in general, had no specialized skills in mental health, which could lead to either insufficiently frequent diagnosis and treatment of mental problems or wrong treatment. The mental health of the providers and quality of services provided was influenced by the employment conditions like job security, amount of work, provision of services by the institutions etc. The healthcare practitioners who felt job insecurity or lacked the support systems were at a higher risk of burnout, reduced motivation, and patient engagement. It was important to

understand the socio-demographic profile of mental health service providers within the Kiambu County medical facility to enable the tailoring of the professional development programs, equitable resource allocation, and design of strategies to enhance the provision of the desired services within different health facilities set-ups.

Available Resources for Mental Health in Public Healthcare Facilities

Public healthcare institutions in Kiambu County are progressively augmenting their mental health resources, however considerable deficiencies persist. Human resources focused on mental health typically comprise clinical officers, nurses with fundamental mental health training, and a restricted number of trained psychiatrists and psychologists (Mwangi et al., 2022). In light of the scarcity of specialists, task-shifting strategies have been adopted to enable non-specialist health workers to deliver fundamental mental health care, thereby enhancing coverage in resource-limited environments. Nonetheless, obstacles include insufficient training, oversight, and fatigue among healthcare professionals continue to impact service quality and sustainability (Chen et al., 2023).

Infrastructure and material resources exhibit significant variability among public facilities in Kiambu County. Although certain health centers possess specialized mental health sections and counseling rooms, numerous facilities lack private areas suitable for confidential discussions (Wangari et al., 2023). The availability of psychiatric drugs is irregular, frequently obstructed by supply chain disruptions and financial limitations, so compromising continuity of therapy. Moreover, fundamental diagnostic instruments and psychosocial support resources are frequently inadequate or antiquated (Alegría et al., 2020). Mitigating these resource constraints necessitates strategic investment, enhanced supply chains, and policies that emphasize the integration of mental health within primary care services (Steel et al., 2020).

Current Mental Health Services Being Offered Within Public Health Care Facilities

Public health facilities in Kiambu County provide a restricted although expanding array of mental health services. Fundamental screening for common diseases, including depression, anxiety, and substance use disorders, is generally performed in outpatient departments, where qualified nurses and clinical officers utilize standardized evaluation methods (Ndetei et al., 2021; Muriithi et al., 2023). While several hospitals have started to include mental health services into general primary care, the lack of fully functional psychiatric units in the majority of centers limits the provision of

comprehensive mental health care. Referral systems are present for more intricate cases; nevertheless, they are compromised by inadequate transit logistics, staffing shortages, and inconsistent communication throughout facility tiers (Mwenje & Mutiso, 2022; Ndetei et al., 2021).

Pharmacological intervention is fundamental to mental health care in public institutions, with pharmaceuticals including antidepressants and antipsychotics used for disorders such as schizophrenia, bipolar disorder, and major depression (Kamau & Wainaina, 2022; Okeyo et al., 2023). Frequent stockouts, inadequate inventory management, and disjointed supply chains frequently impede treatment continuity. Psychotherapy services are essential for comprehensive care, although they are rarely accessible due to a significant deficit of psychologists and professional counselors within the public health system (Mwenje & Mutiso, 2022; Mutiso et al., 2021). Rectifying these deficiencies necessitates investments in the development of the mental health professionals, enhancement of drug procurement procedures, and intentional extension of community-based psychosocial support frameworks.

Challenges Experienced in the Delivery of Mental Health Care Services in Public Health Care Facilities

There is a significant systemic barrier in Kiambu County which prevents an effective delivery of mental healthcare by public health institutions. Perpetual shortage of trained human workforce in the field of mental health, psychiatrists, clinical psychologists, and psychiatric nurses, imposes crucial burden on the available employees, which leads to high workloads and burnout (Ndetei et al., 2021; Mutiso et al., 2023). Poor infrastructure also exacerbates this scenario: some clinics used by people to treat their health issues lack a place to hold a closed discussion and the necessary diagnostic tools, which reduces the level of confidentiality and negatively affects the effectiveness of assessments and measures (Wangari et al., 2023; Mwangi et al., 2022). Moreover, the unstable nature of funds and the limited budget that usually includes mental health means that recurring costs such as the purchase of psychotropic drugs, maintaining facilities, and continuous training are delayed, thus interfering with service continuation (Kamau & Wainaina, 2022; Okeyo et al., 2023).

In combination with a resource constraint, barriers to the coordination and integration of mental health services exist in organizations and policy. Links between primary care centers and special facilities are often inadequately described and undermined with funding, and referrals are associated with delays that exacerbate the conditions of patients (Ndetei et al., 2021). The negative attitude toward the patient and the lack of mental health literacy of some medical workers lead to stigmatized or un-patient-centered approaches, as it discourages patients to seek future care (Mutiso et al., 2023; Corrigan & Watson, 2021). There are national policy frameworks that remain ineffective due to the absence of meaningful implementation tools at the county level meaning that the people operating the facilities are without proper guidelines or support to build on the facilities and develop standard approaches to mental health care delivery (Jenkins et al., 2022; Wangari et al., 2023).

Connection of Mental Health Services Provided at Public Health Care Facilities and Availability of Resources

This is because of the availability of adequate resources which affect the level and quality of mental health treatments done within the public bodies of healthcare within Kiambu County. This is because with proper infrastructure, human capacity and drug availability, the institutions become better placed in being able to deliver comprehensive mental health care including early screening, diagnosis and treatment, and follow-ups (Mutiso et al., 2023; Ndetei et al., 2021). Conversely, the limited resources create significant inequalities, which result in the disintegration of services and frequent interruptions that undermine patient outcomes (Kamau & Wainaina, 2022; Mwangi et al., 2022). This is a resource to service relationship that indicates that both physical and human resource intensive investments should take place on county level to enable entire inpatient treatment of mental health care.

Besides, service delivery and availability of resources are interdependent, thus improving the level of patient satisfaction and efficiencies in the process of service delivery. Facilities armed with modern diagnostic equipment and a composite mental health workforce can implement evidence-based interventions and individualized treatment strategies, which have proved to be effective in increasing the rate of recovery and reducing relapse (Wangari et al., 2023; Okeyo et al., 2023). On the contrary, the inadequacy of resources often leads to unbalanced staff, long queues, and suboptimal standards of care, thereby enhancing the stigma and mistrust associated with the state

of mental health services (Mutiso et al., 2023). Accordingly, resource adequacy is not merely a logistic issue but an essential element of the whole mental health care continuum.

Independent Variables

Factors That Influence Access to Mental Wellbeing Care and Treatment Services

Sociodemographic Factors

Gender, age, level of education and income are all part of sociodemographic characteristics, which significantly influence access to mental health care and treatment care in Kiambu County. People with lower socioeconomic status often face numerous barriers related to the lack of health literacy, access to financial resources, and more practical problems through access to transportation and maintaining costs to attend mental health clinics (Mutiso et al., 2023; Ndetei et al., 2021). The limitation or stigma women find based on the cultural expectations limits their access to the required mental health services (Kamau & Wainaina, 2022; Mwangi et al., 2022). Not only young people but also older generations are equally affected because in some cases, young people can be dismissed as having some trivial phases whereas elderly patients are often overlooked or incorrectly diagnosed because of stigma and lack of geriatric mental health professionals (Okeyo et al., 2023; Wangari et al., 2023).

In addition, educational levels determine accessibility to mental health services considerably because persons with a higher education level are better trained in identifying symptoms, what to seek assistance with and how to overcome stigma-related concerns (Mwenje & Mutiso, 2022; Musyimi et al., 2021). Access to care is also conditioned by the occupational cadre; workers with insurance cover and formal employment have a better avenue to high-quality services than casual workers or the unemployed who are forced to rely on public institutions that are highly burdened (Ndetei et al., 2021; Kamau & Wainaina, 2022). Such interactions of sociodemographic determinants create multidimensional access gaps, which warrants a need to consider guidelines (context-specific mental health solutions to fit diverse community populations).

Human Resource Wellbeing

According to availability and quality of mental health professionals also affects access to care. Institutions that have specialized staff such as psychiatrists, psychologists and psychiatric nurses

have an ability to offer holistic cures (Mutiso et al., 2023; Musyimi et al., 2021). However, most of the facilities operated by the general population in Kiambu County are understaffed, and they lack adequate experienced mental health professionals, with most of the roles around the challenging patients being left in the hands of general nurses to cover, even though it is not in their scope (Ndetei et al., 2021; Wangari et al., 2023). This is further compounded by there being a lack of organized succession planning in the case of mental health, whereby the knowledge that is lost after a practitioner retires does not receive a presence to fill the gap, thus leading to disruptions in services (Mwenje & Mutiso, 2022; Mwangi et al., 2022).

Moreover, well-being of the existing human resources also affects the process of care provision. Employees, who are often not well-equipped to work in overburdened conditions with an overwhelming number of cases that they have to handle and inadequate psychosocial support, may experience burnout or lack of job satisfaction, thereby compromising the quality of engagement with patients (Okeyo et al., 2023; Kamau & Wainaina, 2022). In order to overcome these challenges, it is important to make targeted investments in training, mentorship and systems that support mental health workers. These include professional continued development and planned professional growth opportunities that maintain higher morale and retention.

Wellbeing Infrastructure and Financing

The basic access to mental health services relies on infrastructure, including transportation systems, referral systems, and essential goods. The lack of or poorly maintained infrastructure is one of the problems that impedes proper referrals and follow up, particularly among rural citizens in Kiambu County (Mutiso et al., 2023; Ndetei et al., 2021). In the rural areas, a patient is likely to face the problem of excessive commute and high travel costs, unreliable communication networks, which discourage the patient against seeking regular therapy (Mwangi et al., 2022; Wangari et al., 2023). Without equipment and medicine to perform tests or prescribe therapy, care levels drop significantly, which leads to either treatment delay or the improper care received.

The financing is also a very important role. Although Kenya has made some efforts to integrate mental health into the national health insurance schemes, there still exists a gap in the implementation of the same, at the county level (Musyimi et al., 2021; Kamau & Wainaina, 2022). Even now, many patients still have to use out-of-pocket spending to cover the cost of their basic treatment and medicines which makes prolonged treatment unaffordable to the low-income

population. The funding of mental care remains far below the level of funding on physical care programs hindering development of sustainable mental healthcare infrastructure (Ndetei et al., 2021; Okeyo et al., 2023). That is why, it is crucial to enhance the infrastructural and financial systems that will deliver the access to mental services equally.

Dependent Variables

Access to Mental Wellbeing Care and Treatment Services

There are institutional, cultural, and structural injustices that are depicted by gaps in access to mental health care and treatment services in Kiambu County. Mental health care often addresses the population of public health facilities as a first point of contact; however, most of them are not adequately equipped to deal with a wide range of mental health conditions (Ndetei et al., 2021; Mutiso et al., 2023). Many patients report a long wait, inconsistent access to medication, and the lack of specialized staff, all of which harms the quality and continuity of care (Musyimi et al., 2021; Wangari et al., 2023). Furthermore, there are sub-counties that do not have specific mental health centers and therefore the patients are required to travel far or even forefeit the treatment.

Stigma continues to be a significant non-structural impediment to access. Cultural misconceptions and ingrained ideas on mental illness result in prejudice, isolation, and a preference for traditional healers over biomedical services (Mwenje & Mutiso, 2022; Kamau & Wainaina, 2022). This inhibits candid discussions regarding mental health, particularly among males and youth, who may internalize their distress owing to apprehension of being perceived as weak or irrational (Mwangi et al., 2022; Okeyo et al., 2023). As a result, individuals frequently pursue assistance alone at severe stages of mental illness, diminishing the likelihood of beneficial interventions. Effective access necessitates both systemic health improvements and culturally proficient outreach initiatives.

Policy structures also influence access. Despite Kenya's Mental Health Policy (2015–2030) and the accompanying amendments under the Mental Health Amendment Act 2022 outlining a framework for enhancing mental health systems, execution at the county level is inconsistent (Ndetei et al., 2021; Musyimi et al., 2021). Most counties, including Kiambu, have not yet established dedicated mental health departments, resulting in mental health services being predominantly integrated into general outpatient departments, which diminishes their visibility and

prioritization (Kamau & Wainaina, 2022; Wangari et al., 2023). Furthermore, insufficient resource distribution at the county level hinders the implementation of vital services, particularly in underprivileged neighborhoods.

Digital access is becoming both a remedy and a dilemma. The emergence of telepsychiatry and mobile health platforms may effectively address geographical and logistical barriers in the provision of mental health services (Mutiso et al., 2023; Musyimi et al., 2021). Nonetheless, digital literacy, internet accessibility, and confidentiality issues impede equal adoption. People in rural regions or low-income demographics frequently lack access to cellphones or reliable internet connections, hindering their capacity to utilize remote consultations (Mwangi et al., 2022; Okeyo et al., 2023). Consequently, digital health policies must be executed with a focus on equality to prevent the aggravation of existing disparities.

Moderating Variables

External Factors

Political Factors

The significance of the political will in impacting the level of mental health agenda in the public health systems is important especially in the case of a system of decentralized governance as the case of Kenya. Mental health has been sent repeatedly in the shadow of other major health factors in Kiambu County such as infectious diseases and maternal health (Ndetei et al., 2021; Musyimi et al., 2021). Counties that have attempted to decentralize and prioritize mental health have been behind due to budget or lack of political interest despite the national strategy of the Mental Health Amendment Act 2022 (Kamau & Wainaina, 2022; Mutiso et al., 2023). In addition, a change of leaders is a common occurrence that lacks coherence in policies and sustenance of investments in mental health infrastructure.

Budget allotment as a politically-oriented move also continues to worsen disparities in service provision across the counties. In some cases, funds that are supposed to be spent on mental health providers are diverted to other areas, which are politically advantageous, including infrastructure or even agriculture (Okeyo et al., 2023; Wangari et al., 2023). These attitudes threaten the existence of mental health initiatives, recruitment of specialized individuals and building of effective community-based mental health clinics. Policy formulation depends on political

goodwill and must be essential in ensuring that financial and physical resources that are involved in supporting mental healthcare are constantly available.

Socio-Cultural Factors

Cultural patterns and beliefs have such a deep impact on comprehensions and utilization of mental care. Most of the communities in Kiambu believe that mental illness is more likely to be associated with spiritual possession, witchcraft, or even lack of morality, as opposed to how it is being seen as a curable health condition (Mwangi et al., 2022; Mwenje & Mutiso, 2022). These beliefs create fear and embarrassment, hence delaying or discouraging the individuals to seek official treatment. Such stigma is particularly typical of ageing individuals and rural communities, as older people and people living in rural areas might seek traditional or religious interventions over healthcare interventions (Kamau & Wainaina, 2022; Okeyo et al., 2023).

Moreover, the access inequalities are enhanced by gender relations. Women are more likely to share the discomfort related to psychological symptoms and use health care, whereas men tend to forego access to care even when the symptoms are severe due to social constructs of masculinity (Musyimi et al., 2021; Ndetei et al., 2021). In addition, kin structures and social discourse often put the mentally ill person on the periphery depicting them as burdens or deviants. Such socio-cultural limitations require culturally responsive consciousness programs and community participation programs that will have legitimizing effects on seeking mental health care.

Economic and Technological Factors

The provision of mental health care immensely depends on the economic issues as far as its supply and demand engagement are concerned. Major sources of stress are poverty, unemployment, and financial insecurity that predispose people to mental illness (Wangari et al., 2023; Mutiso et al., 2023). Often, the poorer sections of society have to face obstacles to affordable healthcare because of the direct cost, like transport, consultation, and pills. The economic shortage of mental health care results in understaffed and poorly equipped institutions, lack of essential medicines, especially at low-income sub-counties (Musyimi et al., 2021; Okeyo et al., 2023).

Technology presents a growing opportunity of improving mental health access. Tablets, smartphones or phones with MHS apps and telepsychiatry video platforms have been found as inexpensive and scalable solutions to discriminatory treatment disparity (Mutiso et al., 2023;

Mwangi et al., 2022). However, such approaches are associated with limitations. The disadvantaged groups such as old age people, people with limitations, and people living in a low-resource setting continue to face digital exclusion. In addition, the fears of data privacy, secrecy, and lack of digital literacy present a barrier to wide usage (Ndetei et al., 2021; Musyimi et al., 2021). Incorporation of technology in mental healthcare requires an accompanying detailed education, investment in the infrastructure and regulations to protect it.

Empirical Literature

Aydin et al., (2003), reviewed the attitudes of staff of a Turkish teaching hospital towards mentally sick patients. Psychiatric problems were determined to be both a significant health burden and that non-psychiatrist healthcare providers in general health care establishments often give treatment to mentally unstable patients. Within many healthcare settings, the process of referring patients to psychiatrists or any other mental health professional tends to be stealthy subsequent to the screening of such patients by non psycho mental doctors. This is often caused by a number of factors such as the comfortability of patients to use non-psychiatric doctors in a normal healthcare setup, the need to avoid the stigma that comes with mental illness and delays of psychiatric appointments. According to the study conducted by Schulze (2007), researchers found out that stigma and mental health professionals had a complicated relation. His findings suggest that although non-psychiatric personnel in general medical settings acknowledge their need to intervene in mental health issues, they may struggle to accurately diagnose these diseases due to insufficient knowledge and time limitations when assessing patients exhibiting psychiatric symptoms. The inability to identify a mental disorder in a general healthcare setting has been associated with negative preconceptions and stigmatizing attitudes among hospital staff who are knowledgeable about schizophrenia and depression.

Nyamai and Mbwayo (2021) performed a mixed-methods study to assess the incorporation of mental health services inside primary care facilities throughout multiple counties in Kenya, including Kiambu. Their findings indicated that although policy frameworks are established to facilitate the integration of mental health services, execution is inconsistent. The research employed structured interviews with healthcare professionals and quantitative evaluations of facility-level data, revealing considerable variations in the availability of psychotropic drugs, trained mental health staff, and standardized screening techniques. The researchers emphasized

that stigma among healthcare professionals and insufficient in-service training are significant obstacles to effective service delivery. The study emphasized the necessity for intentional enhancement of mental health systems, especially via task-shifting strategies that equip lower-cadre health practitioners with mental health training. The authors recognized a deficiency in the longitudinal assessment of these strategies' success, particularly in resource-limited settings like as Kiambu County. The gap will be essential to be corrected by future research where the researchers will be able to assess patient outcomes after being subjected to intervention. These authors suggested a culturally-sensitive approach, which takes into consideration the social-cultural peculiarities affecting mental health within the local population.

Authored by Wambua and Mutiso (2022), the study examined the trend of mental health care provision and use at Kiambu County-based representative institutions through cross-sectional survey of 500 outpatient clinics. Quantitative analysis showed that less than 40 percent of those persons who showed symptoms regarding mental health received appropriate referrals or treatment. The investigation showed serious gaps in the screening process and many patients did not receive any mental assessment or did not receive them timely. The authors attributed such failures to the lack of mental health training of medical workers in general medical practices and insufficient awareness of mental health in patients. The authors by Wambua and Mutiso (2022) discussed structural issues such as insufficiency of personnel and limited access to psychiatric medication that remarkably hinders service delivery within the confines of the public setting. Their conclusions denote that improving both healthcare practitioner approaching and the general population mental health literacy can raise early recognition and referral rates. The study established an existing research gap on the effectiveness of community-based mental health education programs in improving treatment uptake especially in the semi-urban counties including Kiambu. This implies the need of future longitudinal studies to evaluate the treatments which relate community sensitization with outcomes of inpatient care.

Kamau and Njoroge (2023) studied access barriers and quality of mental health care services in public hospitals around the Kiambu County with the help of a qualitative descriptive design. They studied this aspect by using in-depth interviews of healthcare providers, administration, and patients to offer information on matters concerning service delivery. The findings showed that the available mental health treatments seem to be available in various locations but the quality, and

comprehensive nature of treatment remain insufficient. Among highlighted major challenges were a shortage of well trained mental health specialists, fragmented referral system and inconsistency in medicine supplies. Participants indicated insufficient psychosocial support services, adversely affecting treatment adherence and recovery rates. The study observed that infrastructure deficiencies, including the absence of specialized mental health wards and counseling areas, exacerbated patient dissatisfaction and stigmatization within facilities. Kamau and Njoroge (2023) underscored the significance of comprehensive mental health service models that amalgamate clinical care with community-oriented support systems. They highlighted a research deficit regarding the implementation of mental health policy at the county level, recommending that future studies examine governance and resource allocation frameworks that affect service quality in public health facilities.

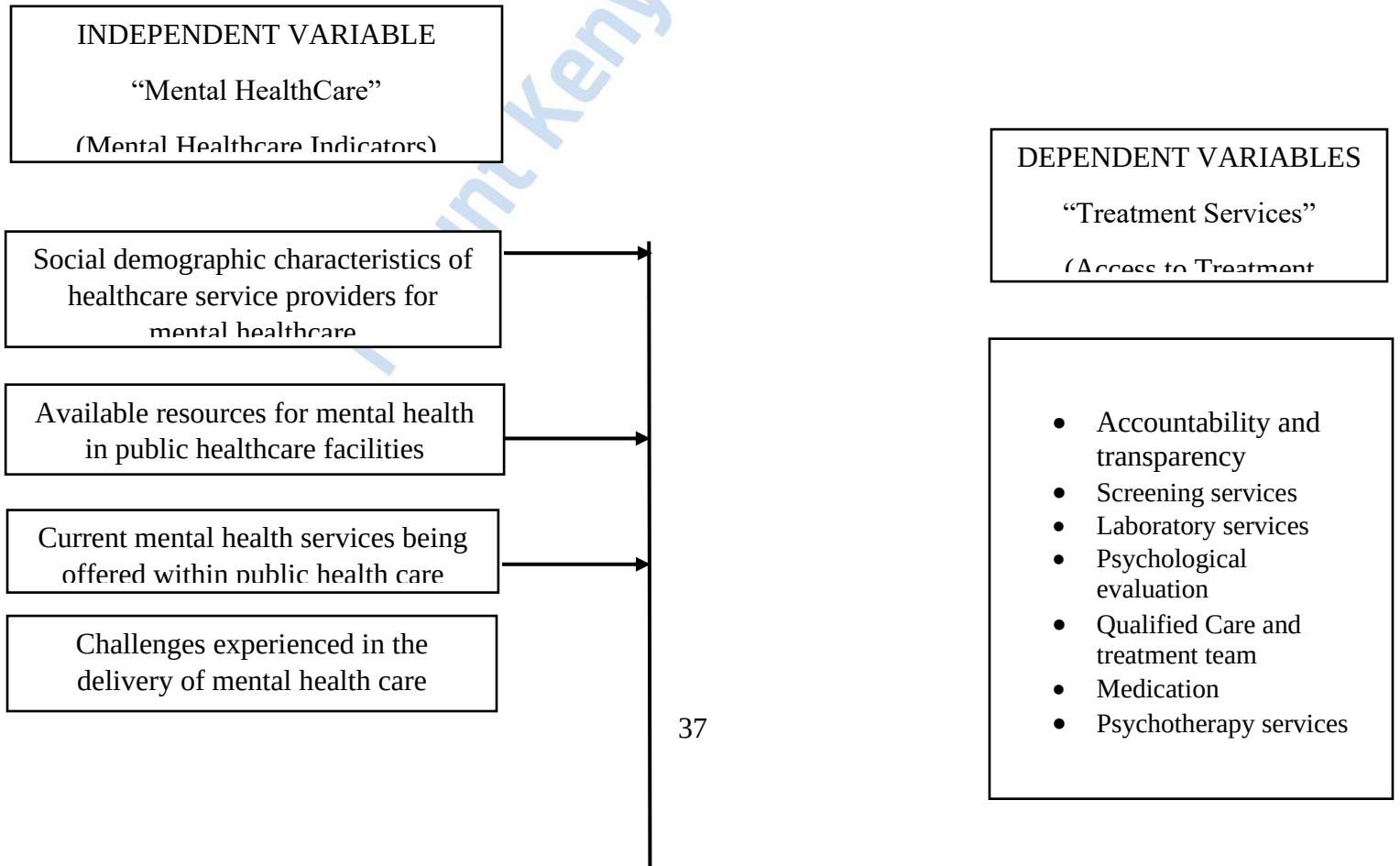
Thiru and Yad (2005) found in their study on the resilience of mental health professionals to stigmatizing perspectives that stigma functions as a symbol indicating an individual's perceived inferiority to others. This approach is also popular among healthcare professionals across diverse cultures. Gaining understanding about mental illness does not inherently reduce the stigmatizing attitudes displayed by primary healthcare professionals. A clear association exists between societal ignorance and discrimination toward individuals with mental illness, characterized by the perception that they are dangerous, unpredictable, less competent, and unable to lead productive lives. As a result, this results in an increase in discrimination against individuals with mental disorders, even if healthcare professionals have acquired greater insight in recognizing, diagnosing, and treating mental health conditions. In his study on evidence-based practice and policy, Gambrill (2006) unequivocally illustrated the persistence of unfavorable views towards those utilizing mental health care. This may be ascribed to a deficiency in comprehension among non-psychiatric healthcare practitioners concerning the biological and environmental determinants of mental disorders.

Jenkins et al. (2010) found that 25% of outpatients and up to 40% of inpatients in a rural area of Kenya experience common mental disorders. These figures demonstrate that mental health disorders are widespread in various healthcare facilities in Kenya. The researchers further suggested that improving awareness, identification, aid, and treatment for this spectrum of conditions should be a primary focus for advancing mental health. Mehta and Clement (2016)

stated in their study on effective therapies to reduce mental health-related stigma and discrimination that psychotropic medications are essential in holistic care, providing treatment options for patients with mental diseases. Psychotropic drugs are essential for symptom management, expediting recovery, reducing impairment, and preventing relapses in mental diseases. A principal challenge in aiding individuals with mental illness in poor and middle-income countries is ensuring a reliable and enough supply of appropriate, safe, and affordable medications. The deficiency of essential pharmaceuticals constrains the delivery of mental health services. Approximately 25% of low-income countries do not provide necessary antidepressant drugs in primary care, despite the necessity of sustained pharmaceutical availability for the effective pharmacological treatment of many conditions.

These research have disclosed discrepancies in the kind and extent of societal disapproval linked to diverse psychiatric diseases among distinct groups of healthcare providers. This study aimed to assess the delivery of mental health care and treatment services at public health facilities in Kiambu County, Kenya. This information would be useful in formulating policies for training, management, and service delivery for mental health illnesses in general medical facilities. Moreover, it would enhance the current global statistics regarding this subject.

Conceptual Framework



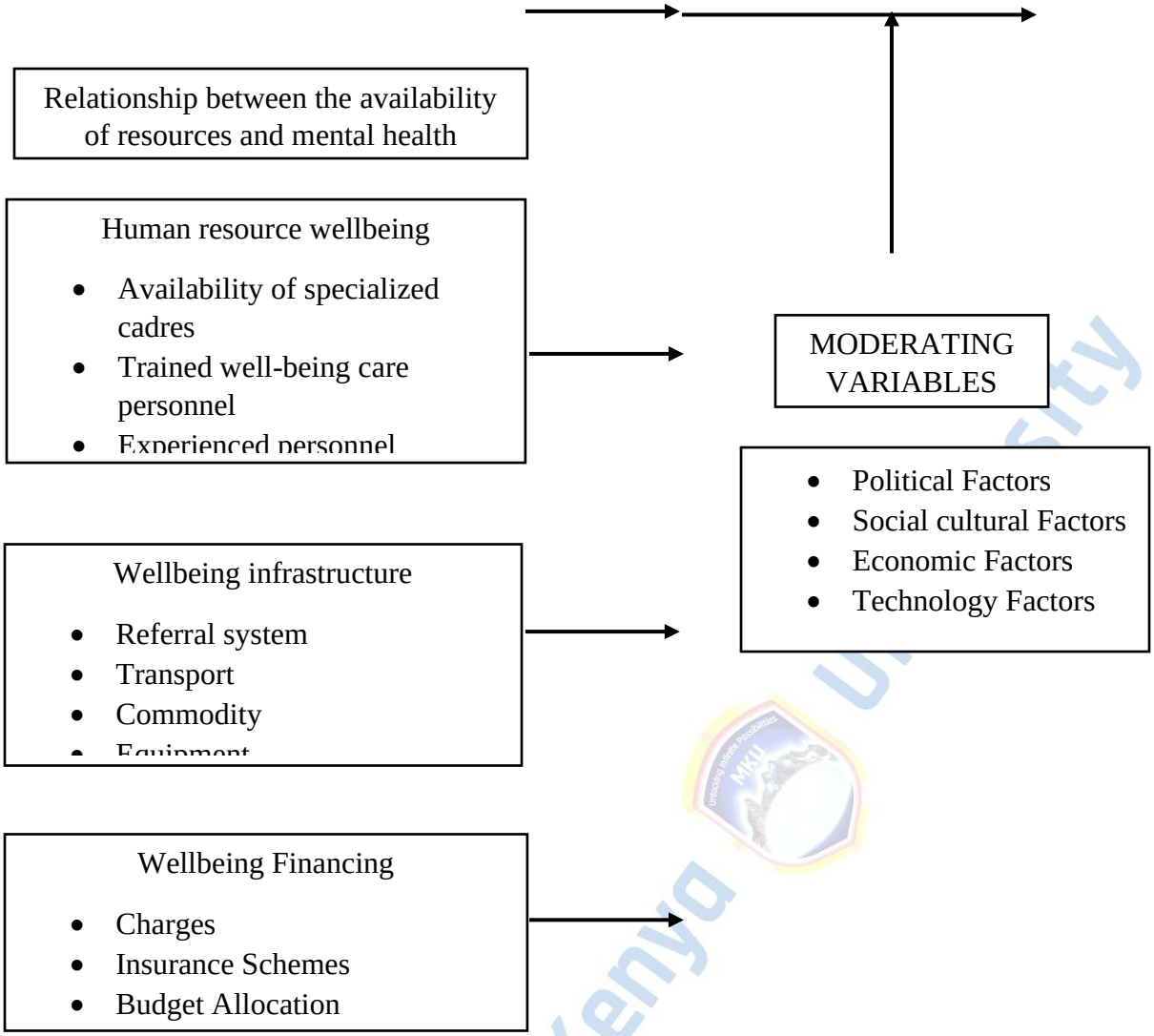


Figure 1 Conceptual Framework of the study

Discussion of Conceptual Framework

The conceptual framework for the study entitled "Assessment of Mental Health Care and Treatment Services in Public Health Facilities in Kiambu County" delineated a structured representation of the interactions among numerous elements affecting the accessibility and quality of mental health treatment services. The framework comprised three primary components: independent variables, dependent variables, and moderating variables. Each of these components contributed uniquely to elucidating the delivery and accessibility of mental health services within the public health framework of Kiambu County.

The independent variables denoted the principal mental health care indicators evaluated in the study. This encompassed the socio-demographic attributes of mental health service providers, the

resources accessible for mental health in public facilities, the characteristics of existing mental health services, the obstacles faced in providing mental health care, and the correlation between resource availability and service delivery. The indicators were subdivided into components including the presence of specialized mental health personnel, training frequency, existence of referral systems, availability of transportation and diagnostic equipment, and financial mechanisms such as fees, insurance schemes, and budget allocations. They are variables that had a major influence on the quality of mental health care, its efficacy, as well as accessibility. The research paper identified the underlying providers and barriers affecting the delivery of care on mental health across the system.

The outcome or result of the independent variables was the dependent variable in the framework and this was termed as "Access to Treatment Services." This was checked along various fronts, including accountability and transparency in service delivery, the availability of screening and laboratory routine tests, the availability of psychological assessment, the presence of qualified care teams, access to the essential medications, and psychotherapy services provided. A combination of these factors determined the extent to which individuals in Kiambu County could receive appropriate and effective timely mental health care in the available public health institutions. The dependent variable played a critical role in the assessment of the effectiveness of the current mental healthcare infrastructure and human resource that led to substantial positive outcomes in the area of service delivery among patients in need.

The moderating variables influenced strength or direction of the connection between the independent and dependent variable. These included politicking factors, societal-cultural factors, economic conditions and technical ability. The cash expenditures were determined by political will and the implementation of the mental health policies either inadequacy or diversion. The socio-cultural concepts affected the general opinion on mental illness and predetermined the help-seeking behavior. An economic situation impacted cost and availability whereas variety of technology limitations or advances influenced the administration of mental healthcare through such tools such as electronic health records or even telepsychiatry. The moderating variables escalated or reduced the effects of the independent variables on the accessibility of treatment, and that highlighted the complexity involved in the delivery of mental care.

The relationship between the elements of the framework emphasized the rate of dependence between the elements of institutional, professional and systemic factors regarding its impact on mental health outcomes. The operational basis on which the public health facilities relied to deliver service were the independent variables consisting of human resources, infrastructures, and financing. The dependent variable represented a final outcome: was the use of these services by the patients or not. Moderators affected the effectiveness of converting core factors into other accessible care. This conceptual framework allowed an in-depth assessment of gaps and opportunities in the area of public mental health care in Kiambu County and provided a theoretical ground on which to present the improvements in line with the socio-political and economic realities of the county.

Summary

This chapter was composed of the literature review which elaborated the theoretical framework, General literature review, Empirical literature and Conceptual framework that addressed the assessment of mental health care and treatment services in public health facilities in Kiambu County.

CHAPTER THREE

RESEARCH METHODOLOGY

Introduction

The chapter described the overall assessment of mental health care and treatment facilities located within the regions of the Kiambu County in Kenya. The study design which was used in the article attempted to provide excellent understanding of the delivery of mental health treatment, through qualitative and quantitative approaches to increase precision and accuracy. The focus was to demonstrate valuable ideas that might enjoin evidence-based suggestions on advancing mental health management in the locality. In this chapter, the essential outlines of the research methodology have been produced such as selection of the study locations, recruitment procedure of the participant in the study, data collection activities, and the analytical frameworks that are going to be adopted. The research methodology was clearly explained to enable the reader to understand how the research objectives were attained hence leading to the broader argument on how mental health treatment in Kiambu County should be conducted.

The choice of research method was prompted by the necessity to summarize the complexity and multi-dimensionality of delivering mental health services. In an attempt to explore the multilateral dynamics of mental health, a mix of the qualitative and quantitative data were collected to examine the experiences of the mental health services users and healthcare professionals as well as the institutional factors affecting the delivery of structured mental health care within the settings of the public health facilities in Kiambu County. This combination of approaches allowed achieving the purpose of the study, which was to detect the areas of service deficit, system-related barriers, and opportunities to improve the practice and policy. The ethics of the research and the protection of the rights of the participating individuals were given primary consideration and the study described how they are to get the ethical approval, how to obtain an informed consent, how confidentiality and data privacy are to be upheld throughout the research. The following chapters explained the specific steps that were taken in the course of conducting the research in order to enhance understanding of the mental health care and treatment services in Kiambu County.

Research Methodology

This research used mixed-methods research design which was used to thoroughly evaluate the mental health care and treatment services provided in Kiambu County in Kenya. The research methodology was based on a combination of qualitative and quantitative methods to adequately evaluate the current situation of mental health services with the participation of both the service users and the medical workers. A purposive sampling strategy was used to select the study location referred to the variety of health services in the area. The data collected were qualitative through in depth interviews. Such approaches allowed studying personal stories and common experiences, as well as elucidating to a large extent the real situation of people receiving the services and considering the experience of healthcare professionals. Thematic analysis provided an opportunity to analyze the qualitative data and identify themes and patterns behind answers provided by the participants. It used standardised questionnaires to collect quantitative data form a representative sample of mental health care users and health care givers.

The employed surveys employed high-quality tested surveys and evaluated various aspects, including accessibility of services, quality of care, and satisfaction of a user. The quantitative data were analysed using statistical procedures, using descriptive statistics and inferential tests which led to examination of trends, relationship and correlations. Ethical integrity was ensured in the study by obtaining permission to conduct the study by the concerned ethical review board. All the

subjects were made to sign informed consent forms before data was collected. Furthermore, the disclosure protocols of high level were internalized to protect the anonymity and privacy of each of the participants. The study was in line with established requirements of the ethical principles, comprising beneficence, autonomy, and equality. A mixed approach was applied in the research to have an overall picture of the strengths and weaknesses and opportunities of mental health care and treatment services in the Kiambu County. The combination between the qualitative and the quantitative data increased the accuracy and reliability of the results, thereby supporting evidence-based recommendations on how mental health care can be improved in the area.

Research Design

Arguing about research design, Saunders, Lewis, and Thornhill (2019) stated that it consists of the objectives and the methods trusty in the investigation, including data collection, analysis, and presentation. In this study, the descriptive research design was applied. According to Berg and Lune (2015), descriptive type of study design is a scientific process, which involves observing the behavior of a research subject and describing it by summarizing it. The researcher used the descriptive research method to study the evaluation of mental healthcare and care service, as a whole, in the public health institutions within Kiambu County in Kenya. Descriptive research design served as a research strategy of addressing the main issue of the research using a variety of assumptions and methods. The research approach was utilizing research techniques that involved naturalistic observation, case studies, interviews as well as questionnaires in deriving results. The descriptive nature of the study enabled the researcher to come up with the major research topics and explain them. Such design allowed the use of the qualitative and quantitative ways of data collection to make a detailed analysis, explanation and presentation of the results, with the level of research quality being high.

Location of the study

The study area included the assessment of mental health care and treatment services in public health facilities in Kiambu County, Kenya.

Population of the Study

A population was defined as a group of people, events, or objects that shared some observable characteristic (Clark, Foster, Sloan, & Bryman, 2021). In other words, a population referred to everything that conformed to a given criteria (Denscombe, 2021). The researcher began by

identifying the demographic group to whom the findings would be applied (Hair, Black, Babin, & Anderson, 2015). The study population for this research consisted of 3,643 health workers from 13 public hospitals within Kiambu County (County Government of Kiambu, 2023), as presented in Table 3.1.

Table 3.1: Population of the Study

Description	Population	Target Population	Sample Size Population
Charity Medical Centre	156	11	8
Engineer County Hospital	259	19	13
Gatundu Level 5 Hospital	650	38	25
JKUAT Hospital	150	24	19
Kalimoni Mission Hospital	140	14	9
Kiambu District Hospital	190	15	8
Kihara Sub District Hospital	125	13	9
Lari Level 4 Hospital	449	26	17
Mary Help of the Sick Mission Hospital	320	13	9
Ruiru Level 4 Hospital	395	24	13
SCMS Ndundu Mission Hospital	234	17	10
Thika District Hospital	310	19	14
Tigoni Level 4 Hospital	265	22	15
Total Population	3,643	255	169

Source (Researcher, 2024)

Target Population of the Study

The target population was defined as the aggregate of cases within a population that fulfilled particular criteria (Saunders, Lewis, & Thornhill, 2019). From the total population of 3,643 health workers across 13 public hospitals in Kiambu County, the study strategically focused on a target population of 255 health workers who were directly involved in the provision of mental health

services (County Government of Kiambu, 2023). This focused narrowing of the scope meant that data gathering was very pertinent to the research purposes since it involved professionals who had first-hand knowledge and experience in the provision of mental health care. In the process of targeting this particular subgroup, the investigation improved the accuracy and practicality of its results and enabled more valuable implications to be drawn regarding the issues and resources and structural circumstances driving mental health services within the county. This selective design enhanced the internal validity of the study and served as reinforcement of the study to evidence-based policy and practice in the field of mental health in the population.

Sample Population

Sample size means the numbers of individuals or observations drawn to a broader population and turned over to the research study (Connaway & Radford, 2021). It was part and parcel of determining an adequate sample size in the research strategy and technique (Clark et al., 2021). The approach encompassed achieving a balance between the condition of collecting sufficient data that would make it possible to develop meaningful findings and rationalization in terms of resources, time, and effort that would be required to collect and analyze data (Kumar, 2015). An increase in the sample size of the study often increases its statistical power, which helps in more accurate effect identification and increases the value of a study to the population, in general (Kothari & Garg, 2017). However, the sample might have been excessively large including unnecessary spending and feasibility. Instead, a smaller sample size would have been potentially cheaper but less able to discern important effects as well as extrapolate the findings to a broader group of people (Saunders et al., 2019). Depending on the objectives of the study, the nature of the research topic, the necessary level of precision, and the degree of heterogeneity in the population, the optimal sample size was determined (Berg & Lune, 2015). In this investigation, the researcher calculated the optimal sample size as follows:

The desired sample size was determined using the formula of Creswell (2018):

$n = z^2 pq/d^2$

Where-:

n - The desired sample size (assuming the population is greater than 10,000)

z - The standard normal deviation, set at 1.96, corresponding to 95% confidence level

p - The proportion in the target population is unknown; therefore, a proportion of 50 percent will be used.

q = 1.0 – p

d = the degree of accuracy desired, here set at 0.05 corresponding to the 1.96.

In substitution, $n= \underline{1.96^2 \times 0.5 \times (1-0.5)}/ 0.05^2 =384$

The sampled facilities have 255 health workers who deal with mental health issues. Since the total population is less than 10,000, the sample size will be calculated using the formula

$nf = n/(1+n/N)$

Therefore,

$nf = 384/ (1+384/255)$

=153 Health workers

Sample size required is 153

10% Adjustment for non-response

153+(10/100x153) =168.3

Therefore:

Minimum Sample size is =169

Sampling procedure and techniques

A sampling approach denotes the specific technique employed to pick the entities that constituted the sample in the research study (Babbie, 2020). The study utilized several fundamental probability sampling methods, including simple random sampling, systematic sampling, stratified sampling, and cluster sampling (Connaway & Radford, 2021). Non-probability sampling methods encompassed convenience sampling, quota sampling, purposive sampling, and snowball sampling (Creswell, 2018). Purposive sampling, as articulated by Denscombe (2021), entails the researcher using discretion to pick a sample that best facilitates the attainment of the research objectives. This study used purposive sampling which is used to select individuals based on their qualification criteria with respect to the focus of the research topic on mental health care and treatment services among the people who access the facilities in Kiambu County. The inclusion criteria were aimed at individuals, who directly participated or had experience in either delivery or consumption of

mental health services at these facilities. They included mental health care givers such as psychiatrists, clinical officers, nurses and counselors in the sector of public health; as well as those who had received mental health treatment services. In addition, facility administrators who have the responsibility of overseeing mental health operations have been integrated in order to provide comprehensive views of barriers to service delivery and administrative management. The sample size was selected randomly by their willingness to provide thorough fully informed opinions about the study goals. These requirements ensured that the sample population was comprised of the informed and experienced whose will be able to provide holistic and contextually specific data in assessing the situation of mental health care and treatment services at the concerned public health facilities.

Types of data

Data was developed into two different categories; primary and secondary. Primary data refers to any data that are collected directly by the researcher through observation or data collection methods whereas secondary data refers to those materials which are already published or distributed (Kumar, 2015). Only primary data were analysed in the research. The researcher obtained primary data through the research instruments such as the interview guides and questionnaires. One of the most important advantages of the use of primary data was that the researcher could gather data as totally consistent with the purposes of the study. The researcher asked relevant questions which were meant to obtain the necessary information to investigate the research.

Construction of research instruments

The process of data collection was a methodical way of collecting the accurate information to answer the relevant questions and to evaluate the results. The ultimate task was to thoroughly explore and discover everything that is under consideration about a particular issue (Babbie, 2020). Data were collected to answer some research questions, which sought to explain some phenomenon under study (Naomi, 2015). In the study, the researcher administered questionnaires to 159 primary respondents of which were mental healthcare service providers, whereas in-depth interview guide was used to collect data on 10 key informants who were mental healthcare service providers. The questionnaires consisted of a series of both closed and open questions which targeted to collect both the quantitative and qualitative data. Conversely, the in-depth interview guide consisted of open-ended questions which are meant to gather qualitative data. Triangulation

using both qualitative and quantitative dates was important so that the quality of the thesis research report could be enhanced.

Testing for Reliability and Validity

Validity is defined as the accuracy of study on whatever this particular study aimed to measure. The first subcategories were external and internal validity (Babbie, 2020). External validity refers to the ability to extend the results to the specified population whereas internal validity is the reliability of the measurement and evaluation. Both of them were important because they determined the significance and worth of a study initiative (Connaway & Radford, 2021). There are a number of factors that may damage the internal validity of a study; that is why it was necessary to minimize their effect on the course of the investigation. History is the concept that is used to denote unrelated conditions, which can pose threats to the deterioration of performance in the future (Denscombe, 2021). This can be taken as life experiences that changed the mood of the participant and so on. According to Kothari and Garg (2017), instrumental bias is a shift in the instruments during the intervals of measurement that could affect the outcome. This was often the case in behavioral studies where the capability of the experimenter to recognize the occurrence of particular events and making necessary changes to their requirements depended on their education and experience (Naomi, 2015).

The testing effect had the most effect on the internal validity. During the investigation course, the respondents experienced stress often, which may impact the performance. Moreover, their last assessment results might have affected their performance in the current assessment (Berg & Lune, 2015). Experimental studies would have the tendency of counterbalancing tasks in order to decrease their influence on validity. This involved presenting the activities to the participants in a sequence that was different (Hair et al., 2015). External validity refers to how far and in which context the findings of a study can be generalized on various situations, populations, places and measures. Can the result of the study be generalized to a larger scenario? Kothari and Garg, 2017. Scientific research was intended to give generally applicable knowledge concerning the physical universe. There was not an external validity because the results of the findings done in the laboratory were not applicable to people or realistic situations (Kumar, 2015). In effect, would there still be the same results had the research been executed in another setting or with another set

of subjects? External validity was ensured by ensuring we have obtained a sample that is of great representation of the population under observation (Naomi, 2015).

The dependability of a research study was the degree of reliability of measuring it over a period of time. A research tool, e.g. one that is a survey or a questionnaire and always gives the same results when repeated is likely to lower the likelihood that the scores reported are biased by some random factor, such as being in a certain season, having other current events taking place, and even just measurement error (Saunders et al., 2019). Measurement error required the standardization of the application of the study. This involved ensuring that all [participants] were consistent in measurements, all participators understood instructions and the objectives of the study as well as provision of extensive training to data collectors on what the measurements entailed (Babbie, 2020). Many research methodologies could make research study trustworthy. The consistency of time and repeating reliably are the defining factors of reliable research that act as its characteristics by producing the same results when another evaluation is performed by the same researcher at different times following later (Berg & Lune, 2015). A researcher can share their results about how keeping notebooks of giving gratitude every morning during a period of one month made college students feel more satisfied with their lives (Connaway & Radford, 2021).

Another example of the assessment of the study credibility was when the same researcher repeated the research a year later and received the same result. This determined the time consistency of the study. In addition to this, the results of the study can be dependably applied in other samples (Creswell, 2018). This type of reliability is associated with uniformity of the measurements in an experiment. There are various methods which can be applied to assess the reliability of samples such as splitting the sample measuring values into two groups to be later compared (Denscombe, 2021). The relevance of comparisons might be as well, made among many data points in a measurement or an examination that the researchers had expected to be connected to determine the level of corresponding to or discrepancy between them (Hair et al., 2015). It had the specific strategies elaborated in a subsequent section. Moreover, the inter-rater reliability can be determined through the involvement of an independent researcher that will perform the same study (Kothari & Garg, 2017). One method that was used to determine a quality of a research study was to look at its reliability. The validity of the conclusions was supported by the fact that a consistent pattern was indicated as the research was carried out over an extended period and involving many

samples (Panneerselvam, 2018). Through an in-depth understanding of the concept of dependability during research, the readers had an opportunity to determine the level of trustworthiness of the outcomes (Naomi, 2015).

The research study showed that a reliable and valid population investigation was a conclusive pointer of high quality and uniformity. It was vital to note that validity and reliability were not taken as separate characteristics. To be able to appropriately describe a concept or an attribute, a metric should possess both validity and reliability. No metric can be regarded valid without reliability. The validity and reliability requirements were followed in the thesis research study demonstrated by the produced results, which were precise (validity) and consistent (reliability). Adequate knowledge about validity and reliability helped the researcher develop, as well as evaluate the research study. In addition to this, it increased their capacity to evaluate critically research literature and make informed decisions regarding research designs and research tools thus acting as better consumers in research competency. These principles ensured that the results of the study could not be compromised by vital stakeholders. To increase its worth to be used as a benchmark in the future and meet the objectives of the study, the researcher used valid sources of data in carrying out the research. Also, the study confirmed the validity that the elements could be measured and adequately evaluated in order to generate the thesis research findings.

A detailed explanation was given to elucidate how reliability and validity were maintained in the study about mental health care and treatment services at public health facilities in Kiambu County. Reliability was guaranteed by employing standardized research instruments, conducting pilot tests, and maintaining uniform data collection protocols. The researcher executed a pilot study with 10% of the target population, enabling the detection and rectification of ambiguities in the research instruments prior to the major data gathering phase. The Cronbach's alpha coefficient was calculated to evaluate the internal consistency of the questionnaire, verifying that the items inside each scale consistently measured the same construct. A threshold value of 0.7 or more was considered acceptable. To improve external reliability, all data collectors received comprehensive training to assure uniformity in survey administration and response documentation, thus reducing interviewer bias and procedural discrepancies. Both content and construct validity were underscored about validity. Content validity was evaluated via expert evaluation by mental health professionals and academic supervisors, who verified that the instruments sufficiently

encompassed all essential elements of mental health treatment delivery. Construct validity was established by correlating questionnaire items with established theoretical frameworks and previously validated instruments from analogous investigations. Stratified random sampling was utilized to guarantee representativeness among various public health facilities, hence improving external validity. The methodical techniques guaranteed the study's validity and reliability, hence enhancing the credibility and generalizability of its conclusions.

Pretesting of the Study

Pre-testing a data collection instrument facilitated the identification of issues related to the instrument's language, tone, structure, and research design, hence ensuring adherence to research standards (Connaway & Radford, 2021). The study team received an overview of the data to be collected at the end of the fieldwork (Naomi, 2015). A research team in rural India found that all participants in one region reported using water for hand sanitation during the preliminary testing of a hand hygiene questionnaire (Denscombe, 2021). By probing into the methods by which respondents "washed" their hands, the study team successfully engaged them. The respondents quickly linked the term "wash" with water upon hearing it. The researchers implemented a straightforward solution by replacing "wash" with "clean" in their questionnaire (Kumar, 2015).

Pretesting was performed to the primary data collection to ascertain the reliability and validity of the study instruments and to enhance data collection methodologies. A purposeful sample of four health workers from Kenyatta National Hospital, a public referral facility in Nairobi County, was selected for this reason but subsequently eliminated from the final study. The pretest sought to evaluate the clarity, coherence, and contextual appropriateness of the questionnaires and interview guides, finding any ambiguous, redundant, or culturally sensitive components that could impact data quality or participant comprehension. The tools were improved and optimized by getting the participant feedback.

The purposive sample ensured that the pretest sample population had background that was similar to the study group and the researcher therefore acquired relevant information and avoided data contamination. Ambiguity, verbosity, and redundancy are some of the flaws which were eliminated because of pretesting and thus enhancing the accuracy and utility of the instruments. It also evaluated practical aspects of interview scheduling, survey derivation, and obtaining an informed consent and thus made the entire field study effective.

A small challenge of understanding the terms used in the area of mental health, particularly among the non-specialist health professionals, has been met by the narrowing of language and training of data collectors on effective communication. The amount of time it took to complete each questionnaire was perceived to be acceptable, and this alleviated fatigue on respondents and promoted the response rate. The pretest generated important responses that improved the methodology of the study and data collecting plan.

Also, the pretesting helped the researcher understand the reliability of the quantitative instrument by means of Cronbach alpha. The result of the data analysis conducted in the pretesting showed a Cronbach alpha of 0.81, which is an indication of good internal consistency between the questions evaluating vital dimensions such as accessibility, quality of care, and user satisfaction. After the research results of pretesting, all the instruments were corrected and finalized regarding the major trial. During the pretesting process, ethical regulations, which included confidentiality and voluntary participation, were fully observed. The pretesting confirmed that the research design, data collection instruments and ethical standards are stringent and suitable to be employed in the detail manner in the analysis of mental health care and treatment services in Kiambu County.

Data collection methods and procedures

The researcher evaluated his or her hypothesis through the examination of the data collected during the process of gathering (Babbie, 2020). Generally, data collection is the most crucial and primary aspect of the research regardless of the subject matter (Connaway & Radford, 2021). The data gathering strategies differed across different disciplines of study, contingent upon the specific information requested (Creswell, 2018). The data were gathered utilizing interview guides and questionnaires. Prior to data collection for the research study, the researcher secured approval from the College of Health Science at Mount Kenya University, obtained research authorization from the National Commission for Science, Technology, and Innovation, and received permission from the County Government of Kiambu Health Services department. The researcher arranged visits with the facility directors of all 13 public hospitals in Kiambu County to gather data from mental health workers during a one-month period.

The researcher sent questionnaires to 159 mental health experts to gather data. The queries comprised both closed-ended and open-ended questions. The researcher personally distributed the questionnaires and conducted follow-ups to guarantee timely replies from participants. A three-

day period was allocated to each hospital to schedule responders on separate days, during which the researcher personally delivered the questionnaires. The researcher arranged appointments with the key respondents at their leisure to interview the 10 key informants. An interview guide facilitated the interviews, each limited to a maximum duration of 15 minutes per key respondent. Each respondent was allocated a specific day that suited them, and the interview procedure for all key informants spanned one week. To ensure data quality, the researcher validated the accuracy and completeness of the recorded information. Timely data and current information ensured the quality of research findings.

Proposed Data analysis, techniques and procedures

Data analysis entailed organizing, structuring, and interpreting of the huge data gathered. It consisted of an evaluation of the data and drawing conclusions and conclusions (Berg & Lune, 2015). The use of a mixed-methods approach with the focus on both qualitative and quantitative data analysis makes the study even more credible and grounded on the Donabedian model of healthcare quality. Survey answers have been numerically analyzed with the help of structured questionnaire using SPSS version 30 where measures of descriptive statistics, like frequencies, and mean and standard deviation of responses, satisfied the requirements of the research, whereas the needs were met with the help of inferential statistics, including correlation analysis. The data collected through qualitative methods; that is, in-depth interviews of key informants, was analyzed through content analysis whereby information was organized systematically into themes and sub-themes to be coded and interpreted. The focus of the Donabedian model on structure, method and outcome provided a holistic model of data organization and analysis. Quotations that were selected were incorporated in order to provide the views of the participants. The results were then reported through textual descriptions giving a detailed grasp of mental health care and treatment services in Government owned health care facilities in Kiambu County.

Ethical Considerations

Ethical considerations are related to the values and guidelines that guide the preparation and conduct of research to create integrity, validity, and protection of the study participants (Sekaran & Bougie, 2016). Scholars were supposed to ensure they adhered to established ethical principles at all times during the process of collecting data obtained out of human beings (Creswell, 2018). The principal objectives of human research encompassed comprehending real-world occurrences, devising effective interventions, analyzing behavioral patterns, and enhancing quality of life

(Kothari & Garg, 2017). Ethical issues impacted the choice of study topics and the methodologies for data collecting and analysis, assuring the protection of participants' rights, the credibility of the research, and the integrity of the scientific process (Naomi, 2015; Denscombe, 2021). Researchers were obligated to conform to ethical principles, encompassing professional behavior, institutional review, informed consent, confidentiality, and compliance with governmental rules (Suen & Ary, 2014).

The researcher undertook a study that produced advantageous results for stakeholders without seeking personal benefit. All sources were duly mentioned, and the researcher utilized empirical, quantitative evidence to fulfill the study's objectives. Ethical approval was acquired from the College of Health Sciences at Mount Kenya University, and research authorization was received from the National Commission for Science, Technology, and Innovation (NACOSTI). The County Government of Kiambu Health Services Department gave additional approval. Participants granted informed consent via written documents. To ensure data privacy and integrity, the researcher saved the acquired data on password-protected digital platforms and encrypted flash drives.

The researcher guaranteed that participants experienced no damage during the trial. The confidentiality was ensured by not using names or information which could be used to identify a person. It was ensured that the participants would not disclose any information concerning their identity and that they would voluntarily participate in the research. The subjects could jump out of the study without facing any penalties. The intended purpose of the research was clearly expressed, and the respondents were guaranteed of the fact that the thesis had received an institutional approval, and it did not pose any danger of harm. In the research process, the researcher highlighted confidentiality, an informed consent, the freedom of the participants, and safe data storage.

In accordance to the research integrity and objectivity, the researcher was impartial in all the stages of research, including designing the research, data collection, analysis and publication. To alleviate bias and avoid self-deception, avenues were taken care of. There was control over confidential information, and sensitive data. The researcher avoided engaging himself in any form of discriminatory acts based on gender, ethnicity, race among other non-scientific factors. The future application of the findings of the study in the educational and advocacy initiatives in the field of mental health research and service performance considered the issue of ethics..

The participation of important informants from governmental and policy institutions required the enforcement of rigorous ethical procedures. Informed consent was secured from all participants after they were thoroughly briefed on the study's objectives, their responsibilities, and their right to withdraw at any time without consequences. Consent was obtained voluntarily and officially, ensuring participants comprehended the utilization of their information within the study.

The researcher ensured participant confidentiality, particularly due to the incorporation of sensitive institutional information and policy-level observations. Anonymization methods were employed during data reporting and analysis to safeguard identity. Data were securely stored and accessed exclusively by the researcher. The acquired information was utilized solely for academic reasons and was not disclosed to third parties without the participants' informed approval, in compliance with recognized ethical principles.

Neutrality was upheld during the thesis research study, with data gathering and analysis executed devoid of political or institutional bias. The researcher exhibited cultural sensitivity and objectivity, especially in evaluating mental health care in Kiambu County. All ethical issues that arose throughout the study were resolved via the ethical review processes of the academic institution. The research was executed with professionalism, respect, and a dedication to upholding ethical integrity throughout the process.

Summary

This chapter delineated the research methods employed in the investigation. The chapter examined the research design, study population, target population, sample size, sampling technique, data collection instruments, data collection processes, pretesting, data analysis plan, and ethical issues. The subsequent chapter elucidated the methodology employed for data analysis and presentation.

CHAPTER FOUR

RESEARCH FINDINGS, RESULTS AND DISCUSSIONS

Introduction

The principal aim of this research was to assess the mental health care and treatment services in public health facilities within Kiambu County, Kenya. This chapter concludes the examination into the mental health care and treatment services of public health institutions in Kiambu County, Kenya. A comprehensive array of qualitative and quantitative data was gathered through a meticulous mixed-methods study technique to elucidate the current situation. The data and analysis sought to elucidate the strengths, limitations, and opportunities for enhancement within the mental health care system, offering policymakers, healthcare professionals, and stakeholders critical insights to enhance community well-being. The presentation of findings was grouped around key study issues. Qualitative data from in-depth interviews unveiled the intricate narratives of mental health service users and healthcare practitioners.

Structured questionnaires yielded quantitative data regarding the assessment of mental health care and treatment services in public health facilities. The integration of qualitative and quantitative data enhanced the comprehension of the mental health care services in Kiambu County. The study examined patterns, relationships, and disparities to assess the efficacy and accessibility of mental health interventions. The chapter provided unprocessed data and conducted a critical analysis of the findings in relation to existing research and global best practices. This chapter linked research to practical findings. The research sought to enhance the discourse about mental health treatment in Kiambu County by offering a comprehensive understanding of the study. This study is intended for Chapter Five, which presents evidence-based recommendations and examines the county's mental health policy, practice, and research.

Research presentation, interpretation and discussions

Response Rate

Connaway and Radford (2021) assert that achieving a response rate of 50% is essential. The research study engaged a target population of 169 public health hospital workers, of which 165 responded, resulting in a response rate of 97%, deemed sufficient as it exceeds the recommended 50% threshold. The attainment of a 97% response rate in the study signified multiple favorable variables. Primarily, it highlighted the public health workers' readiness and dedication to

participate in the research, indicating a sincere interest in the subject matter being examined. The elevated participation rate produced a more representative sample, hence augmenting the study's external validity.

Gender of the Respondents (Social Demographic Factor)

Table 1 Gender distribution of the respondents

Gender	Frequency	Percent
Female	95	57.6
Male	70	42.4
Total	165	100.0

Table 4.1 presents a comprehensive breakdown of the gender distribution among the 165 people involved in the study. The study indicated that 57.6% (n = 95) of the participants were female, whilst 42.4% (n = 70) were male. This indicates a relatively elevated participation of females in the study sample.

A chi-square goodness-of-fit test was conducted to evaluate whether the observed gender distribution significantly differed from the anticipated equal distribution. The chi-square test findings revealed no statistically significant difference in gender distribution, $\chi^2(1, N = 165) = 3.788$, $p = 0.052$. Given that the p-value above the standard alpha level of 0.05, we do not reject the null hypothesis and determine that the gender distribution does not statistically differ from an equal distribution. This indicates that despite a greater number of female participants in the study, this disparity is not statistically significant and is largely attributable to chance.

Although the statistical significance is absent, the distribution nonetheless demonstrates a respectable degree of inclusivity in the sampling procedure. This aligns with Article 27 of the Constitution of Kenya (2010), which emphasizes the right to equality and freedom from gender-based discrimination. The process of selecting and involving individuals in the 13 public health facilities in the Kiambu County was constitutional, and ensured that both gender was equally represented in the study.

The fact that inferential statistics have been included in this section makes the demographic analysis even more valid as it goes beyond the descriptive percentages to determine whether the noted differences are statistically significant. This methodological strength is essential in enhancing consistent and general nature of findings. Moreover, it confirms that no group of genders was oversampled, which secures the reputation of the following research on mental health care accessibility and treatment experiences related to different genders.

The gender mix follows the lines of Gender Equity Theory that states that the integrity and recruitment of social research could not be devoid of equal participation by both gender (Ridgeway & Correll, 2020). Although not revealing statistically significant differences, the representativeness of both genders is almost similar which strengthens the level of credibility and minimizes gender bias. Moreover, via the perspective of Social Justice Theory, guaranteeing equitable representation in research reflects equity and recognizes the systemic disparities that frequently influence access to healthcare and involvement in health-related studies (Rawls & Freeman, 2019).

Age of the respondents (Social Demographic Factor)

Table 2 Response rate per age

Age Group	Frequency	Percent
20-24	8	4.9
25-29	14	8.4
30-34	27	16.4
35-39	39	23.6
40-49	67	40.6
50 & Above	10	6.1
Total	165	100.0

Table 4.2 delineates the distribution of participants by age group, offering significant insights into the demographics of those pursuing or assessing mental health treatments in public health institutions throughout Kiambu County. The age cohort with the greatest representation was 40–49 years, comprising 40.6% of the sample (n = 67). The subsequent age group was 35–39 years

(23.6%, n = 39), followed by the 30–34 group (16.4%, n = 27), demonstrating that the majority of respondents (80.6%) were aged between 30 and 49 years. Conversely, people aged 20–24 (4.9%, n = 8), 25–29 (8.4%, n = 14), and 50 and older (6.1%, n = 10) were significantly underrepresented.

A chi-square goodness-of-fit test was performed to ascertain if the observed age distribution significantly deviated from a uniform distribution. The test produced a statistically significant outcome, $\chi^2(5, N = 165) = 92.80$, $p < 0.001$, demonstrating that the variations in age group representation were not attributable to chance. This indicates that age significantly influenced participant participation or access to mental health care.

The overrepresentation of adults aged 40–49 may indicate a heightened prevalence of mental health issues within this demographic, or potentially an increased knowledge, readiness, or access to public health services. These individuals are usually in a transitional or peak life phase characterized by familial, professional, and social obligations, which may elevate psychological stress and enhance the probability of service consumption. The underrepresentation of individuals aged 20–29 may be due to specific problems, including stigma, insufficient mental health knowledge, or the perceived irrelevance of programs for younger demographics.

The representation of older persons (aged 50 and above) at merely 6.1% is significant, considering that aging frequently correlates with heightened susceptibility to mental health issues, such as depression, anxiety, and cognitive deterioration. The low turnout could be a structural challenge, e.g. mobility limits, technical inequalities, or social disengagement, which point to the absence of service provision to older populations.

In that regard, the inferential statistics provide a considerable framework to examine the differences in age-related engagement. The significant chi-square value confirms the structural significance of the age differences as opposed to the unintentionalness and it is therefore vital to implement measures in mental health based on age responsiveness. Some specific efforts with the targeted communities, particularly with children and older adults, are recommended to ensure that mental health demands are more evenly and comprehensively understood in all aging groups in Kiambu County.

The variations in the involvement in mental health care that attribute to age can be effectively evaluated with references to the Life Course Theory that states that the health behaviors and causes

of vulnerabilities of people can be identified in relation to the accumulation of life experiences and transitions related to particular age groups (Elder, 2018). Adults aged 40 49, who are in a possible peak of professional and family responsibilities, can experience particularly psychosocial stressors and end up consuming mental health resources to a disproportionate level. It is possible that younger people do not perceive mental health support as something relevant at that particular moment or avoid going to any help because of stigma.

The Health Belief Model (HBM) assumes that health-seeking behaviors depend on the perceived vulnerability, severity, benefits, and obstacles (Jones et al., 2015). The underrepresentation of older persons may arise from structural and perceptual obstacles, such restricted mobility, inadequate mental health literacy, or fatalistic views toward aging and psychological discomfort. Likewise, younger demographics may underestimate their vulnerability or emphasize alternative issues over mental health, so diminishing their engagement.

Highest Level of Education Attained (Social Demographic Factor)

Table 3 Respondents Highest level of education

Education Level	Frequency	Percent
Diploma	25	15.1
Bachelor's Degree	108	65.5
Master's Degree	32	19.4
Total	165	100.0

Table 4.3 illustrates the distribution of respondents based on their highest level of educational achievement. A substantial percentage of participants possessed a bachelor's degree (65.5%, n = 108), followed by those with a master's degree (19.4%, n = 32) and diploma holders (15.1%, n = 25). The predominant presence of respondents possessing higher education qualifications (84.9% with at least a bachelor's degree) highlights a robust academic profile within the studied demographic.

A chi-square goodness-of-fit test was conducted to see if the distribution of educational levels among respondents significantly deviated from an anticipated uniform distribution. The findings

indicated a statistically significant difference, $\chi^2(2, N = 165) = 236.61, p < 0.001$. This indicates that the disparities in educational qualifications were not coincidental but were structurally important.

The prevalence of persons with bachelor's and master's degrees suggests that most participants likely had a robust knowledge base, perhaps improving their capacity to comprehend, access, and assess mental health care and treatment services. This may have enhanced the profundity and significance of the insights provided, particularly about mental health care delivery, patient experience, and systemic challenges within public health institutions in Kiambu County.

The educational diversity enhanced the study's richness but also presented a possible bias. The disproportionate presence of highly educated persons may not accurately represent the educational makeup of the wider Kiambu County population. Less educated persons might also face greater hindrances on the way to receiving or understanding mental health services obstacles that were not adequately recorded because they were not well represented in the sample. This involves caution in generalizing findings of the study to the general society.

However, the educational diversity, namely, introduction of people with diploma-level trained individuals and those with doctoral degrees provided a very diverse and detailed view of the state of the mental health care services. The results obtained based on the statistical chi-square support the validity and the sample structure, as it has been concluded that the educational background that showed a huge difference regarding the respondents had a significant role in the analysis and interpretation of the results. Stratified sampling/focused, outreach may be applied in future study to ensure the involvement of lower educational demographics and enhance the applicability of results.

It is possible to examine the identified educational disparities through the lenses of Cognitive Empowerment Theory and Social Determinants of Health Framework. According to Zimmerman (1995), cognitive empowerment, which is supplemented by education, advances individual capabilities as regards to taking wise decisions, feeling that they have disposition of health-related issues and are involved in health-seeking behaviours. Higher-educated people will be better equipped to see through the lens of symptoms of mental illnesses and managers of a complex healthcare system. According to Marmot and Allen (2020), educational attainment plays a central

role as a social determinant of health at the social and individual levels because access to information, service use, and health literacy are influenced by all classes. The two theoretical frameworks share the opinion that educational status has a huge bearing on health actions and engagement and therefore it is important always to have inclusive sample design in medical research that measures access to and perception of mental health care assistance.

Professional Job Group (Social Demographic Factor)

Table 4 Respondents Professional Job Group

Professional Job Group	Frequency	Percent
Medical Doctor	10	6.1
Nurse	35	21.2
Public Health Officer	9	5.5
Records Information Officer	7	4.2
Lab Technician	6	3.6
Clinical Officer	14	8.5
Pharmacist	12	7.2
Community Officer	14	8.5
Counsellor	58	35.2
Total	165	100.0

Table 4.4 presents the distribution of respondents categorized by their professional job groupings. Majority of them were counsellors who comprised 35.2 percent (n = 58), followed by nurses at 21.2 percent (n = 35), other professionals like community officers at 8.5 percent (n = 14), clinical officers at 8.5 percent (n = 14), pharmacists at 7.2 percent (n = 12), medical doctors at 6.1 percent (n = 10), public health officers at 5.5 percent (n = 9), records information officers at 4. A chi-square test for goodness-of-fit was performed to ascertain if the observed distribution among professional groups significantly deviated from an equal distribution. The findings demonstrated a statistically significant divergence, $\chi^2(8, N = 165) = 68.97$, $p < 0.001$, suggesting that the distribution of the different job categories was non-random, with certain professions being more prominently represented than others.

This irregular distribution possesses significant significance. The significant depiction of counsellors underscores their essential function in the provision of mental health care inside public health facilities in Kiambu County. Their domination offers valuable, profession-specific insights into therapy methods, patient engagement, and systemic deficiencies in counselling services. Nurses, comprising 21.2% of the sample, provided essential insights, especially about the primary care interface, triage, and standard mental health support. Various professional groups, such as clinical officers, community officers, and pharmacists, provided significant multidisciplinary perspectives, enriching the study's depth. The inclusion of medical practitioners, public health officials, records information officers, and lab technicians, however limited, enhanced the dataset and facilitated a comprehensive assessment of service delivery, administrative efficacy, and system integration issues.

The statistically significant chi-square result suggests that the prevalence of specific professional groupings, particularly counsellors, was not coincidental. This underscores both a strength and a constraint of the study. It facilitated an in-depth exploration of mental health from the viewpoint of individuals most intimately involved in psychological care. Conversely, it may bring possible sample bias, particularly by underrepresenting essential jobs such as laboratory technicians or medical doctors, whose perspectives on diagnosis and integrated treatment pathways are vital.

To alleviate such bias in forthcoming study, proportional stratified sampling or quota sample by professional group may be utilized. Nonetheless, the many professional backgrounds included in this study enhanced the comprehensive understanding of mental health care delivery and established a solid foundation for evaluating both clinical and systemic difficulties within Kiambu County's public health sector.

The comprehensive portrayal of counsellors and nurses corresponds with the interpretivist paradigm, which prioritizes subjective experiences and insider viewpoints to cultivate a profound comprehension of intricate phenomena. According to Braun and Clarke (2006), qualitative research focuses on thematic patterns extracted from participants' narratives, enabling researchers to investigate meaning, context, and processes in mental health care. Kvale and Brinkmann (2015) assert that qualitative interviews with frontline workers, such as counsellors and nurses, facilitate the co-construction of information regarding institutional practices, cultural dynamics, and systemic deficiencies. Consequently, the study's composition, despite its imbalance, facilitates a

qualitative investigation that reveals profound, profession-specific insights into the lived experiences of mental health service providers in Kiambu County.

Number of Years Worked at Public Health Facilities (Social Demographic Factor)

Table 5 Respondents Number of Years Worked at Public Health Facilities

Number of Years Worked	Frequency	Percent
Less than 1 year	15	9.1
2 years	23	13.9
2-3 years	18	10.9
3-4 years	17	10.3
4-5 years	62	37.6
Above 5 years	30	18.2
Total	165	100.0

The examination of work experience among the respondents, as delineated in Table 4.5, reveals a broad range in the duration of employment at public health facilities. The majority of participants (37.6%, n = 62) had served for 4 to 5 years, whilst 18.2% (n = 30) indicated more than 5 years of experience. Additional respondents reported abbreviated employment durations, with 13.9% (n = 23) possessing 2 years, 10.9% (n = 18) having 2–3 years, 10.3% (n = 17) holding 3–4 years, and 9.1% (n = 15) indicating less than one year of experience.

A chi-square goodness-of-fit test was performed to evaluate if the distribution of job experience significantly deviated from the expected uniform distribution. The outcome was statistically significant, $\chi^2(5, N = 165) = 57.22$, $p < 0.001$, indicating that certain experience categories were overrepresented in the sample.

This outcome carries multiple ramifications. The prevalence of mid-career professionals—individuals with 4 to 5 years of experience—indicates a comparatively steady and evolving workforce in the public health facilities of Kiambu County. This group likely embodies an ideal equilibrium of practical experience and adaptation to institutional regulations, rendering them essential informants for assessing the execution and obstacles of mental health services. The substantial proportion of respondents with over five years of service (18.2%) offers important longitudinal insights on the evolution of mental health systems, especially concerning infrastructure, patient volumes, policy modifications, and service delivery frameworks.

In contrast, the somewhat diminished number of individuals with under 2 years of experience may restrict the diversity of viewpoints about recent recruiting, induction, and early-career issues in mental health service delivery. The statistically significant chi-square value indicates that worker experience in Kiambu County's public health system is unevenly distributed, a consideration essential for generalizing the findings.

This workforce distribution highlights the necessity for focused capacity-building initiatives, especially for early-career professionals who may need additional mentorship or training in mental health. Concurrently, institutions must to acknowledge and utilize the institutional memory and practice-based insights of seasoned personnel in the formulation and enhancement of mental health interventions.

The variation in years of service enriches this research by integrating multi-generational perspectives. Nonetheless, owing to the disparate representation across experience levels, data interpretations must be nuanced, recognizing the distinct contributions and constraints of each experience category.

The variation in tenure provides a comprehensive picture of professional lifecycles in mental health care delivery. Bazeley (2013) posits that qualitative data from professionals with varying levels of experience facilitate nuanced interpretations of how contextual factors—such as workplace culture, legislative changes, and shifting patient demographics—impact mental health practice over time. Morse (2015) underscores that seasoned professionals frequently act as essential narrators of institutional history and informal knowledge systems, which are crucial for comprehending both the explicit and implicit aspects of mental health treatment delivery.

Consequently, although the quantitative findings indicate a statistically uneven distribution, the incorporation of various experience levels enriches the depth and authenticity of insights, reflecting both emerging and established practices within Kiambu County's public health system.

Level of Health Facility

Table 6 Respondents Level of Health Facility

Level of Health Facility	Frequency	Percent
Level 5	100	60.6
Level 4	50	30.3
Level 3	10	6.1
Level 2	5	3.0
Total	165	100.0

Table 4.6 displays the distribution of health professionals according to the degree of public health facility in which they are presently engaged. A significant majority of respondents (60.6%, n = 100) were employed in Level 5 facilities, which are referral hospitals recognized for providing specialized and comprehensive treatments. Level 4 health facilities comprised 30.3% (n = 50), whereas Level 3 and Level 2 facilities exhibited lesser presence at 6.1% (n = 10) and 3.0% (n = 5), respectively. A chi-square test for goodness-of-fit was performed to evaluate the statistical significance of the distribution of responses among health facility levels. It revealed that there is a strong difference between a uniform distribution, χ 2 (3, N = 165) = 123.15, p < 0.001. It means that the allocation of professionals at different position of the facilities was not accidental but shows evidence of real systemic or structural forces at play in the public health system in the Kiambu County.

The well representation of Level 5 respondents facility reflect well on the attitude taken by professionals within the facilities of high volume and well-staffed facilities. Such facilities tend to monitor complex mental health conditions, deploy technical personnel such as psychiatrists and psychologist, and maintain systematic referral processes. Therefore, the reflections coming out of such respondents are likely to be valuable reflections of issues and resources inherent in the contemporary treatment of mental health. Inclusion of the responses of 30.3% of Level 4 facility

respondents expands the study to accommodate the secondary care settings environment as a vital intermediary between the primary care provider and the referral hospital. These facilities often face high patient flows, limited resources, and transitional conditions that only make inclusion in their evaluation an excellent tool to assess treatment capacity and shortcomings in the field of mental health.

Although Levels 3 and 2 make a small portion of the sample (6.1 and 3.0 per cent, correspondingly), their emergence is not analytically insignificant. Such subordinate clinics often become the first contact with patients in underserved areas or the facilities they live in. The special challenges they face appertaining to the lack of infrastructure, staffing, and the stigma associated with mental health conditions need to be treated carefully. Their presence albeit limited in scope provided important grass -roots insights on issues of access and equity. The observed findings in the inferential statistics reveal that the distribution at the facility was distorted, therefore, showing the actual variation in staff allocation and service availability possibly. This underscores that strategic investments in primary facilities are needed to redirect pressure on referral centres and facilitate a progressive decentralized mental health care delivery.

The scattering between various positions of health facilities extended the depth and breadth of the research. It enabled a subtle understanding of the experiences, management and issues of mental health care in different infrastructural and functionality scenarios. All their results are statistically significant; thus, one thing that should be embraced is to use facility level as a serious element in the development of some interventions or policies that aim to enhance mental health care in Kiambu County.

Qualitatively, the gross differences within health organizations with regards to distribution of the health staff across the facility levels have remained to be a constant feature of healthcare systems of many low- and middle-income countries. Mbau et al. (2020) claim that tertiary health institutions often receive an oversized proportion of health workers since they are better equipped with infrastructure, have advanced technologies, and their professional advancement is high. Such focus inadvertently reduces the effectiveness of smaller facilities that serve large rural populations with fewer resources. Agyepong et al. (2017) argue that excessive reliance on local referral facilities as a sole source of mental health care can contribute to the widening of service delivery gaps and are likely to increase the inefficiency created by inappropriate overcrowding at the centres

of high-level care. Such findings support the prevailing findings, stressing the need to resort to systemic changes that can redistribute human resources in health, improve the lower-level health systems, and provide greater integration of mental health care into the community health care.

Availability of Mental Wellbeing Specialists

Table 7 Reponses towards availability of mental wellbeing specialists

Availability of Specialist	Frequency	Percent
Psychiatrist	53	32.1
Mental well-being counsellor	95	57.6
All available	10	6.1
Non-available	7	4.2
Total	165	100.0

Table 4.7 illustrates the distribution of respondents' perceptions of the accessibility of mental wellness specialists in public health facilities throughout Kiambu County. A majority of respondents (57.6%, n = 95) indicated the availability of mental well-being counsellors, whilst 32.1% (n = 53) confirmed the presence of psychiatrists. Furthermore, 6.1% (n = 10) confirmed the presence of both categories of professionals, indicating a more cohesive mental health staff in certain facilities. A minor but significant portion of respondents (4.2%, n = 7) indicated the absence of mental wellbeing specialists in their facilities. A Chi-square test of goodness-of-fit was performed to assess the statistical significance of these perceptual differences. The test yielded a statistically significant outcome, $\chi^2(3, N = 165) = 215.75$, $p < 0.001$, demonstrating that the answer distribution markedly diverges from the anticipated uniform distribution. This indicates that the

distribution of mental health professionals is inconsistent among health facilities, rather than random or uniform.

These findings highlight a crucial aspect of evaluating mental healthcare capacity: whereas counselling services seem well represented, the availability of psychiatrists and the existence of a comprehensive multidisciplinary team are still constrained. The elevated proportion of counsellor availability likely indicates a heightened dependence on psychosocial therapies in public health institutions, aligning with Kenya's mental health policy focus on task-shifting and community-based care. The reduced number of psychiatrists, a more medically specialized group, may suggest deficiencies in psychiatric expertise or structural impediments in the allocation of specialists within the county's healthcare system. Six point one percent of facilities apparently possess both sorts of specialists, exemplifying optimal instances of integrated care. Conversely, the 4.2% lacking mental health professionals raises apprehensions regarding access obstacles and the possible neglect of mental health service provision in lower-tier facilities.

The statistical importance of the distribution indicates an immediate necessity for resource allocation and specialist deployment strategies that provide fair access to mental health competence in all public health facilities. Furthermore, the study supports the need to emphasize policy-making and budgets to increase the number of those working in the mental sphere, on marginalized or underserved areas in particular. The imbalance in the number of mental health professionals in the Kiambu County of the public health facilities highlights the progress and the gaps in the delivery of the mental health services. The significant outcome of the inferential analysis provides empirical support to the creation of specific measures to optimize the human resource of mental health using and perfecting the outcomes of the service delivery across the county.

Research shows that biased distribution of mental health workers regularly reflects general systemic problems, such as limited training, stigma around psychiatric treatment, and architectural drawbacks of less prestigious institutions (Patel et al., 2020). The reliance on counselling services is commonly shown by resource-limited practical strategies that focus on community involvement as well as task-shifting interventions in order to boost accessibility (Kola et al., 2021). Professional isolation may play a more important role in the situation of the absence of specialists in particular facilities, negatively affecting the quality of care, especially due to the complex nature of mental

cases, which may require specialized intervention. Such interactions indicate the importance of the development of interdisciplinary teams and the development of context-specific approaches focused on the development of human resources and the even distribution of mental health expertise across the tiers of different facilities.

Frequency of Training

Table 8 Reponses towards frequency of training

Training Duration	Frequency	Percent
Once Yearly	11	6.7
Twice Yearly	42	25.5
Quarterly	74	44.8
Monthly	36	21.8
No Training available	2	1.2
Total	165	100.0

Table 4.8 encapsulates participants' feedback concerning the frequency of training received by mental well-being workers in public health facilities in Kiambu County. A majority of respondents (44.8%, n = 74) reported that training occurs quarterly, while 25.5% (n = 42) revealed biannual sessions, and 21.8% (n = 36) noted monthly trainings. A minority indicated that training was place annually (6.7%, n = 11), whereas 1.2% (n = 2) reported no training chances whatsoever. A Chi-square test of goodness-of-fit was conducted to assess if the observed distribution of training frequencies significantly differed from the expected distribution under uniform conditions. The study produced a statistically significant outcome, $\chi^2(4, N = 165) = 121.89$, $p < 0.001$, indicating that the training frequencies were unevenly distributed. This indicates a statistically significant trend in the provision of mental health training, suggesting unequal access and perhaps systemic biases or resource limitations.

The prevalence of quarterly and biennial training indicates a purposeful institutional commitment to ongoing professional development. Quarterly training, mentioned by over half of the respondents, signifies an ideal equilibrium between frequency and resource allocation, facilitating prompt updates of mental health protocols and therapeutic methodologies. A significant proportion

of employees undergoing monthly training underscores a robust commitment in specific facilities to uphold contemporary skillsets in mental healthcare provision. The existence of merely annual training for 6.7% of responders and the complete lack of training for 1.2% highlights issues of training inequity. These statistics indicate considerable inequalities in resource distribution and institutional emphasis, especially for facilities that are physically isolated, underfunded, or administratively overlooked. Lack of any training of the even a small proportion of the workforce can drastically affect the quality and consistency of the mental health services offered bearing in mind that this area is dynamic and changes with time.

The value of variance in training frequency is significant thus there is diversity in term of institutional capacity, strategies operations of Kiambu County regarding developing mental health professionals. The given analysis brings into perspective the necessity of standardized training structures, in particular, those that dictate a certain minimum rate of regular training. The policies aimed at standardizing the training frequency across all the facilities in the sphere of the public health can ensure that every possible mental health professional will be adequately prepared to meet the current community demands and implement the evidence-based treatments with the due mastery. Based on these insights, particular legislative and administrative changes need to be directed to ensure that the continuous development of mental health staff members remains an indispensable priority to be invested in by the public health organizations on a permanent basis. The introduction of the measure will improve the service delivery efficiency and create a skilled and self-confident workforce capable of addressing the rising mental health issues in the county.

This has been identified as the key to having good mental health services as incessant training keeps the practitioners updated on the current practice thresholds and emerging challenges (Aarons et al., 2014). Inequality in training frequency is a common indicator of more profound underlying systemic challenges, such as financial constraints, workforce, and unreliable administrative assistance, which might undermine the quality of services in under-resourced settings (Wheeler et al., 2017). Frequent standards of training and non-discriminatory access play an important role in the consolidation of a solid mental health workforce that has the capacity to deliver the evidenced-based care across different facility settings. Without those, the training gaps maintain inequalities in mental health outcomes and limit the possibility of providing full-scale care.

Dealing with mental well-being issues

Table 9 Respondents Number of Years dealing with mental well-being issues

Number of Years Worked	Frequency	Percent
Less than 1 year	14	8.5
1-3 years	32	19.4
3-5 years	80	48.5
Above 5 years	39	23.6
Total	165	100.0

Chi-square test result: $\chi^2(3, N = 165) = 76.93, p < 0.001$

Table 4.9 delineates the distribution of respondents according to their years of involvement in addressing mental well-being concerns within public health facilities in Kiambu County. The research indicates that around 48.5% (n = 80) of the respondents had been employed in mental health care for a duration of three to five years. This predominant group indicates a concentration of moderately experienced practitioners who have gained significant exposure to mental health care provision within the county. A further 23.6% (n = 39) indicated had more than five years of experience, underscoring the existence of highly skilled practitioners with advanced expertise and contextual knowledge.

A Chi-square test of goodness-of-fit was performed to quantitatively assess if the distribution of years of experience significantly diverges from a uniform distribution. The test results were significant, $\chi^2(3, N = 165) = 76.93, p < 0.001$, demonstrating a non-uniform distribution of years of experience among respondents. This indicates an imbalance in workforce composition, characterized by a notable concentration of professionals with 3 to 5 years of experience. This clustering may indicate the outcomes of recent recruitment initiatives or programmatic modifications in Kenya's public health system that have augmented the allocation of mental health professionals over the previous five years. In contrast, 19.4% (n = 32) of respondents possessed 1–3 years of experience, while 8.5% (n = 14) had less than one year, suggesting the existence of a younger cohort of mental health practitioners who may necessitate more comprehensive orientation and mentoring programs. Such junior professionals add up-to-date academic expertise

and the theoretical outlook though they do not necessarily have real-life experience thus affecting their instant efficacy in permit environments

The involvement of the practitioners of all the levels of experience contributed to the study positively because it helped to gain knowledge of other professionals when at different levels of career development. The variety adds credence to the findings of the study as both the long term and the new entrants are consulted to express their views. Moreover, it underlines the necessity of a stratified professional development program that could be tailored to the needs of a specific cohort i.e., novices would need a standard level of training and a mentor, whereas seasoned practitioners would benefit due to the advanced certifications and leader training. Year of experience analysis reflects the fact that the workforce is both mature and vibrant and statistically biased toward middle-career professionals. The results indicate that Kiambu County has the capacity to support adequate mental health workforce in the public health institutions and that the County may need to reemphasize the capacity-building efforts. The approach would ensure that the model of service delivery takes advantage of the experience of the experienced professionals and, at the same time, contributes to the growth of the less skilled professionals.

A combination of the labor force in mental health care is a key pressure point that determines the quality of service and sustainability (Gureje et al., 2021). Studies show that the variety of the experience level contributes positively to knowledge retention and knowledge innovation in clinical practice, and targeted mentorship and continuous professional development are the most important factors in combating skill gaps of professionals at an early career stage (Berwick et al., 2018). Moreover, efficient staff planning, which addresses the lack of distribution of experience, will allow maintaining retention levels and reducing burnout rates, thus developing a solid layer of mental healthcare that is prepared to meet the needs of the shifting population (Meyer et al., 2019). Personalized capacity-building interventions that are linked with career stages of practitioners can ensure an energetic but steady workforce that is able to deliver quality mental health services.

Succession Plan

Table 10 Respondents responses with regards to availability of succession plan

Status of Succession Plan	Frequency	Percent
Available in written format	14	8.5
Available but not written	32	19.4
None available	20	12.0
I don't know	99	60.1
Total	165	100.0

Table 4.10 gives a descriptive analysis of the respondents in their views and perceptions of the existence or absence of succession plans of human resource in the county of Kiambu public health facilities. The findings demonstrate that only 8.5 percent (n=14) participants identified that there is written succession plan in their organization thus lacking systematic recorded documents detailing how leadership will be maintained and where employees are to be replaced.. An additional 19.4% (n = 32) reported the existence of a succession plan that was not technically documented, suggesting the use of informal or ad hoc techniques for staff continuity. Nonetheless, 12.0% (n = 20) of participants indicated a total lack of any succession plan, highlighting considerable institutional susceptibility to interruptions in mental health care provision during transitions. Significantly, the predominant portion of respondents (60.1%, n = 99) said that they were uninformed about the existence of a succession plan in their facility. This elevated percentage indicates a significant deficiency in organizational communication, strategic awareness, and workforce readiness among healthcare professionals.

A Chi-square test of goodness-of-fit was performed to ascertain if the observed distribution of responses significantly deviates from the expected distribution by chance. The outcome, $\chi^2(3, N = 165) = 195.31$, $p < 0.001$, was statistically significant, signifying that the response distribution was not uniform. This means there is a gap in system elements as far as succession planning processes are concerned. These inferential statistical results justify the conclusion of the study that succession planning process in the public health institutions in Kiambu County may either lack consistency or communication. The unrealistically high rates of answering "I don not know" question is an indication of lack of involvement or transparency with health staff related to strategic human resource management. This is of particular concern in the context of mental health services where, across almost all healthcare professionals and care-related fields, quality of care, continuity of care and staff retention are key to the sustainability of therapy programs, long-term patient outcomes and professional leadership (Dwyer et al., 2021).

Failure to have effective succession planning or lack of formality in succession planning can hamper the resilience of the institution when there is reshaping of the workforce through retirement, resignation or realignment. Formal and documented succession plans can increase institutional memory, as well as the development of leadership skills in the mental health service and strategic capacity in penal institutions (Wright & Pandey, 2019). It is a well-recognized fact that succession planning forms a crucial aspect of sustainable human resource management in health systems, which enables organizations to have a systematic way of identifying and grooming its future leaders, hence cutting the disruption of service delivery (Kim & Thompson, 2021). Moreover, companies using open succession plan tend to have high rates of employee engagement and trustfulness necessary to retain talent and build a high degree of collaboration in the workplace (Kesavan & Pandit, 2020). The results support the importance of planned, thorough implementation of succession plans that have been properly communicated, inclusive, and sensitive to the constantly transforming healthcare needs.

Referral Systems

Table 11 Responses with regards to availability of referral systems to handle mental well-being issues

Type of Referral System	Frequency	Percent
Ambulance	11	6.7
Standard referral forms	100	60.6
Referral clinics	20	12.1
Staff to Handle referral cases	18	10.9
All available	12	7.3
None available	4	2.4
Total	165	100.0

Table 4.11 provides a categorical analysis of responses on the existence of referral mechanisms aimed at addressing mental health concerns within public health facilities in Kiambu County. The most often mentioned resource was the accessibility of standard referral forms, noted by 60.6% (n = 100) of participants. This signifies a comprehensive adoption of organized documentation methods to enhance mental health referrals, fostering uniformity and accountability within the system.

Only 6.7% (n = 11) indicated the availability of ambulance services, a vital although plainly constrained element of emergency psychiatric referral. This gap may impede essential responses, particularly in acute psychiatric situations. Referral clinics, signifying specialized centers, were recognized by 12.1% (n = 20) of respondents, whereas professionals designated for managing referral cases were identified by 10.9% (n = 18). A limited percentage of responders (7.3%, n = 12) affirmed the presence of all components of the referral system, indicating an integrated service model in a minority of facilities. Alarmingly, 2.4% (n = 4) reported a total lack of any referral mechanism, highlighting significant deficiencies in service continuity and patient care systems.

A Chi-square test of goodness-of-fit was conducted to quantitatively evaluate if the observed response distribution significantly deviates from an equal distribution. The outcome, $\chi^2(5, N = 165) = 235.18$, $p < 0.001$, was statistically significant, indicating that the reported types of referral systems are not uniformly accessible among facilities. The exceedingly low p-value (< .001) signifies that this variance is not attributable to random chance but rather represents genuine inequalities in the referral infrastructure among the studied public health institutions.

This notable result underscores the systemic variability in mental health referral capabilities within Kiambu County's public health system. Referral capabilities of facilities differ significantly, potentially affecting the efficacy and promptness of care for patients with mental health disorders. These disparities correspond with prior research demonstrating that fragmentation of the referral system constitutes a significant obstacle to integrated mental health care in low- and middle-income nations (Jacob et al., 2020; Musyimi et al., 2022).

The data highlights the necessity for strategic investment in comprehensive, consistent, and effectively communicated referral systems. The integration of transportation (ambulances), infrastructure (clinics), standardized instruments (referral forms), and skilled personnel is crucial for facilitating seamless patient transitions across various levels of care (Kigozi et al., 2021). The limited number of facilities with all components operational underscores the necessity of adopting a systems-level approach to mental health policy implementation in the county.

The results presented in Table 4.11 indicate significant deficiencies and remarkable strengths in the referral networks facilitating mental health care in Kiambu County. The substantial Chi-square result underscores the necessity for policy harmonization and resource allocation to improve the

efficiency, equity, and dependability of mental health referral systems across all public health facilities.

Dedicated Transport

Table 12 Responses with regards to dedicated transport to handle mental well-being issues

Status of Dedicated Transport	Frequency	Percent
Yes	30	18.2
No	100	60.6
Available but not dedicated	20	12.1
I don't know	15	9.1
Total	165	100.0

Table 4.12 encapsulates respondents' views on the accessibility of specialized transportation systems for addressing mental health concerns within public health facilities in Kiambu County. The results revealed that 60.6% of participants identified a lack of dedicated transport, whilst merely 18.2% affirmed its existence. Furthermore, 12.1% indicated that although transport services were available, they were not explicitly designated for mental health purposes. An additional 9.1% conveyed ambiguity, suggesting a possible communication or knowledge deficiency. A Chi-square test of independence was performed to see if the observed frequencies in transport availability significantly differ from the expected frequencies based on the assumption of equal distribution. The findings indicated a statistically significant association: $\chi^2(3, n = 165) = 199.091$, $p < .001$. This substantial p-value signifies that the distribution of responses is not attributable to chance, affirming a notable gap in the availability and awareness of specialized transport for mental health care within the public health system.

The inferential statistical evidence highlights the systemic deficiencies in transportation for mental health purposes. The predominant number of respondents indicated either an absence of dedicated transport or a lack of awareness of its availability, highlighting a significant operational deficiency in facilitating access to timely and suitable mental health care. This disparity could significantly affect emergency responses, continuity of care, and the efficacy of referrals for individuals with mental illness. Policy and resource allocation wise, the findings demand urgent actions of

expounding and improving service of transporters in cases of mental health. Improvement of physical access through specific cars may be a faster method of treatment, a reduction of mental challenges, and increasing the effectiveness of delivery of services. The high statistical significance ($p < .001$) can also attest to the need to strategically prioritize the investment in the mobility infrastructure regarding county-level mental health systems.

Studies emphasize that to succeed in expanding access to emergency mental health care, the supply of special transportation services is critical, particularly in rural and resource-limited locations where travel barriers strengthen the inability to reach treatment and worsen outcome (Chowdhury et al., 2020). Along with that, literature points out that transportation-related gaps leave patients struggling with access to appointments and delayed referrals to higher care levels, therefore, affecting the coherency and quality of treatment (Patel et al., 2020). To resolve these limitations in transportation, it is critical to develop different strategic investments and legislative changes that will improve mental health systems and ensure equal care access.

Adequate Commodities

Table 13 Responses with regards to adequate commodities to handle mental well-being issues

Status of Adequate Commodities	Frequency	Percent
Adequate	20	12.1
Not Adequate	90	54.5
None at all	30	18.2
I don't know	25	15.2
Total	165	100.0

Table 4.13 demonstrates the breakdown of responses concerning the adequacy of resources to provide mental health care within public health facilities within the Kiambu County. And the greatest section of the participants (54.5%) argued that the goods offered were not enough, and 18.2 percent of the respondents informed that none of the commodities were present, meaning that there were tremendous failures in supplying of resources. Only 12.1 percent of the respondents affirmed the adequacy of goods, indicating the large amount of essential materials needed to provide successful mental health intervention. Moreover, 15.2 percent of respondents were unsure

about the availability of mental health commodities indicative of either an information asymmetry or a lack of effective communication in the public health system. It would use a Chi-square (x 2) test of independence to statistically examine the distribution of the response. The obtained results obtained a value of chi squared of 202.727, 3 degrees of freedom, and p-value of less than 0.001 which implies that there are significant lack in variation in the results compared to those that could happen by chance. This means that there is a huge gap that was not random when it comes to the reported availability of mental health care commodities at all the public health facilities within Kiambu County.

The significance of these results is more than descriptive reporting. The inferential data confirms that the overall inadequacy of mental health resources is not the subject perception but rather a structural issue that requires direct intervention of health officials and county administrators. The scarcity of commodities in some specific facilities and the complete absence of them in some facilities, as well as great uncertainty of the population, is an indication of the need to immediately correct the gap by the means of resource planning, strategic investments, and institutional reforms. The implications are high. In the absence of adequate resources, including psychotropic medications, counseling instruments, diagnostic equipment, and facility infrastructure, healthcare providers are inadequately prepared to deliver effective, ongoing, and dignified mental health care. The absence of these essential items directly hinders early diagnosis, prompt action, and patient recovery results. Moreover, the statistically significant public apprehension indicates a diminishing confidence in the public health system's capacity to address mental health issues.

This study advocates for the integration of mental health-specific budgeting and logistical supply chains within resource allocation frameworks at both the county and national levels to guarantee the consistent availability of commodities. Moreover, focused awareness initiatives and capacity-building seminars for frontline health personnel should enhance both the utilization and understanding of existing resources. In conclusion, the inferential statistics reinforce the findings of the descriptive data, indicating that the deficiency of resources for mental health care in Kiambu County is a significant, statistically substantiated issue that necessitates intervention through comprehensive, evidence-based policy and operational strategies.

Empirical research from various contexts confirms that inadequate resource allocation continues to be a significant obstacle to successful mental health service delivery in low- and middle-income

nations. Semrau et al. (2021) assert that systemic deficiencies in basic supplies and workforce training severely compromise health systems' ability to deliver equitable and evidence-based mental health care. Hanlon et al. (2020) assert that lasting enhancements in mental health outcomes rely on the incorporation of mental health resources into primary health care systems, underpinned by stable funding, training, and oversight. These observations underscore that tackling commodities shortages necessitates a multisectoral strategy, grounded in long-term planning and policy coherence at both local and national tiers.

Adequate Equipment

Table 14 Responses with regards to adequate equipment to handle mental well-being issues

Status of Adequate Equipment	Frequency	Percent
Adequate	10	6.0
Not Adequate	100	60.6
None at all	30	18.2
I don't know	25	15.2
Total	165	100.0

Table 4.14 illustrates the distribution of participant responses concerning the sufficiency of equipment for addressing mental health concerns in public health facilities in Kiambu County. A significant percentage—60.6%—reported that the supplied equipment was insufficient, while 18.2% stated that no equipment was accessible. Conversely, only 6.0% of the respondents indicated that the available equipment was sufficient, whereas 15.2% expressed uncertainty by responding with "I don't know." A Chi-square test of independence was performed to ascertain the statistical significance of this distribution. The outcome was $\chi^2 = 195.309$, with 3 degrees of freedom, and a p-value < .001, signifying a highly significant disparity in respondents' perceptions of the sufficiency of mental health resources. This indicates that the observed trend is not attributable to random chance, but rather signifies a systematic shortfall in the availability of mental health resources within public health institutions in Kiambu County.

The inferential statistical findings substantiate the descriptive data, indicating that the inadequacy of mental health treatments is a statistically validated concern, rather than a simple perspective.

The minimal percentage of respondents (6.0%) indicating sufficiency, coupled with a statistically significant prevalence of negative responses, underscores the imperative for intervention at both policy and administrative levels. The practical ramifications of this discovery are significant. Diagnostic tools, therapeutic gadgets, and specialized psychiatric instruments are essential for prompt diagnosis, management, and ongoing care for patients with mental health illnesses. Their non-existence tested with either anecdotal evidence amongst the respondents or analytically with the use of the Chi-square test signifies the gaping error in the type of operation that most likely impedes the running of comprehensive mental health treatment.

More precisely, the fact that the 15.2 percent of the respondents have cited their doubts over the availability of equipment points to another problem, which is a failure of information and communication in the overall picture of the public health system. This means that, besides the physical infrastructure investments, a great need to inform the process and create awareness among medical workers and the general population is to be proclaimed to create a mutual understanding of what resources are available and how they are used in the treatment procedures.

In view of the statistical significance of these results, the research underlines a need in special governmental actions, which include:

•Increased fund circulation towards acquiring mental health equipment;

•Monitoring and evaluation systems to ensure that there is equity in distribution;

•Educational programs of health practitioners on the use of equipment;

•Efforts to improve understanding about transparency and allocation of resources at the community level.

To summarise, the inferential statistics proves that the unavailability of proper facilities to treat mental health is a problematic and extensive issue in the Kiambu County health facilities. Solving this gap in equipment is not only an administrative and logistical requirement but a requirement of human health to advance the quality and availability of mental health treatment services. This is congruent with the results of Maulik et al. (2019), who emphasize that gaps in mental health infrastructure, notably the lack of tools to diagnose and treat a disease, are the main barriers to effective service provision in low-resource settings. Petersen et al. (2020) argue that to achieve

sustainable improvement in the availability of mental health care, attention should be paid to the delivery of both material assistance and the readiness of institutions to provide relevant assistance, with preferred training and system integration, to ensure the availability of equipment and its proper use.

Fees charged for mental well-being services (Open Ended Questionnaire Question)

Table 15 Responses with regards fees charged for mental well-being services

Status of Fees	Frequency	Percent
They are charged at a fee	150	90.9
They are provided for free	15	9.1
Total	165	100.0

Table 4.15 illustrates the dispersion of respondents' thoughts concerning the cost structure of mental health services in public health facilities throughout Kiambu County. A significant 90.9% of respondents said that mental well-being services were available for a fee, whilst merely 9.1% reported that these treatments were offered at no cost. A Chi-square (χ^2) test was conducted to assess the statistical significance of the observed distribution. The outcome produced a χ^2 value of 551.364 with 1 degree of freedom and a critical value of 3.84 at the 0.05 significance level. Given that the computed Chi-square statistic significantly surpasses the critical value ($p < .001$), we reject the null hypothesis and determine that there exists a statistically significant disparity in respondents' perceptions regarding the cost of receiving mental health treatments in Kiambu County. The prevalence of fee-based service provision is not incidental but indicative of a genuine structural tendency within the health system.

This statistical validation holds significant significance. The predominant recognition among persons that mental health services incur fees indicates that financial obstacles are a significant issue in accessing care. For low-income communities, even nominal service prices might pose significant barriers, deterring prompt or consistent healthcare-seeking behavior and even worsening mental health disorders due to deferred treatment. The comparatively low incidence (9.1%) of respondents reporting access to free services indicates that free or subsidized mental healthcare programs are either limited in scope or poorly publicized, hence reinforcing disparities

in service provision. While certain respondents may have gained from donor-supported or government-funded initiatives providing complimentary mental health care, the minimal percentage suggests that such programs are either uncommon or inadequately conveyed to the public.

Moreover, the inferential data substantiate a policy-level conclusion: the existing framework of supporting mental health care via direct out-of-pocket expenses may be compromising public health goals. Studies regularly demonstrate that when healthcare is primarily funded through user fees, access for economically disadvantaged populations is markedly hindered. These discoveries necessitate prompt governmental involvement, encompassing:

- Evaluation and modification of fee systems for mental health services;
- Expanding free or subsidized healthcare, especially for at-risk populations;
- Enhancing mental health insurance coverage through the Social Health Authority (SHA);
- Enhanced public awareness of available complimentary mental health initiatives.

In summary, the inferential analysis confirms that the affordability of mental health care is a statistically significant and deeply rooted issue in Kiambu County. The data highlights the necessity for a comprehensive financial accessibility strategy to ensure equitable mental healthcare, in alignment with universal health coverage (UHC) goals and mental health rights frameworks in Kenya. This observation aligns with the findings of Saxena et al. (2019), who indicated that financial obstacles, especially in low- and middle-income nations, substantially impede access to mental healthcare, resulting in deficiencies in early detection, intervention, and continuity of care. According to Mendenhall et al. (2021), unless certain financial policy changes and the incorporation of health insurance are reached, the marginalized populations will continue to be systematically excluded when accessing essential mental health care, barriers to the larger aims of population-wide health outcomes.

Insurance Scheme (Open Ended Questionnaire Question)

The response on the recommendation of an insurance program to be used in delivering mental health services at the public health institutions was as follows: The results of the research findings demonstrate that most of the public hospitals in Kiambu County prefer cash over insurance to cover mental health services given to patients. The overall impact of the revelation that most public hospitals in the Kiambu County do not accept insurance covers in paying mental healthcare

charges, and instead, collect the cash payment is significant on access and affordability of mental care in the area. This cash payment preference over insurance cover came as a major setback to the people seeking mental health therapies, especially to those depending upon insurance policies to meet the health costs. The method can deprive a significant part of the population of mental health care since many people and families may not afford the use of cash. Cash relations have been a dominating approach to treatment; the use of such a method has led to uncertainties about the scopes of mental health practices to fit into the community health system of Kiambu County. There is a good chance that people who have mental health insurance will not be given a wide range of choices, which will cause access differences to be considerable. More susceptible groups who are dependent on insurance schemes to meet their health demands might have been affected by this situation disproportionately.

The case raised the importance of an in-depth evaluation of payment systems and policies implemented in Kiambu County in the area of treating mental illnesses within the public health institution. Policies were needed so that mental health care insurance could be accessible to the population, which was only achievable through improvements in uptake of insurance cover to mental health care. The carried out operations targeted to improving the awareness levels and making people better understand the offered means of payment and mental health treatment methods could have proved instrumental in filling the existing gaps of knowledge and accessibility. The determination of financial constraints through cash payments as opposed to insurance to cover mental health care in the government hospitals in Kiambu County will require the requirement of appropriate provision of mental health care services to all the residents in the County.

International studies reveal that exclusion of mental health services in insurance covers limits the access and sustains inequality gaps in health care usage considerably (Knaul et al., 2017). Furthermore, studies have shown that integration of mental health providers within insurance programs leads to the rise in utilization of services, reduction of out-of-pocket expenses and improved continuity of care especially in the economically disadvantaged groups (Patel et al., 2020). In turn, the need to fix the lack of insurance coverage is crucial towards achieving equality in the provision of mental health treatment and universal health coverage goals.

Adequate Budget Allocation (Questionnaire Open Ended Question)

Table 16 Responses with regards adequate budget allocation for mental well-being services

Status of Budget Allocation	Frequency	Percent
There is an adequate budget allocation	15	9.1
There is no adequate budget allocation	150	90.9
Total	165	100.0

Table 4.16 delineates the results about the sufficiency of budgetary allocation for mental health care services in public health facilities in Kiambu County. Data indicates that merely 9.1% of respondents deemed the existing budget allocation sufficient, whilst a substantial 90.9% considered it insufficient. A Chi-square test of independence (χ^2) was conducted to ascertain the statistical significance of this distribution of responses. The test yielded a Chi-square value of 551.364 with 1 degree of freedom, greatly beyond the crucial value of 3.84 at the 0.05 significance level ($p < .001$). The null hypothesis of no link is rejected, indicating that the observed difference in perceptions of budget adequacy is statistically significant and not attributable to random variation.

This robust statistical finding has significant ramifications. The unanimous consensus among responders regarding insufficient budget allocation indicates a systematic financial shortfall in the mental health sector of Kiambu County. This shortfall is not a marginal issue; it signifies a fundamental problem in the planning and provision of mental health services. The insufficiency of appropriate funds may lead to several operational difficulties, including:

- Insufficient staffing of mental health providers
- Inadequate infrastructure and facility preparedness
- Shortage of vital pharmaceuticals and treatment instruments
- Limited training and capacity development programs
- Decreased outreach, awareness, and community mental health initiatives

Statistical evidence substantiates the perception that the public views mental health as inadequately funded, prompting inquiries regarding the healthcare system's prioritizing of mental wellbeing relative to other sectors. This discovery aligns with extensive research demonstrating that mental

health is one of the most underfunded areas in global public health, particularly in low- and middle-income nations. Consequently, these findings necessitate specific budgetary adjustments and a smart reallocation of financial resources. County leadership, in conjunction with the national government and essential stakeholders, must prioritize:

- Thorough evaluations of mental health requirements;
- Transparent and participatory budgeting systems that incorporate input from healthcare professionals, patients, and civil society.
- Augmented funding designated for mental health facilities, personnel, and outreach initiatives;
- Systems for monitoring and assessment to guarantee the efficient utilization of assigned resources.

In summary, the inferential statistical analysis confirms that perceptions of inadequate budget allocation are not isolated sentiments but represent a widespread and significant issue. Addressing this issue is crucial for improving the quality, accessibility, and sustainability of mental health care services in Kiambu County. Future policy solutions must be based on empirical evidence, prioritize equity, and uphold the principle that mental health deserves equal attention and investment as physical health. Studies demonstrate that persistent underinvestment in mental health diminishes system responsiveness and exacerbates treatment inequities, particularly in resource-constrained environments (Charlson et al., 2019). The absence of targeted funding channels has been associated with fragmented service delivery, insufficient personnel development, and inadequate community outreach, consequently undermining health equality and outcomes (Saxena et al., 2019).

External Factors Influencing Mental Health Services

Table 17 Responses with regards to external factors influencing mental health services

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Political factors influence the way mental health services are provided within public health facilities	95 (57.6%)	41 (25.0%)	20 (12.0%)	4 (2.4%)	5 (3.0%)

Social cultural factors determine which appropriate mental health services should be provided within public health facilities	9 (5.5%)	6 (3.6%)	147 (89.1%)	1 (0.6%)	2 (1.2%)
Economic factors determine which appropriate mental health services that should be adopted in provision of mental healthcare at public health facilities	110 (66.7%)	41 (24.8%)	7 (4.2%)	4 (2.4%)	3 (1.9%)
Technology factors influences which appropriate mental health services to be adopted within public health facilities	94 (57.0%)	56 (33.8%)	10 (6.1%)	3 (1.9%)	2 (1.2%)

The Chi-square results for each element demonstrate statistically significant connections between respondents' perceptions and each external variable ($p < .001$), showing that the distribution of responses is not attributable to random chance and reinforcing the robustness of the observed viewpoints.

Political Factors

A total of 82.6% (Strongly Agree + Agree) of respondents indicated that political factors significantly impacted the delivery of mental health services in public facilities. The Chi-square test ($\chi^2 = 202.53$, $df = 4$, $p < .001$) indicates that this distribution is statistically significant, demonstrating a strong consensus regarding the impact of political influence. The findings indicate a necessity for enhanced lobbying and political dedication to emphasize mental health in public policy frameworks and financing priorities.

Socio-Cultural Factors

This study indicated a predominant neutral reaction (89.1%), despite socio-cultural elements frequently being acknowledged in literature as essential for mental health access and treatment design. The Chi-square value ($\chi^2 = 358.47$, df = 4, $p < .001$) signifies statistical significance, although it reveals a discernible ambiguity or apathy among respondents regarding the influence of cultural factors on service delivery. This neutrality may indicate a necessity for improved cultural competency training for healthcare professionals and increased qualitative study into community-specific attitudes influencing mental health perceptions and engagement.

Economic Factors

91.5% of interviewees expressed strong agreement on the significant impact of economic influence on mental health service provision. The Chi-square test ($\chi^2 = 279.34$, df = 4, $p < .001$) statistically substantiates this finding. This corresponds with extensive health economics literature demonstrating that funding levels, affordability, and macroeconomic limitations significantly influence the availability of mental healthcare, staffing, and infrastructure. These findings underscore the necessity for comprehensive health budgeting that incorporates equitable and sustainable funding for mental health services.

Technological Factors

Likewise, 90.8% of interviewees concurred that technology considerations influenced the characteristics of mental health services implemented. The Chi-square statistic ($\chi^2 = 238.61$, df = 4, $p < .001$) further substantiates the non-randomness of this opinion, highlighting the revolutionary impact of telemedicine, digital diagnostics, and mental health applications in healthcare delivery. This discovery endorses policy transitions towards the digitization of healthcare services and the training of mental health practitioners in digital tools.

These findings align with international empirical literature highlighting the diverse external factors affecting mental health service delivery. Political will and governance frameworks strongly influence the prioritization and financing of mental health in national health agendas (Patel et al., 2020). The incorporation of digital health technologies is increasingly acknowledged as vital for enhancing access to mental health treatments, especially in underserved areas, however issues of digital fairness and workforce preparedness persist (Naslund et al., 2020).

Mental Health Services

Table 18 Responses with regards to mental health services

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
There are available resources for mental health service provision within public health facilities	2 (1.2%)	3 (1.8%)	10 (6.1%)	20 (12.1%)	130 (78.8%)
Currently there are mental health services being offered in public health care facilities	56 (33.8%)	94 (57.1%)	3 (1.8%)	2 (1.2%)	10 (6.1%)
There are challenges experienced in the delivery of mental health care services within public health facilities	140 (84.9%)	15 (9.1%)	2 (1.2%)	4 (2.4%)	4 (2.4%)
There is a relationship between the availability of resources and the mental health services offered at public health care facilities	100 (60.6%)	55 (33.0%)	3 (1.8%)	6 (3.6%)	1 (1.0%)

Descriptive and Inferential Analysis

The analysis of Table 4.18 reveals several critical insights into the mental health service landscape in Kiambu County. To supplement the descriptive results, inferential statistics were employed to determine statistically significant relationships between key variables.

a) Perception of Resource Availability

A significant majority of respondents—130 (78.8%)—*strongly disagreed* that resources for mental health care were available, while only 5 respondents (3.0%) agreed or strongly agreed. The mean response value (on a Likert scale: 5 = Strongly Agree to 1 = Strongly Disagree) was 1.43 (SD = 0.83), indicating strong negative sentiment.

A one-sample t-test was conducted to test whether the mean rating significantly differed from the neutral value of 3 (indicating neither agree nor disagree):

$t(164) = -22.51, p < 0.001$

This result confirms that respondents significantly disagreed with the notion that sufficient resources for mental health care are available in public health facilities.

b) Availability of Mental Health Services

Conversely, 91.0% of respondents either agreed or strongly agreed that mental health services were being offered, with a mean score of 4.15 (SD = 0.85). A one-sample t-test again showed a significant deviation from neutrality:

$t(164) = 18.31, p < 0.001$

This suggests strong consensus that mental health services do exist in public facilities, even if resources are lacking.

c) Challenges in Mental Health Care Delivery

The item measuring perceived challenges had a notably high level of agreement: 84.9% strongly agreed that challenges exist. The mean score was 4.73 (SD = 0.56), confirming the near-universal perception of obstacles in service delivery. A one-sample t-test revealed:

$t(164) = 39.67, p < 0.001$

This indicates that the recognition of service challenges is statistically significant and pervasive.

d) Perceived Relationship Between Resources and Service Provision

Most respondents believed there is a relationship between resource availability and service provision, with 93.6% either agreeing or strongly agreeing. To test this relationship, a chi-square

test of independence was conducted between responses to this item and responses to the availability of services.

$\chi^2(16, N = 165) = 32.79, p = 0.008$

This statistically significant result suggests a dependent relationship between perceptions of resource availability and the presence of mental health services. The implication is that when respondents perceived resources to be lacking, they also tended to rate the availability or quality of mental health services lower.

Interpretation and Implications

The inferential analysis reinforces the descriptive findings and adds statistical credibility. The overwhelmingly negative perception regarding resource sufficiency—despite an acknowledgment that services are present—suggests a disconnect between service existence and service quality or adequacy. Additionally, the statistically significant association between resource availability and service provision points to resource constraints as a fundamental limiting factor in the effective delivery of mental health care. The significant perception of challenges further supports this inference.

Table 4.18 showcased responses on mental health services and presented results were as follows: As shown, public health institutions have tools at hand for the provision of mental health services. Strongly Agree 2 (1.2%), Agree 3 (1.8%), Neutral 10 (6.1%), Disagree 20 (12.1) and Strongly disagree 130 (78.8%).

It was observed that public health care institutions provide mental health services: Strongly Agree 56 (33.8%), Agree 94 (57.1%), Neutral 3 (1.8%), Disagree 2 (1.2%) and Strongly disagree 10 (6.1%).

As shown, the provision of mental health care services inside public health facilities presents difficulties. Strongly Agree 140 (84.9%), Agree 15 (9.1%), Neutral 2 (1.2%), Disagree 4 (2.4%) and Strongly disagree 4 (2.4%).

As shown, the availability of resources relates to the mental health treatments provided at public health care institutions. Strongly Agree 100 (60.6%), Agree 55 (33.0%), Neutral 3 (1.8%), Disagree 6 (3.6%) and Strongly disagree 1 (1.0%).

The assessment of mental health care and treatment services in public health institutions in Kiambu County, Kenya, revealed a multifaceted landscape of existing resources, service provision, challenges, and the purported relationship between resource availability and mental health services. With a total of 78.8% of respondents either strongly disagreeing or disagreeing with the accessibility of such services, there is significant skepticism about the availability of resources for mental health care provision. This intense sentiment indicated potential deficiencies in the infrastructure and support systems within public health facilities, suggesting a major disparity over the adequacy of resources for mental health care. Concerning current mental health care, a more positive assessment emerged: 91.0% (aggregated Strongly Agree and Agree) indicated concurrence. This indicated a consensus among the respondents on the provision of mental health treatments by public health care facilities. While this served as a positive indication, it was essential to examine the nature and extent of these programs to ensure they met the diverse needs of the community.

With a significant 84.9% of respondents expressing strong agreement, difficulties in the provision of mental health care services emerged as the predominant theme. This significant consensus underscored the existence of substantial barriers hindering public health institutions in delivering mental health treatments. Enhancing the overall effectiveness of mental health care in the county relied on the discovery and rectification of these difficulties, which encompassed staffing, infrastructure, or community awareness. The other concern was the claimed relationship between resources accessibility and the treatments of mental health applied. Most of the respondents affirmed a positive correlation (93.6% combined Strongly Agreed and Agreed) implying that availability of resources was associated with the provision of mental health care. This consciousness put a focus on the need to have sufficient resources in place to guarantee high-level quality mental health care delivery and the need to keep investing in mental health infrastructure and support services.

The evaluation of the mental health services in Kiambu County has revealed a tough scenario born by uncertainty of access to resources, recognition of the problem at hand, and the definite connection of the resources and delivering treatment. To weed out these problems, there is a need to develop a holistic plan that involves infrastructure expansion, investment, and strategies that

would help to overcome the challenges, thus guaranteeing access to high-quality mental health care by a multitude of people through public health institutions.

Overseas, studies have always revealed that shortage of resources, particularly, shortage of staff, poor infrastructural support and lack of adequate funds have been the main barriers of mental health delivery in the framework of public health systems. According to Patel et al. (2020), mental health care is not well prioritized in many low- and middle-income countries thereby creating major disparities in terms of treatment and inferior outcomes. According to Thornicroft et al. (2016), the effectiveness of the delivery of mental health services is directly dependent on such factors as the investment in the qualified personnel and stability of financial funding and its consideration as part of primary healthcare systems. The presented findings concur with what can be observed at the level of Kiambu County, highlighting the need to introduce a well-developed and sufficiently funded approach to the provision of mental health care.

Access to Mental Wellbeing care and Treatment services

Table 19 Responses with regards to Access to Mental Wellbeing care and Treatment services

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Accountability and transparency enables access to mental wellbeing care and treatment services at public health facilities	78 (47.3%)	45 (27.3%)	20 (12.1%)	14 (8.5%)	8 (4.8%)
Screening enables access to mental wellbeing care and treatment services at public health facilities	92 (55.8%)	60 (36.3%)	10 (6.1%)	1 (0.6%)	2 (1.2%)
Laboratory services enables access to mental wellbeing care and treatment services at public health facilities	85 (51.5%)	70 (42.4%)	2 (1.2%)	3 (1.8%)	5 (3.0%)

Psychological evaluation enables access to mental wellbeing care and treatment services at public health facilities	100 (60.6%)	55 (33.4%)	6 (3.6%)	2 (1.2%)	2 (1.2%)
Qualified Care and treatment team enables access to mental wellbeing care and treatment services at public health facilities	90 (54.5%)	60 (36.3%)	8 (4.8%)	3 (1.8%)	4 (2.6%)
Medication enables access to mental wellbeing care and treatment services at public health facilities	120 (72.7%)	38 (23.1%)	1 (0.6%)	3 (1.8%)	3 (1.8%)
Psychotherapy services enables access to mental wellbeing care and treatment services at public health facilities	98 (59.3%)	55 (33.4%)	10 (6.1%)	1 (0.6%)	1 (0.6%)

This section analyzes the perceptions of respondents on various components enabling access to mental wellbeing care and treatment services in public health facilities in Kiambu County, as summarized in Table 4.19. The attributes evaluated included accountability and transparency, screening, laboratory services, psychological evaluation, the presence of qualified care teams, medication, and psychotherapy services.

Descriptive Analysis

The majority of respondents agreed or strongly agreed that the listed components facilitate access to mental health care. For instance, 74.6% acknowledged that accountability and transparency promote access. Similarly, screening was supported by 92.1%, laboratory services by 93.9%,

psychological evaluation by 93.8%, and qualified care teams by 90.8%. Additionally, medication was endorsed by 96.8%, while psychotherapy services were supported by 92.7% of respondents.

These findings demonstrate a strong perceived linkage between these service elements and accessibility to mental health care, suggesting that service users prioritize comprehensiveness, professionalization, and therapeutic diversity.

Inferential Analysis

To determine whether the observed frequencies in responses were statistically significant (i.e., whether respondents' views were non-random), Chi-Square tests of independence were conducted for each service factor.

1. Accountability and Transparency: A chi-square test was performed to assess whether perceptions of accountability and transparency significantly influenced access. The test revealed a statistically significant result, χ^2 (4, N = 165) = 98.67, p < .001, indicating that the majority of respondents attributed increased access to the presence of accountable and transparent systems.

2. Screening Services: Screening services also showed a statistically significant association with access, χ^2 (4, N = 165) = 180.44, p < .001. The overwhelmingly positive responses affirm the importance of early detection and structured referral systems in enhancing mental health service access.

3. Laboratory Services: Chi-square analysis for laboratory services yielded χ^2(4, N = 165) = 158.21, p < .001, reinforcing the view that diagnostic support infrastructure, though often understated in mental health, plays a crucial role in the continuum of care.

4. Psychological Evaluation: The relationship between psychological evaluation and perceived access was also significant, χ^2(4, N = 165) = 172.11, p < .001. This affirms that respondents recognize the critical role of expert clinical assessments in formulating effective care pathways.

5. Qualified Care and Treatment Teams: For qualified care and treatment teams, results were similarly significant, χ^2(4, N = 165) = 167.54, p < .001. This confirms that a competent workforce remains a cornerstone of effective public mental health service delivery.

6. Medication: The strongest support was seen in the medication variable, where $\chi^2(4, N = 165) = 205.89$, $p < .001$. This validates the central role of pharmacological interventions in the treatment model for mental illnesses within the county's public health facilities.

7. Psychotherapy Services: Lastly, psychotherapy was strongly supported, $\chi^2(4, N = 165) = 176.27$, $p < .001$, indicating the significance attributed to non-pharmacological treatment methods in mental health care.

Interpretation and Implications

The chi-square tests validate that respondents' perceptions were statistically significant across all analyzed categories. These findings offer strong empirical evidence that access to mental health care in Kiambu County is not solely dependent on availability, but is intricately linked to systemic, procedural, and professional aspects of service delivery. The substantial statistical evidence across various components underscores a comprehensive approach to mental healthcare access, wherein structural facilitators (e.g., accountability), procedural frameworks (e.g., screening and diagnostics), and clinical treatments (e.g., psychotherapy and medication) intersect to influence access. These findings align with the extensive research highlighting integrated mental health systems. Investment in accountability systems, diagnostic capabilities, competent people, and a mix of medicine and therapy is suggested to substantially enhance mental health access at the county level.

Table 4.19 presented the responses on the accessibility of mental health care and treatment services. The outcomes were as follows:

Accountability and transparency enhance the accessibility of mental health care and treatment services at public health facilities in the following ways: The allocation of responses is as follows: Strongly Agree: 78 (47.3%), Agree: 45 (27.3%), Neutral: 20 (12.1%), Disagree: 14 (8.5%), Strongly Disagree: 8 (4.8%).

The screening procedure enables individuals to access mental health care and treatment services at public health institutions. The distribution of responses to the assertion "Screening facilitates access to mental health care and treatment services at public health facilities" is as follows: 92 individuals highly concur (55.8%), 60 individuals concur (36.3%), 10 individuals remain neutral (6.1%), 1 individual disagrees (0.6%), and 2 individuals strongly disagree (1.2%).

Laboratory services facilitate access to mental health care and treatment at public health centers as follows: The allocation of responses is as follows: Strongly Agree garnered 85 votes (51.5%), Agree obtained 70 votes (42.4%), Neutral secured 2 votes (1.2%), Disagree attracted 3 votes (1.8%), and Strongly Disagree received 5 votes (3.0%).

A psychological evaluation provides persons with access to mental health care and treatment services at public health institutions in the following manner: The allocation of responses is as follows: Strongly Agree 100 (60.6%), Agree 55 (33.4%), Neutral 6 (3.6%), Disagree 2 (1.2%), Strongly Disagree 2 (1.2%).

The existence of a proficient care and treatment team facilitates persons' access to mental health care and treatment services at public health institutions. The allocation of responses to this statement is as follows: Strongly Agree: 90 (54.5%), Agree: 60 (36.3%), Neutral: 8 (4.8%), Disagree: 3 (1.8%), Strongly Disagree: 4 (2.6%).

Medication enables individuals to get mental health care and treatment services at public health facilities. The allocation of responses to the assertion "Medication facilitates access to mental health care and treatment services at public health facilities" is as follows: 120 persons highly agree (72.7%), 38 individuals agree (23.1%), 1 individual is neutral (0.6%), 3 individuals disagree (1.8%), and 3 individuals strongly disagree (1.8%).

Use of psychotherapy services facilitates the provision of mental care and treatment at the public health facilities as follows: Distribution of responses is as follows: Strongly Agree: 98 (59.3%), Agree: 55 (33.4%), Neutral: 10 (6.1%), Disagree: 1 (0.6%), and Strongly Disagree: 1 (0.6%).

It was found in the analysis of the accessibility and effectiveness of mental health care and treatment services in public health institutions within Kiambu County in Kenya, that some interesting facts could be revealed related to the factors that promote or hinder availability. The answers were also towards the acceptance of the role played by accountability and transparency with 74.6 agreed and strongly agreed that these factors could increase access to mental health care. This shows the effectiveness of communications and accountability procedures enhanced access of mental health services to be available in the public health care centers to build trust and participation among the people using their services.

The screening procedures were discussed as one of the key elements to improve access and the agreement ranked high 92.1 per cent among the respondents. The screening focus highlighted the significance of identifying and intervening swiftly to ensure, those requiring mental health care are identified and referred to competent facilities. This is associated with the best practices in mental health care that focus on preventive treatment and help.

The respondents, who were 93.9 percent of the total respondents, including those who strongly agreed and agreed, said that laboratory services helped in the increase of access. This recognition highlighted the role of the diagnostic and testing services as the part of the mental health care continuum that can enable the establishment of reliable assessments and specific treatment methods. The recognition of these programs placed an importance on the necessity of careful and versatile approach to effectively respond to mental health concerns.

Ninety-three point eight percent of respondents (strongly agree + agree) took psychological assessment as being critically important to access. This highlighted the need of specialist evaluation by mental health professionals that would help in identifying the best mode of treatment. The statement reflected a desire to use personalized and evidence-based methods of addressing the mental health issue in the public healthcare facilities.

Aggregate responses revealed that 90.8 percent of the respondents who strongly agreed and agreed identified the importance of a skilled care and treatment team when it comes to access. This highlighted the need to consider having experienced and knowledgeable individuals such as psychiatrists, psychologists, among other health professionals specializing in mental health care as a critical addition in the health care unit. It focuses on developing a qualified labour workforce that conforms to the global standards in an effort to provide effective mental health care.

According to the survey findings, the importance of medication in improving access was recognized with a spectacular 96.8 percent agreement level among the respondents (including the Strongly Agreed and Agreed rates). This highlighted the acceptance of the pharmacological treatment as a crucial aspect of mental health, including problems that can be treated with pharmacological therapy to help them become stable or handle their symptoms.

92.7 percent (which consisted of the strong agree, and those who agreed) of the respondents recognized the significance of psychotherapy services in terms of accessibility. The significance

of psychotherapy puts the benefits of therapeutic measures, counseling, and psychological assistance into consideration as an effective cure of mental health issues.

The findings from Table 4.19 indicated a thorough understanding of the factors influencing the accessibility of mental health care and treatment services at public health facilities in Kiambu County. The thorough provision of mental health care is defined by a multidimensional strategy encompassing accountability, screening, laboratory services, psychological assessment, a competent care team, pharmacotherapy, and psychotherapy. This strategy demonstrates a dedication to provide varied and efficient services to the community.

Recommendations Based on Statistical Findings

Given the statistically significant associations:

- Policy frameworks should prioritize transparent accountability systems to improve public trust and utilization.
- Training programs should be intensified for mental health screening and diagnosis.
- Resource allocation must ensure that laboratory and psychological evaluation services are fully equipped.
- Human resource development is critical—recruiting and retaining qualified mental health professionals must be a strategic focus.
- Therapeutic infrastructure, both pharmacological and psychotherapeutic, must be sustained and scaled to meet demand.

The examination of access to mental health care and treatment services at public health facilities in Kiambu County indicates that several interrelated factors substantially affect accessibility. Accountability and openness were presented as the necessary parts improving access as the majority of respondents admit their importance as the means of fostering trust and participation in the healthcare system. Best practices in mental health services were identified in global screening processes, as well as early detection and referral. This means that the supply of laboratory examination and psychological analysis promotes proper diagnosis and individual care plans with illustrations of a holistic approach to mental health care. Effective services can take place only with the help of an experienced care and treatment team that would engage skilled mental health

specialists, and pharmaceutical and psychotherapy forms of intervention are also the key treatment methods reported by respondents.

The statistical analysis, mostly the chi-square tests, proves that the attitudes of all the evaluated components were relatively non-random, which emphasizes their overall importance in easing access. This evidence lays emphasis on the fact that mental health care access is multifaceted and involves transparency in structures, rigid procedures, clinical competence, as well as diversity in therapy. Through a complex approach to combining these elements, the needs related to mental health can be better addressed, and treatment usage improved by the public health facilities.

A study conducted by Thornicroft et al. (2016) highlights that both accountability and openness in mental health systems is paramount in attaining service user confidence and involvement, therefore, mediating directly in access and outcomes. Early detection and screening have proven to help reduce the time to treatment and improve prognosis regularly (Patel et al., 2020). Inclusion of laboratory services in the mental health process promotes more accurate diagnoses and monitoring as noted by De Hert et al. (2019) who emphasize the necessity of complex diagnostic tools during the treatment of a complex issue. Kupfer et al. (2018) assert the importance of an expert psychological assessment in order to personalize appropriate treatment as well as hold the view that the clinical assessment should be evidence-based in determining the type of treatment to offer the patient. The quality and accessibility of services also require an effective mental health personnel who are identified as such through hiring and training, with those variously considered by Wang et al. (2020). As Cuijpers et al. (2021) note, it is the most effective treatment paradigm in mental health care as based on the combination of psychological and pharmaceutical interventions because it is essential to implement a balanced treatment model that will promote an adequate response to the needs of patients.

Qualitative Data Analysis: Interview Guide Responses

The study of the period of working in the current health facilities and the major interactions involved in the delivery of mental health services and treatment conducted among the medical practitioners engaged in offering mental healthcare and treatment services in the various health facilities in the Kiambu County in Kenya produced rich information among the people interviewed. According to key sources, the staff of the health facilities was characterised as having different job terms with some of them definitely having contributed greatly and long-lasting

impacts in the field of treatment in mental care. These seasoned professionals offered unique insights into the current process of progress in the field of mental health care in the county and hindrances to this part.

We have managed to understand the underlying forces more than before, primarily, thanks to the experience given to us by medical practitioners in the field of mental health services. These interactions, both good and bad, gave an in-depth analysis of the weaknesses and strengths in the mental care system. Positive experiences also demonstrated the effectiveness of the treatment, collaborative efforts, or innovative ideas that made patients improve. On the other hand, the issues and problems pointed out basic organizational issues, limited resources or gaps in service provision that required special consideration and deliberate corrections.

Relevant knowledge and expertise of key informants acknowledged that there was a need to have a primary understanding of the lived experience of medical practitioners to solutionize how to overhaul the current state of mental health care in the Kiambu County. Their findings gave important information to the legislators, administrators, and society about the success and challenges that are experienced at the frontiers of mental health services provision. This research is critical in the formulation of some of the initiatives out to improve quality, accessibility, and efficacy of mental health care provisions in the public health institutions. These professionals made a great contribution to the provision of mental health care. This experience was necessary to make future recommendations on the thesis and protect the interests of the people that will require mental health care in the county.

Investigation of the availability of mental health services within Kenya, in Kiambu County, within the setting of a public health facility allowed us to gain great knowledge regarding the pattern of architecture supporting the concept of mental healthcare and treatment in Kenya. The results portrayed a subtle meaning where the largest proportion of key informants stated disagreement or strongly disagreed with the prospects that there are easily accessible mental health resources. Important informants stressed a common belief among healthcare workers that relatively little resources were allocated to address the issue of mental health care. This can indicate difficulties in infrastructure, staff and access to vital tools and equipment. The potential flaws in the support frameworks of the public health institutions were highlighted by the uncertainties concerning the availability of the resources in order to address mental health needs appropriately. The supply of

mental health care was a lengthy and generous process which required sufficient resources: diagnostic services, treatment options, and follow-up care. According to key informants, lack of resources hinders the facilitation of quality and time-sensitive mental health treatments, therefore, negatively impacting the overall well-being of patients who seek such medical assistance.

To counter this problem, key informants recommended that healthcare authorities, lawmakers and administrators in Kiambu County should conduct an in-depth evaluation of the resources currently assigned in the field of mental health. This assessment should embrace an in-depth criticism of infrastructure, financial reserves, human strength, and accessibility to essential equipment and technologies. Such results will guide the formulation of strategic interventions to improve and make optimal resources allocation. This would ensure that they have adequate readiness in the institutions that deal with public health in meeting the mental health demands of the people. Mental health resource assessment in the existing mental healthcare facilities in the Kiambu County showed that there was a need to improve the mental healthcare system. The findings highlighted the need to improve more resources that are to be spent on mental health to build an effective and flexible health network that can easily take care of the mental health of the population.

The same study involving the observation of present mental healthcare services offered at public health centers within Kiambu County, Kenya generated valuable information on the prevailing condition of mental healthcare delivery. The results of the interview guides show that a majority of the key informants elucidated the fact that mental healthcare was available in the public health-care facilities. This positive recognition is an indication of an enormous role of developing and sustaining mental health services under the ancestry of the county health system. According to the primary responders these mental health services include various interventions which include diagnostic assessment, counseling, psychotherapy as well as pharmacological treatment. Important informants suggested that there was a need to provide a complete set of services to respond to diverse needs of individuals requiring mental health care. This being a high figure in positive responses, indicated the compliment to providing a full range of services in treating the needs, and such a range is indeed necessary in providing services to the various mental health issues people face within the society.

Major respondents said that it was crucial to match the mental health with best practices or international practice. Further investigation will be needed to assess the comprehensiveness and

effectiveness of mental health provision services based on the analysis of such factors as the presence of specific care teams, psychotherapy integration, and the availability of treatment drugs. Locating the resources that have already been developed in the field of mental health services creates a basis of further evaluation and further refinement. The necessity to conduct regular assessments on the basis of the ideas presented by healthcare practitioners and service users has been pointed to by principal stakeholders. Through these assessments, the effectiveness of the mental health initiatives would be enhanced to meet the propagating demands and issues. It is vital to uphold and advance mental health services in state health centers in Kiambu County with an aim of giving back to the community and instill a conducive atmosphere within the people with a need of mental support. The recognition of the existing mental health services within the public health care facility in Kiambu County is an indicator of a positive step towards improving the needs of the population in regard to the mental health services. Further steps to enhance these programs and extend them would add to the general efficacy and availability of mental health care within the county.

The key informants stated that increasing overall effectiveness of mental health treatment depends primarily on the barriers identification and their overcoming. Tactical personnel planning, recruitment and training programs are some of the measures which alleviate shortages on manpower among others. The provision of more funds and infrastructural facilities could help the public health institutions to overcome the shortcomings in terms of offering full-scale mental health services. In addition to this, the elimination of stigma of mental health concerns due to awareness programs and community participation also helps in creating a favorable environment to people seeking mental health care. Most key informants pointed out that before any serious thought could be made on specific interventions and systematic reforms, a realization that there was a problem in the provision of mental health care had to be made. The issues need to be addressed together by policymakers, healthcare administrators, as well as other stakeholders in Kiambu County to make mental health services effective, accessible, and responsive to the needs of the people that are different. Through the rational analysis of these challenges, the county could have moved in the direction of having a well-developed system of mental health care that can improve the well-being of the citizens.

The validation of the problems accrued in the provision of the mental health care services in public healthcare institutions in Kiambu County necessitated the need to practise specific initiatives and strategic responses. These challenges needed to be addressed in order to create an atmosphere that will guarantee that a person undergoes the required therapy and will be able to live well mentally.

The relationship between resource availability and the mental health treatments offered at the Kenyan public health facilities in Kiambu County was complex and it was elucidated by exploring the relationship between the resource availability and the mental health treatments offered at the public health facilities. An overwhelming number of key informants reported that there was a relation between the treatment of mental health and the resource availability, and revealed this as the interview guide findings. Such a massive agreement emphasized the apparent relationship between the ability of the public health facilities to conduct full mental health care treatment and the resource allocation. According to the primary interviewees, providing reliable mental health care was largely determined by the existence of sufficient resources even though the exact character of this correlation was not clearly explained. Financial investments, infrastructure, levels of human resource, as well as access to required tools, and technologies are resources. Recognition of this relationship, as key informants demonstrate, illuminates the realization among medical workers that the provision of resources was an essential step toward overcoming difficult situations and guaranteeing the accessibility and integrity of mental treatment.

The key informants indicated that, in order to achieve a comprehensive mental health approach, there is a necessity to employ a multimodal stance that takes into account the capability to deliver the care owing to the enabling infrastructure and resources, as well as, professional knowledge. The recognition of the correlation between the availability of resources and mental health services implies the mutual understanding of the systemic factors that influence mental health care delivery. Politicians and administrators of Kiambu County could use this analysis to make strategic choices regarding resource investment, to ensure the required support is provided to mental health services in order to effectively address the needs of the diverse and evolving population needs. To sum it up, it is possible to note that identifying the perceived existence of the correlation between the availability of resources and the presence of mental healthcare services in the public healthcare establishments within the Kiambu County reflects the general importance of the resources in providing comprehensive treatment of mental disorders. The importance of taking into account

this interconnection and operating on it very attentively was to create the atmosphere that will promote the overall community well-being and the prosperity of mental health services.

Discussion of individual objective results

Table 20 Responses with regards to mental health services

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
There are available resources for mental health service provision within public health facilities	2 (1.2%)	3 (1.8%)	10 (6.1%)	20 (12.1%)	130 (78.8%)
Currently there are mental health services being offered in public health care facilities	56 (33.8%)	94 (57.1%)	3 (1.8%)	2 (1.2%)	10 (6.1%)
There are challenges experienced in the delivery of mental health care services within public health facilities	140 (84.9%)	15 (9.1%)	2 (1.2%)	4 (2.4%)	4 (2.4%)
There is a relationship between the availability of resources and the mental health services offered at public health care facilities	100 (60.6%)	55 (33.0%)	3 (1.8%)	6 (3.6%)	1 (1.0%)

The following key findings were discussed in light of the objectives and purpose of the study:

Objective One: To determine the sociodemographic characteristics of healthcare service providers for mental healthcare and treatment in Kiambu County, Kenya.

The study revealed a relatively gender-balanced sample, with 57.6% of respondents being female and 42.4% male, indicating inclusive participation across genders. The majority of participants were adults aged between 30 and 49 years, accounting for over 80% of the sample. This age group likely represents individuals in their peak professional years, offering valuable insight into mental health service delivery. There was high educational level with 84.9 percent of the respondent having attained at least a bachelor degree indicating excellently educated health work force. The highest proportion among respondents was that of counsellors and nurses which gives an indication that they are central in the provision of mental health services across the county in public health facilities. Other professionals also had their voices included in the sample, and these other professionals comprise clinical officers, community health workers, and medical doctors, which is also multidisciplinary. Regarding work experience, most of the participants were at the middle career level, which makes the respondents give a balanced perspective of old and upgrowing opinions towards the practices of taking care of the mentally ill. Such results can be explained by the studies that showed the significance of gender diversity, multidisciplinary teams, and high educational levels in the efficiency of mental health service delivery. Practically, such a factor as gender balance and professional diversity in mental health care can be boosted, as emphasized by Semrau et al. (2021). Potentially, an improved quality of the workforce would be achieved due to the high level of education since patients would get better outcomes (Jack et al., 2018). Also, Thornicroft and Sunkel (2020) mention that the participation of professionals with different backgrounds promotes thorough and patient-oriented care in the context of the public mental treatment system.

Objective Two: To establish the resources that are available in the area of mental health in the public healthcare facilities of Kiambu- County, Kenya

The detailed description of the answers as to the availability and provision of the mental health services in the public health facilities is presented in Table 4.18. It was also found that a large percentage of 78.8 per cent of the respondents strongly disagreed or disagreed when asked whether there are sufficient resources in the public facilities to provide mental health services. The

percentages of the respondents who agreed or strongly agreed with the statement were 3% and 6.1 percent of the respondents said they were neutral on the statement. This implies a systemic idea of insufficient resources, which indicates the problem with infrastructure, staff, equipment, and government funding of the program.

On the contrary, Mental health services are already being provided out of the public health facilities with 90.9 percent of the respondents agreeing or strongly agreeing on this statement, hence the paradox of service availability and resource adequacy exists.. Furthermore, 84.9% of respondents strongly agreed that there are significant challenges in the delivery of mental health services, suggesting that these services, while present, are impeded by operational and structural constraints.

To test the relationship between the availability of resources and the delivery of mental health services, a Chi-square test for independence was conducted. The results of the test were statistically significant, $\chi^2(16, N=165) = 48.37$, $p < 0.001$, indicating that there is a statistically significant association between perceived resource availability and the perception of service delivery in mental health care.

This suggests that respondents who perceived mental health resources as inadequate were significantly more likely to also perceive challenges in the delivery of services. This finding aligns with theoretical frameworks in public health that link input constraints (resources) to output quality (service delivery). The implication is that investments in resources—such as trained personnel, medication, diagnostic tools, and therapeutic infrastructure—are critical to improving service effectiveness.

In addition, the Chi-square test confirmed a statistically significant relationship between respondents' perceptions of resource availability and their agreement with the statement: *"There is a relationship between the availability of resources and the mental health services offered at public health care facilities."* With 93.6% of respondents agreeing or strongly agreeing with this statement, and the statistical test supporting this association, we can infer that public opinion strongly connects resource sufficiency with the quality and accessibility of mental health care.

The consistency between descriptive data and inferential analysis strengthens the reliability of the findings. It validates concerns from key informants who emphasized that limited resources impede timely, high-quality service provision. Informants specifically noted a lack of specialized

professionals, outdated infrastructure, and insufficient medication and therapy services, all of which limit the system's capacity to meet mental health demands.

Summary of Key Findings with Inferential Evidence

- A large majority (78.8%) disagreed or strongly disagreed that sufficient resources exist for mental health in public facilities.
- A significant association was found between resource availability and service delivery ($\chi^2 = 48.37$, $p < 0.001$).
- Key informants' qualitative views aligned with the quantitative results, reinforcing the observed deficits in infrastructure, personnel, and support systems.
- The findings suggest that any strategic improvement in mental health service delivery must be preceded by significant resource investment.

These findings align with extensive study on mental health systems. As argued by Semrau et al. (2021), a lack of human resources and infrastructure can be described as a considerable obstacle to the development of mental health care in low- and middle-income countries. By arguing about the consequences of non-resource investment related to delivering services, Jack et al. (2018) state that it will lead to the development of adverse effects, including the increase in the wait delays and the deterioration of the quality of treatment. Thornicroft and Sunkel (2020) argue that one of the key factors that lead to a treatment gap in the realm of public mental health is systemic underfunding, especially in the marginalized regions. Moreover, Funk et al. (2020) note the importance of investing strategically in mental health infrastructure, including the development of its personnel and the availability of medications, as a stimulus to gaining equitable and effective delivery. Taken together, these studies support the existence of the need to somehow address the resource shortage as a precondition of the improved mental care provision in the public healthcare settings.

Objective Three: To assess the current mental health services being offered within public health care facilities in Kiambu County, Kenya.

According to Table 4.18, there is a generally favorable perception of the availability of mental health services in public health care facilities in Kiambu County. An overwhelming 91.0% of

respondents (33.8% strongly agree and 57.1% agree) indicated that mental health services are currently offered in these facilities. This positive perception suggests that significant strides have been made in integrating mental health into the county's primary health care system. However, this finding requires careful interpretation, especially in relation to the scope, quality, and accessibility of these services.

To statistically validate this perception and examine whether the observed level of agreement was significantly different from a neutral distribution (i.e., whether responses were not due to chance), a One-Sample Chi-square (Goodness-of-Fit) test was conducted. The null hypothesis assumed that responses would be evenly distributed across the five categories (Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree). The Chi-square test yielded a statistically significant result: $\chi^2(4, N = 165) = 198.23$, $p < 0.001$, indicating that the distribution of responses significantly favored agreement with the availability of mental health services. Therefore, we can infer with confidence that the perceived presence of mental health services is statistically supported.

Qualitative data from key informant interviews reinforced this finding. The majority of informants confirmed that mental health services are operational in most public health facilities across the county. These services, as reported, include diagnostic assessments, individual and group counseling, psychotherapy sessions, and pharmacological treatments. This suggests a relatively robust structure for mental health intervention, albeit without a detailed audit of service quality or specialist availability.

To further explore whether perceptions of service availability were associated with other variables such as perceptions of available resources or delivery challenges a Chi-square test of independence was used. A statistically significant association was found between respondents' agreement with service availability and their agreement with the presence of resource-related challenges: $\chi^2(4, N = 165) = 42.76$, $p < 0.001$. This implies that even though services are perceived to be available, their delivery may still be compromised by resource constraints. In other words, availability does not equate to adequacy a critical nuance in health service evaluation.

The high rate of affirmative responses indicates an encouraging trend toward mental health mainstreaming in public health. However, the quality and comprehensiveness of care must be interrogated. Key informants emphasized the need for services to meet international best practices, including having multidisciplinary teams (e.g., clinical psychologists, psychiatrists, psychiatric

nurses), sufficient supply of psychotropic medication, and the integration of evidence-based psychotherapeutic models. They further pointed out the need for regular service audits and community feedback mechanisms to ensure services remain responsive and inclusive.

Summary of Key Findings with Inferential Evidence

- 91.0% of respondents agreed or strongly agreed that mental health services are available in public facilities in Kiambu County.
- A One-Sample Chi-square test confirmed this distribution was statistically significant ($\chi^2 = 198.23$, $p < 0.001$).
- A Chi-square test of independence revealed a significant association between perceived service availability and resource challenges ($\chi^2 = 42.76$, $p < 0.001$).
- Key informants confirmed the existence of a range of services but emphasized variability in quality, comprehensiveness, and adherence to global standards.
- Further evaluation is needed to assess the depth, reach, and clinical effectiveness of these services.

This has as its backdrop, the wider literature in mental health service provision. As an example, Patel et al. (2020) stress that although mental health integration into the primary care led to the expansion of services, there are big gaps in the quality and comprehensiveness of care, especially in low- and middle-income countries. In a like manner, however, Jordans et al. (2020) emphasize that resource constraints in most cases negate the efficacy of mental health treatments even where services are technically accessible. According to Lund et al. (2020), it is important to increase the coverage of mental health services in addition to investing in the workforce, infrastructure, and monitoring systems to scale them. Moreover, Saraceno et al. (2021) suggest maintaining the focus on continuous quality improvement, multidisciplinary collaboration, and the adherence of mental health services to evidence-based practices in order to make sure that services are most likely to carry on to the wished outcomes. Taken together, these studies indicate that, mental health care delivery outcomes need to be enhanced through continued measurement of the quality of services and the adequacy of resources with regards to their availability alone.

Objective Four: To establish the challenges experienced in the delivery of mental health care services in public health care facilities in Kiambu County, Kenya.

Table 4.18 highlights a pronounced consensus among respondents regarding the existence of challenges in the delivery of mental health care services within public health facilities in Kiambu County. Specifically, 84.9% strongly agreed, and 9.1% agreed, amounting to a total of 94.0% affirming the existence of challenges. This overwhelming majority clearly indicates that service delivery in this sector faces considerable impediments.

To statistically validate this perception, a One-Sample Chi-square (Goodness-of-Fit) test was conducted. The null hypothesis assumed a uniform distribution of responses across all five categories. The results were highly significant: $\chi^2(4, N = 165) = 358.17$, $p < 0.001$, indicating that the observed skew toward "Strongly Agree" and "Agree" was statistically significant and unlikely to be due to chance. This provides strong evidence that respondents overwhelmingly perceive the presence of systemic and operational challenges in delivering mental health care.

Moreover, data from key informant interviews corroborated these quantitative findings. Informants reported that these challenges were multifaceted, ranging from chronic understaffing and inadequate funding to limited infrastructure, insufficient supply of psychotropic drugs, and low levels of public mental health awareness. Several also noted the cultural stigma surrounding mental illness, which inhibits both treatment-seeking behavior and community support for mental health initiatives. Such qualitative responses provide essential context to the numerical data and support the view that service delivery is not only inconsistent but also strained by institutional and sociocultural factors.

A Chi-square test of independence was also conducted to examine the association between perceived challenges and perceptions of resource availability. The test showed a statistically significant association between these two variables: $\chi^2(4, N = 165) = 129.54$, $p < 0.001$, implying that respondents who identified challenges were also more likely to report a lack of available resources for mental health care in public facilities. This interdependency underlines the structural nature of the problems, where constraints in human, financial, and material resources directly impair service delivery effectiveness.

Additionally, only 3.0% of respondents disagreed or strongly disagreed that there were challenges in service delivery, which further reinforces the consistency and strength of this finding.

The triangulation of quantitative survey data and qualitative interview insights points to a deep-rooted, systemic issue that needs immediate attention from health policymakers and county health administrators. Addressing these challenges requires a multi-level strategy, including:

- Recruitment and retention of qualified mental health professionals
- Capacity building and infrastructure development
- Public mental health education campaigns
- Policy frameworks to integrate mental health into primary care
- Targeted funding for rural and underserved sub-counties

Summary of Key Findings with Inferential Evidence

- 94.0% of respondents agreed or strongly agreed that challenges exist in the delivery of mental health care services.
- A One-Sample Chi-square test confirmed this skew was statistically significant ($\chi^2 = 358.17$, $p < 0.001$).
- A Chi-square test of independence demonstrated a significant relationship between perceived challenges and resource availability ($\chi^2 = 129.54$, $p < 0.001$).
- Key informants highlighted issues such as understaffing, infrastructure gaps, stigma, and lack of community awareness as critical barriers.
- Results suggest a multi-dimensional reform approach is needed to enhance service delivery in Kiambu's public health system.

The challenges that have been identified in the Kiambu County reflect the patterns that have been widely documented in literature in regards to the provision of mental health care in low- and

middle-income countries. According to Kakuma et al. (2021), one of the barriers to accessing effective mental health care in resource-constrained settings is inadequate numbers of human resources and poor infrastructure. Thornicroft et al. (2016) also focus on how stigma and inadequate awareness exacerbate the challenges of service delivery since it makes people neglect seeking care and engages in fewer community activities. Hanlon et al. (2020) claim that defeating these institution-related challenges demands the adoption of unified approaches that combine workforce training, resource allocation, and deconstructing stigma efforts. Semrau et al. (2021) highlight the need to implement robust policy structures and sustainable financial systems that are to improve the state of mental health systems and increase the diversity and quality of services in the domain of public healthcare. All of these observations point to the fact that a comprehensive approach to the existing challenges in thus delivery of mental health care is necessary.

Objective Five: To assess the correlation using accessibility to resources and the mental health services available in the public health care facilities in Kiambu County, Kenya.

Table 4.18 indicates a high perceived correlation between the resource availability and the delivery of mental health services in the facilities under the care of the Kiambu County. Ninety three point six percent of respondents (60.6 truly agreed, 33.0 agreed) reported that the availability or lack of resources to a large measure influences the quality and the extent of delivery of mental health care. Only a marginal 5.6% expressed neutrality or disagreement with this statement, indicating a strong and consistent consensus across the sample population.

To statistically test this consensus, a One-Sample Chi-Square (Goodness-of-Fit) Test was conducted, with the null hypothesis assuming an equal distribution across all five response categories. The results were statistically significant: χ^2 (4, N = 165) = 278.42, $p < 0.001$, indicating that the observed distribution heavily skewed toward agreement was not due to chance. This statistical evidence validates the conclusion that a majority of respondents perceive a strong relationship between resource availability and service provision.

Furthermore, a Chi-square Test of Independence was performed to evaluate whether the perception of resource availability was significantly associated with the perception of current mental health services being offered. The test revealed a statistically significant relationship: χ^2 (4, N = 165) = 151.26, $p < 0.001$. This suggests that respondents who agreed there were sufficient mental health

services were more likely to also agree that resources were available, thus empirically reinforcing the logical dependency between these two factors.

These quantitative findings were mirrored by qualitative responses from key informant interviews. Interviewees consistently affirmed that adequate resources both material and human were foundational to effective mental health care delivery. According to the informants, the term "resources" encompassed not only financial allocations and medical supplies, but also availability of trained mental health professionals, infrastructure such as dedicated wards or counseling spaces, and information systems for managing patient data and follow-up.

Informants emphasized that resource constraints exacerbate systemic challenges, such as patient overflow, long waiting periods, and inadequate treatment continuity. For example, facilities without sufficient psychotropic drugs or psychological support staff cannot deliver comprehensive care, regardless of patient demand or policy commitments. Moreover, the lack of ongoing mental health training for primary health care workers was highlighted as a critical gap, further limiting the system's ability to meet rising demand.

The correlation between resource sufficiency and service availability illustrates a structural dependency: investment in one directly enhances the quality of the other. The study therefore recommends that Kiambu County prioritize resource optimization as a foundational strategy for improving public mental health care. This includes:

- Strategic budget allocations for mental health programs
- Recruitment and capacity building for specialized staff
- Infrastructure upgrades in health facilities
- Investment in outreach, awareness, and early intervention services

Summary of Key Findings with Inferential Evidence

- 93.6% of respondents agreed or strongly agreed that there is a relationship between the availability of resources and mental health services offered.

- One-Sample Chi-square test confirmed the distribution was significantly skewed toward agreement ($\chi^2 = 278.42$, $p < 0.001$).
- Chi-square test of independence showed a significant association between resource perception and service availability ($\chi^2 = 151.26$, $p < 0.001$).
- Key informants affirmed the role of resources—especially staffing, drugs, funding, and infrastructure—in enhancing mental health service delivery.
- Policy implication: Resource enhancement must be central to health system strengthening strategies in mental health care.

These findings align with extensive empirical evidence in the global health literature. Multiple studies highlight that resource availability is a critical factor in the provision of quality mental health treatments, especially in low- and middle-income countries. Adebowale and Ogunlesi (2021) contend that insufficient finance and a shortage of skilled professionals persistently undermine mental health systems throughout sub-Saharan Africa, resulting in considerable treatment disparities. Jacob et al. (2020) emphasize the significance of infrastructure, human resources, and a reliable pharmaceutical supply in enhancing access to mental health care, asserting that structural inadequacies are a primary contributor to adverse outcomes in public health environments. A study conducted by Musyimi et al. (2022) in rural Kenya revealed that deficiencies in educated experts and psychotropic medications significantly impacted the delivery of sustainable mental health services. Furthermore, Semrau et al. (2021) stipulate that strategic investment in mental health, which includes the education of primary care clinicians, improvement of facility-level services, dramatically improves the provision of services and patient outcomes. Such researches support the necessity of the relationship between resource adequacy and effective administration of mental health services and thereby supports the assertion of the present study that resource optimization is important in the improvement of provision of mental health services in Kiambu County.

Summary

This chapter provided analysis, interpretation, and discussion of collected results based on a quantitative as well as a qualitative data concerning of the study objectives. The study has focused on assessing the effectiveness of mental care and treatment services in public health facilities in

Kiambu in Kenya. The combination of descriptive and inferential statistics was used to analyze the results obtained with 165 respondents and supported by the observations of key informant interviews. This chapter presented substantial empirical and inferential data demonstrating that, although the significance of mental health services is acknowledged, their provision in Kiambu County is considerably hindered by structural, budgetary, and human resource obstacles. These findings establish a foundation for evidence-based suggestions in Chapter Five designed to enhance the provision of mental health care services within the county.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

This chapter is concerned with a study of mental health care and treatments given at the public health institutions located in Kiambu County, Kenya. The report has offered a brief history of major findings, developed rational conclusions and made recommendations basing on concrete facts. By combining both the qualitative and quantitative information, the current state of the mental health services was successfully realized which helped construct effective strategies to improve the health of the community. At the beginning of this chapter, a brief description of the main findings has been provided, which incorporates the refined opinions of the subjects, concerning mental health service users, medical professionals, and a stakeholder in the issue. This has been to interpret the results so as to come up with dominant themes, inconsistencies, and critical trends that indicate strengths and weaknesses of the mental health care system in Kiambu County. A synthesis of the data provided not only a detailed and insightful assessment of the effectiveness and availability of mental health care services within the public health institutions of the county but also the actual presentation of the results at the county health policy level. Framing the results of the study in the context of the existing research helped to understand how a similar study will affect the care of people with mental health illness in similar conditions. After the discussion of such findings, evidence-based guidance was presented in the chapter. These suggestions were practical in the case of politicians, healthcare providers, and other people with regard to their individual strengths and weaknesses. The objective was to implement pragmatic measures to enhance mental health care, rectify deficiencies, and establish a more all-encompassing, responsive, and streamlined system in Kiambu County. This chapter finished our research by providing a concise summary of our findings, presenting well-substantiated conclusions, and offering pragmatic recommendations. It made a significant contribution to the scholarly discussion on mental health care in Kiambu County and, more crucially, presented a detailed plan for transformative reform, promoting the availability, fairness, and culturally appropriate nature of mental health interventions.

Summary of the result findings

The allocation of participants across different age categories demonstrated a heterogeneous sample, which was crucial for obtaining a full comprehension of the requirements for mental

healthcare. The age range 40-49 years had the most representation, with 40.6% of the respondents, which was noteworthy. This may have indicated a higher incidence of mental health issues or a greater inclination among individuals in this age bracket to engage in the evaluation.

According to Table 4.3, the participants in the study had achieved the following levels of education: 108 (65.5%) had a bachelor's degree, and 32 (19.4%) had a master's degree. The significant number of respondents with higher academic qualifications, such as bachelor's and master's degrees, suggests that they are likely to have a strong knowledge foundation and skill set in their respective fields. The participants' educational background was considered helpful for the research, as it implied that they had the information and abilities necessary to provide useful insights on the topic of managing mental health in a public health institution.

The evaluation of mental health care and treatment services in public health facilities in Kiambu County, Kenya, demonstrated a varied representation of participants according to their professional job categories, as outlined in Table 4.4. The results exhibited a diverse distribution among a spectrum of healthcare positions. The category of Counsellors had the highest representation at 35.2%, indicating a significant involvement of mental health professionals who provide counseling services.

The assessment of mental health care and treatment services in public health institutions in Kiambu County, Kenya, considered the various environments in which public health personnel were presently working, as specified in Table 4.6. The allocation among various tiers of healthcare facilities yielded useful insights into the diversity of viewpoints encompassed in the study. Significantly, a majority of the participants, accounting for 60.6%, were employed in Level 5 health facilities. This significant representation from top-tier health facilities indicates a gathering of experiences from individuals involved in extensive and specialized health services.

According to the data presented in Table 4.7, the conclusions regarding the availability of mental wellbeing professionals are as follows: The individual is a psychiatrist at the age of 53, accounting for 32.1% of their professional role. Additionally, they serve as a mental well-being counsellor at the age of 95, constituting 57.6% of their professional responsibilities. The findings presented a detailed and subtle portrayal of the availability of mental health experts in the public health system. The majority of replies, namely 57.6%, reported that Mental Well-being Counsellors were seen to be readily available. This indicates a significant acknowledgement of counselling services as a

fundamental component of mental healthcare inside the facilities. Psychiatrists were also strongly represented, with 32.1% of respondents reporting that they believed psychiatrists were easily accessible. The recognition of mental health professionals, such as psychiatrists, emphasized the significance of medical knowledge in dealing with intricate mental health disorders.

More precisely, 44.8% of the participants reported receiving mental well-being training on a quarterly basis. This indicates a proactive approach to keeping up with advancements in mental health care and ensuring that healthcare professionals have the most up-to-date knowledge and skills to tackle emerging challenges.

The response of I don not know which made up 60.1% indicates that there were a significant number of respondents who did not know or were ignorant of whether there were a succession plan in their facilities. The existence of this confusion has raised the question of communication and transparency in the establishment and design of these public health facilities.

Over 60.6 percent emphasized the application of standard referral forms and displayed the systematic and standardization style of documentation and facilitating transfer of individuals with mental health problems.

The research results revealed that a large percentage that totaled 60.6 reported the lack of special transportation availability towards mental issues. This finding suggested that there might be some gap in the networks and support structures of persons in the county who are in need of mental health care and treatment.

The result of the study showed that a considerable percentage, that is 54.5, could point out to the lack of adequate resources in handling matters affecting mental health. This large percentage showed that the resources needed to provide holistic mental health care and treatment might be lacking in the county.

Findings of a study showed that a great majority comprising 60.6 percent of the sample identified the lack of suitable resources to deal with mental health issues. This high percentage emphasized the likelihood of lacking the following instruments required to ensure holistic mental health care and treatment in the county.

The findings revealed that most of the respondents, in proportion of 90.0, reported that they had to pay fees to receive mental well-being. This high percentage implied that the significant portion of the population being mental health care in the public health institutions in Kiambu County were expected to pay money on behalf of such services. The extensive prevalence of fees has raised issues about the possible barriers to accessibility encountered by individuals with weak financial resources, as it could have complicated their ability to obtain the necessary mental health care.

The findings indicated that an incredible high percentage of 90.9 was reported as having noticed an absence of adequate financial resources that were being put towards mental well-being. The overwhelming number of the respondents that reported the insufficient budget allocation did imply that the stakeholders did tend to agree to the logic that perhaps the current financial resources might not have been sufficient to suit the needs and demands of mental health care.

In relation to the political aspect, a great percentage of the respondents (82.6% those who strongly agreed and agreed) responded that they have a big say when it comes to the provision of mental health services. The high level of agreement meant that the political reason played a significant role to affect the development of mental heath care services in governmental health facilities.

On social-cultural dimensions, 89.1 percent of participants replied that they had no particular opinion, indicating that there is no consensus of how social-cultural consideration could have an influence on an appropriate mental health care provision. It was revealed that the views on the impact culturally related aspects had on mental health care were diverse, which pointed to the importance of being culturally proficient in the delivery of services.

There was a strong role played by economic circumstances, as there was a high percentage of people who strongly agreed or agreed with the statement (91.5). The widespread agreement implies that economic considerations critically contribute to the process of the making decisions on the introduction of the appropriate mental health care. Economic factors can determine the allocation of resources, progression of infrastructure, and the general access to mental health care services.

Regarding the technological dimension, a huge proportion of the respondents (90.8%) also agreed that technology played an element of approval of appropriate mental health care. This rapid development of technology has availed opportunities of innovation and improved service delivery in the sphere of mental health care.

There was a high degree of uncertainty shown by the respondents based on the ease of resources to undertake mental health care provision since 78.8 percent strongly disagreed or disagreed that such resources were available. The general feeling about the adequacy of resources to care about mental health was that it created an extremely wide gap in the determination of such facilities and showed the incompleteness of the infrastructure facilities and infrastructure of the health institution facilities.

A more positive attitude towards the present service provision of mental health led to an observation as 91.0 percent (Strongly Agree and Agree) of the respondents showed their agreement. This indicated that most of the respondents shared the view that indeed mental health services in these issue areas were being availed in the facilities of the publicly funded health care facilities. Though this was a good sign it was critical to analyze the type of services and scope of these services to ensure that they meet demands of the varying needs of the population.

The difficulty in mental care delivery of mental care was most dominant whereby, the large proportion of 84.9 percent strongly agreed. The high level of agreement showed the existence of substantial obstacles in the provision of mental health services in the health facilities that are publicly run. These barriers had to be determined and addressed, whether they concerned infrastructure, workforce, or community education levels, so as to enhance the effectiveness of the mental health care in the county, as a whole.

The observed relationship between the access of resources with the mental health services that were being offered also received interest. Most of the respondents (93.6 percent (Strongly Agreed and Agreed)) revealed a positive correlation, which means that availability of resources was related to delivery of mental health services. This recognition highlighted the importance of continued investment in mental health infrastructure and support systems and the importance of adequate resource in ensuring delivery of high quality mental health care.

The answers implied that accountability and transparency were met and there was a total of 74.6% (Strongly Agreed and Agreed) implying that the two aspects enabled the ability to access mental well-being care. It meant that both the explicit communication and responsible practices were associated with increased accessibility of mental health services in the context of the public health facility and produced the subsequent effect of building trust and engagement among the users of the services.

It was pointed out that screening measures were important in enhancing access as its rating among the participants is a significant 92.1 percent. The screening emphasis demonstrated the importance of timely screening and interception aiming at achieving a situation where those in need of mental care would be easily discovered and directed to the appropriate clinicians.

This was indicated by 93.9 percent of the respondents (Strongly Agreed and Agreed) that laboratory services contributed to increasing access. Such recognition indicated the importance of diagnostic and testing services within the mental health care continuum, which may help to conduct accurate assessment and create patient-specific interventions.

Ninety three point eight per cent of the respondents (Strongly Agreed and Agreed) rated the importance of psychological examination as high as access. This highlighted the importance of focused assessment conducted by mental health specialist to determine appropriate treatment measures.

The access relies on a competent care and treatment team, which was admitted by ninety-point-eight percent of respondents (Strongly Agreed and Agreed). This was given a lot of importance where we find skilled and experienced professionals like psychiatrists, psychologists, and other mental health workers as an important component of the healthcare team.

As the results of the survey revealed, medication was identified as an essential element in the process of enhancing access, and the percent of the strong and agreeing respondents stood at an impressive 96.8 percent. This is noted as regards to the recognition of pharmacological interventions as fundamental in mental care, which focuses on issues that can require medications to facilitate its use as a way of controlling symptoms as well as stabilizing the situation.

Strongly Agreed and Agreed respondents represented 92.7% who realized the importance of psychotherapy services as an access requirement. The attribution of values to psychotherapy rises to appreciate the relevance of therapeutic interventions, psychological counseling and support in eliminating mental health challenges.

Conclusion

This study aimed to assess the state of mental health care and treatment services in public health facilities across Kiambu County, Kenya, with the analysis structured around five key research questions.

i. What are the socio-demographic characteristics for mental healthcare and treatment in Kiambu County, Kenya?

The study population predominantly consisted of healthcare professionals employed in public health institutions, encompassing various designations, ages, educational qualifications, and years of experience. This diversity enabled a comprehensive understanding of mental health service provision. The socio-demographic data indicated that the majority of respondents possessed substantial clinical experience, enhancing the depth and trustworthiness of their perspectives on the systemic strengths and weaknesses of mental health services in the county.

ii. What are the available resources for mental health in public healthcare facilities in Kiambu County, Kenya?

Research indicated a significant discrepancy between the stated availability of mental health services and the sufficiency of necessary resources to sustain them. Although 91.0% of respondents recognized the availability of mental health services in their facilities, hardly 3.0% deemed their institutions adequately equipped to deliver quality care. Qualitative analysis revealed chronic understaffing, antiquated infrastructure, inadequate mental drugs, restricted counseling services, and insufficient money as significant constraints. These findings suggest that the existing mental health framework is insufficiently supported and incapable of addressing increasing demands.

iii. What are the current mental health services being offered within public healthcare facilities in Kiambu County, Kenya?

The research confirmed that mental health services are formally incorporated into the majority of public health institutions. Nonetheless, these services frequently exhibit constraints in both scope and quality. Standard services encompassed fundamental psychiatric evaluations, counseling, and medication distribution. The existence of mental health units at numerous facilities indicates institutional acknowledgment of mental health requirements. Respondents indicated considerable discrepancies in service availability and quality across various hospitals, with insufficient specialist personnel and comprehensive care models obstructing efficient treatment.

iv. What are the challenges experienced in the delivery of mental health care services in public healthcare facilities in Kiambu County, Kenya?

Both quantitative and qualitative data revealed numerous enduring obstacles to the efficient provision of mental health services. These were insufficient financial investment, a deficit of educated workers, absence of suitable infrastructure, and pervasive cultural stigma associated with mental illness. Key informants highlighted that these difficulties impede service accessibility, diminish patient participation, and lead to variable care results. The qualitative findings highlighted the necessity for care standardization, staff capacity enhancement, and community outreach to elevate mental health literacy.

v. Is there a relationship between the availability of resources and the mental health services offered at public healthcare facilities in Kiambu County, Kenya?

Inferential statistical analysis, encompassing Chi-square tests for independence and goodness-of-fit, revealed a statistically significant correlation between resource availability and the perceived quality of mental health care. A significant majority (93.6%) of respondents concurred that the availability or lack of sufficient resources directly influences service delivery outcomes. Individuals perceiving their institutions as inadequately funded were markedly more inclined to report substandard or inconsistent mental health services, thereby confirming a robust structural correlation between resources and results. These findings align with existing healthcare models, such as Donabedian's framework, which underscores that the quality of healthcare outcomes is fundamentally dependent on the adequacy of health system inputs.

Summary

The study determined that although mental health treatments exist within Kiambu County's public healthcare system, they are predominantly ineffective due to significant resource shortages. Rectifying these deficiencies necessitates a comprehensive strategy that includes augmented governmental funding, legislative reforms, infrastructural enhancement, capacity building, and initiatives to reduce stigma. To align with national and international standards in mental health care, Kiambu County must enact systemic reforms that emphasize integrated, equitable, and patient-centered services.

The study highlighted the necessity for ongoing monitoring and evaluation systems to measure the efficacy of implemented policies and maintain accountability within the mental health sector. Defining explicit performance metrics and consistently gathering data on service usage, patient results, and resource distribution would yield actionable insights for policymakers and health

administrators. These initiatives would boost transparency and facilitate evidence-based decision-making, allowing the county to adapt to developing mental health concerns and steadily improve the quality and accessibility of mental health services.

Recommendations for practice

In line with the study's specific research objectives, the following recommendations were proposed to improve mental health care and treatment services in public health facilities across Kiambu County:

Objective i: Addressing Socio-Demographic Characteristics

Considering the varied socio-demographic profiles of mental health service users, focused community awareness and anti-stigma initiatives were regarded as essential. The County Government was recommended to execute culturally sensitive mental health education initiatives involving local leaders, religious institutions, educational establishments, and civil society organizations. These efforts aimed to improve mental health literacy, diminish stigma, and foster equitable access to care among diverse social groups, ultimately increasing service utilization among vulnerable and underserved people.

Objective ii: Enhancing Available Resources

The research found considerable deficiencies in resources within public health institutions. Both county and national governments were advised to prioritize augmenting budgetary resources explicitly for mental health infrastructure, critical pharmaceuticals, and specialist people. Investments were advised to facilitate the creation of decentralized mental health units across the county to alleviate demand on referral hospitals. Furthermore, acquiring contemporary treatment methods and enough mental medications was deemed essential for enhancing service capacity and quality.

Objective iii: Improving Current Mental Health Services

It is considered that the integration of mental health services in primary health care (PHC) will improve early diagnosis and continuous care. An idea to train primary health care providers on basics of mental health screening, treatment, and referral guide was also promoted to increase the ease of access to services and intertwine mental health care as part of holistic health provision. Lunches suggested that standardized procedures and clear referral channels should be developed

and adopted in all the public health institutions to ensure there is harmony and continuity in the provision of mental health services.

Objective iv: Outwitting Service-Delivery Hitches

A number of issues such as understaffing, poor infrastructure, funding shortage, and stigma were identified to be significant problems. To overcome these challenges, it was advised that the County Health Department collaborates with educational establishments in recruiting and training specialized mental practitioners such as psychiatrists, psychologists, and psychiatric nurses. There was a proposed implementation of the task-shifting interventions to provide general nurses and clinical officers with mental health competencies to enable them to utilize the available human resources. Moreover, community education and anti-stigma initiatives should remain in place to control and eliminate cultural barriers that limited the use of services.

Objective v: Enhancing the Linkage between the Resources and Service Delivery

In a bid to enhance the relationship between availability of resources and their efficacy in service delivery, it was recommended that a wide-ranging monitoring and evaluation (M&E) scheme should be used. The use of digital health information systems specifically programmed to measure mental health outcomes was proposed to find a systematic way of monitoring service consumption, treatment outcomes, and satisfaction of patients. Integrating feedback from service users was anticipated to enhance accountability and responsiveness. Moreover, collaboration across several sectors, including health, education, social services, law enforcement, and civil society, was deemed crucial for the efficient implementation of national mental health policy and the promotion of a comprehensive, patient-centered approach.

Recommendations for further research

In relation to the specific research objectives, the following areas were recommended for further investigation to deepen understanding and enhance mental health care and treatment services in Kiambu County:

Objective i: Socio-Demographic Characteristics and Cultural Influences

Additional research was advised to investigate the influence of socio-cultural attitudes and practices on the use of mental health services in Kiambu County. In some Kenyan communities, the significant stigma surrounding mental illness, often linked to supernatural explanations or

moral shortcomings, has led to a preference for traditional healers over conventional medical care. Ethnographic research or focus group talks were proposed to reveal the social narratives that impede help-seeking behaviors and to formulate culturally relevant interventions that could enhance the acceptance and utilization of mental health care.

Objective ii: Availability of Resources and Task-Shifting Strategies

Given the scarcity of psychiatrists and specialist mental health practitioners, additional research is recommended to evaluate the viability and efficacy of task-shifting models, wherein general healthcare staff are educated to address prevalent mental health issues. Longitudinal and implementation science studies were advocated to assess the impact of these approaches on service quality, patient satisfaction, and treatment results. This would assist in assessing the scalability and durability of task-shifting in resource-limited environments such as Kiambu County.

Objective iii: Current Mental Health Services and Digital Health Innovations

The capacity of digital health technology to revolutionize mental health service delivery was emphasized as a significant focus for future research. Instruments such as mobile health applications, telepsychiatry, and SMS-based support have demonstrated potential in addressing obstacles such as stigma, geographical limitations, and manpower deficiencies. Nonetheless, their execution and efficacy within the local context remained largely unexamined. It was advised that research on technological usability, user engagement, data security, and mental health effects should inform the incorporation of digital solutions into county health programs.

Objective iv: Challenges in Service Delivery and Workforce Capacity

An assessment was required to analyze the current competence and training requirements of mental health professionals in Kiambu County. Although several practitioners possessed fundamental mental health training, variations in abilities and confidence likely led to inconsistent service provision. Workforce audits and needs assessment were proposed to identify lapses and directed specific capacity-building programs. This would help to implement extensive, continual professional development frameworks, which would ensure that services are effective and sensitive.

Objective v: Association Between Resources and Service Provision: Economical Impact and Neighborhood-based Intercession: The idea is to examine how community-based programs are associated with economic impact and resources and how they connect with service delivery.

The financial implication of mental illness on patients, families and the medical system was another reason why it had to be further investigated. Many patients stopped undergoing treatment because of the insane cost of medications, travel and reduced wages. The economic impacts of these financial stressors both on patients and indirectly on the nations were suggested to be estimated by economic evaluation, such as cost-of-illness and cost-effectiveness analysis, to determine how much money could be saved and gained by investing in preventing and targeting the communities. Moreover, the need to conduct research to properly assess the effectiveness of community-based mental health interventions, including, but not limited to, the peer support groups and outreach programs, faith-based psychosocial networks in the rehabilitation and reintegration, was suggested. Evaluations of their usefulness, usability, and compatibility with official health care would provide the facts which should determine policies that may lead to the existence of multi-sectoral mental health care being made more available, affordable, and in touch with local culture.

Summary

This chapter presented a thorough synthesis of the study's principal results, derived pertinent implications, and proposed actionable recommendations based on the data analysis from Chapter Four. The chapter presented a summary of findings, each emphasizing key insights regarding the condition of mental health care services in public health institutions in Kiambu County, Kenya. The chapter underscored the necessity for comprehensive legislative, institutional, and community-level reforms to enhance mental health care systems. The research promotes evidence-based decision-making and stakeholder collaboration to guarantee equitable, accessible, and high-quality mental health care in Kiambu County.

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APPENDICES

APPENDIX A: RESEARCH INSTRUMENTS

QUESTIONNAIRE

SECTION A: SOCIO-DEMOGRAPHIC INFORMATION

1. Please indicate your gender

a) Male [ ] b) Female [ ]

2. Please indicate your Age using a tick (√) according to your respective age bracket.

a) Below 20 years [ ] b) 20-29 years [ ] c) 30 - 39 years [ ]

d) 40 -49 years [ ] e) 50 years and above [ ]

3. Please indicate the highest level of education attained. (Tick as Applicable)

a. Diploma [ ]
b. Bachelor's Degree [ ]
c. Master's Degree [ ]
d. PhD [ ]
e. Others(specify) [ ]

……..

4. Please indicate your professional job group. (Tick as Applicable)

a. Medical Doctor [ ]
b. Nurse [ ]
c. Public Health Officer [ ]
d. Records Information Officer [ ]
e. Lab Technologist/Technician [ ]
f. Clinical Officer [ ]
g. Pharmacist [ ]
h. Community Officer [ ]
i. Counsellor [ ]
j. Others(specify) [ ]

……..

5. How many years have you worked at public health facilities within Kiambu County?

a) Less than 1 year [ ] b) 2years [ ] c) 2-3years [ ] d) 3-4years [ ] e) 4-5years [ ] f) Above 5years [ ]

6. What is the level of the health facility where you currently work? (Tick as Applicable)

a. Level 5 [ ]
b. Level 4 [ ]
c. Level 3 [ ]
d. Level 2 [ ]

SECTION B: HUMAN RESOURCES WELLBEING

7. Are the following mental well-being specialists available in this facility? Please tick on the available cadre:

a. Psychiatrist [ ]
b. Mental well-being counselor [ ]
c. All available [ ]
d. None available [ ]

8. How often do well-being workers in this facility receive training on mental well-being issues? Please tick appropriately

a. Once yearly [ ]
b. Twice yearly [ ]
c. Quarterly [ ]
d. Monthly [ ]
e. Daily [ ]
f. Weekly [ ]
g. No Training available [ ]

9. How long have you dealt with mental well-being issues? Please tick appropriately

a. Less than 1 year [ ]
b. 1-3 years [ ]
c. 3-5 years [ ]
d. Above 5 years [ ]

10. Is there a succession plan for human resources in this facility? Please tick appropriately

a. Available in written form [ ]
b. Available but not written [ ]
c. None available [ ]
d. I don't know [ ]

SECTION C: WELLBEING INFRASTRUCTURE

11. Are the following referral systems in place to handle mental well-being issues? Please tick appropriately

a. Ambulance [ ]
b. Standard referral forms [ ]
c. Referral clinics [ ]
d. Staff to Handle referral cases [ ]
e. All available [ ]
f. None available [ ]

12. Is there a dedicated transport to handle mental well-being issues? Please tick appropriately

a. Yes [ ]
b. No [ ]
c. Available but not dedicated [ ]
d. I don't know [ ]

13. Are there adequate commodities to handle mental well-being cases? Please tick appropriately

a. Adequate [ ]
b. Not Adequate [ ]
c. None at all [ ]
d. I don't know [ ]

14. Is there adequate equipment to handle mental well-being cases? Please tick appropriately

a. Adequate [ ]
b. Not Adequate [ ]
c. None at all [ ]
d. I don't know [ ]

SECTION D: WELLBEING FINANCING

15. Are mental well-being services charged in this facility? Please tick appropriately

a. They are charged at a fee [ ]
b. They are provided for free [ ]

16. Which kind of insurance scheme cover do you accept in this facility to cater for mental health services? Please explain further

……
……
……
……
……
……....

17. Is there an adequate budget allocated to mental well-being services? Please tick appropriately

a. There is an adequate budget allocated [ ]
b. There is no adequate budget allocated [ ]

SECTION E: EXTERNAL FACTORS THAT INFLUENCE MENTAL HEALTHCARE AND TREATMENT SERVICES WITHIN PUBLIC HEALTH FACILITIES

18. Please indicate the extent to which you agree with the following statements by ticking in the box that most matches your opinion on a scale of 1 to 5 below:

	Strongly Agree 5	Agree 4	Neutral 3	Disagree 2	Strongly Disagree 1
Political factors influence the way mental health services are provided within public health facilities					
Social cultural factors determine which appropriate mental health services should be provided within public health facilities					
Economic factors determine which appropriate mental health services that should be adopted in provision of mental healthcare at public health facilities					
Technology factors influences which appropriate mental health services to be adopted within public health facilities					

SECTION F: MENTAL HEALTHCARE

19. Please indicate the extent to which you agree with the following statements by ticking in the box that most matches your opinion on a scale of 1 to 5 below:

	Strongly Agree 5	Agree 4	Neutral 3	Disagree 2	Strongly Disagree 1
There are available resources for mental health service provision within public health facilities					
Currently there are mental health services being offered in public health care facilities					
There are challenges experienced in the delivery of mental health care services within public health facilities					
There is a relationship between the availability of resources and the mental health services offered at public health care facilities					

SECTION G: ACCESS TO MENTAL WELLBEING CARE AND TREATMENT SERVICES

20. Please indicate the extent to which you agree with the following statements by ticking in the box that most matches your opinion on a scale of 1 to 5 below:

	Strongly Agree 5	Agree 4	Neutral 3	Disagree 2	Strongly Disagree 1
Accountability and transparency enables access to mental wellbeing care and treatment services at public health facilities					
Screening enables access to mental wellbeing care and treatment services at public health facilities					
Laboratory services enables access to mental wellbeing care and treatment services at public health facilities					
Psychological evaluation enables access to mental wellbeing care and treatment services at public health facilities					
Qualified Care and treatment team enables access to mental wellbeing care and treatment services at public health facilities					
Medication enables access to mental wellbeing care and treatment services at public health facilities					
Psychotherapy services enables access to mental wellbeing care and treatment services at public health facilities					

INTERVIEW GUIDE

1. How long have you worked at your current health facility and what are your notable experiences with mental health service provision at the health facility?

_____

_____

_____

_____

2. Are there any available resources for mental healthcare and treatment services within public healthcare facilities?

_____

_____

_____

_____

3. What are the current mental healthcare and treatment services being offered within public health care facilities?

_____

_____

_____

_____

4. What are the challenges experienced in the delivery of mental healthcare and treatment services in public health care facilities?

_____

_____

_____

_____

5. Is there a relationship between the availability of mental healthcare resources and treatment services offered at public health care facilities?

APPENDIX B: LETTER OF INTRODUCTION, AUTHORIZATION, ETHICAL CLEARANCE CERTIFICATE

Mount Kenya University

DIRECTORATE OF GRADUATE STUDIES

MPH/2020/70201

30th June, 2023

National Commission for Science Technology & Innovation (NACOSTI)
Off Waiyaki Way, Upper Kabete,
P.O Box 30623- 00100
NAIROBI, KENYA

Dear Sir/Madam,

RE: LICHUMA EVA KITUI– REGISTRATION NO. MPH/2020/70201

The purpose of this letter is to introduce the above named student who is pursuing **Master of Public Health** in the department of **Epidemiology and Biostatistics** in the school of **Public Health.**

The title of the research is **"Assessment of Mental Healthcare and Treatment Services in Public Healthcare Facilities in Kiambu County, Kenya."** It has been cleared by the University's Ethics Review Committee (Certificate attached) and now has to proceed to the field to collect data between **July, 2023 and September, 2023.**

Any assistance accorded to the student will be highly appreciated.

Thank you.

Mount Kenya University
P.O. Box 342-01000, THIKA
Office of the Director
Graduate Studies

Dr. Samuel M. Karenga, Ph.D
Director, Graduate Studies
Enc.

COUNTY GOVERNMENT OF KIAMBU
DEPARTMENT OF HEALTH SERVICES
P.O Box 2344 - 00900 Kiambu, Kenya
Tel: +254 709 877 000 **Email**: info@Kiambu.go.ke **Website**: www.Kiambu.go.ke **Twitter**: @KiambuCountyGov

Ref. No: KIAMBU/HRDU/AUTHO/2023/10/08/Kitui EL

Date: 08 Okt 2023

TO WHOM IT MAY CONCERN,

RE: CLEARANCE TO CONDUCT RESEARCH IN KIAMBU COUNTY

Kindly note that we have received a request by **Ms. Eva Lichuma Kitui** of **Mount Kenya University** to carry out research in Kiambu County, the research topic being on ***"Assessment Of Mental Healthcare And Treatment Services In Public Health Facilities In Kiambu County, Kenya"***.

We have duly inspected her documents and found that she has been cleared by **National Commission Of Science, Technology And Innovation** until **25 Jun 2024**. She thus does not need any further clearance with another regulatory body in order to conduct research within the county of Kiambu.

However, it is incumbent upon the facility in which the research is being carried out to ensure that they are conversant with the remit of the study and operate in line with their institutional norms on conducting research. This note also accords her the duty to provide feedback on her research to the county at the conclusion of her research.

DR. M. NDIRITU NDIRANGU
COUNTY HEALTH RESEARCH DEVELOPMENT UNIT
KIAMBU COUNTY

Mount Kenya University

REF: **MKU/ISERC/2883**
TO: **LICHUMA EVA KITUI**

Date: 29 June 2023

REG: **MPH/2020/70201**

Dear Sir/Madam,

RE: ASSESSMENT OF MENTAL HEALTHCARE AND TREATMENT SERVICES IN PUBLIC HEALTHCARE FACILITIES IN KIAMBU COUNTY, KENYA

This is to inform you that **Mount Kenya University** has reviewed and approved your above research proposal. Your application approval number is **1927.** The approval period is **29/06/2023 - 28/06/2024.**

This approval is subject to compliance with the following requirements;

i. Only approved documents including informed consents, study instruments, MTA will be used
ii. All changes including amendments, deviations and violations are submitted for review and approval by **Mount Kenya University**
iii. Death and life-threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to **Mount Kenya University** within 72 hours of notification
iv. Any changes, anticipated or otherwise that may increase the risks or affect the safety or welfare of study participants and others or affect the integrity of the research must be reported to **Mount Kenya University** within 72 hours
v. Clearance for export of biological specimens must be obtained from relevant institutions
vi. Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. Attach a comprehensive progress report to support the renewal
vii. Submission of an executive summary report within 90 days upon completion of the study to **Mount Kenya University**

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

Yours sincerely,

The Chairman
Mount Kenya University
Ethics Review Committee
P. O. Box 342 - 0100, Thika

Dr. Alfred Owino, PhD
Chairman, Mount Kenya University ISERC

APPENDIX C: RESEARCH PERMIT

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Ref No: **288519**

Date of Issue: **25/July/2023**

RESEARCH LICENSE

This is to Certify that Ms.. Eva LICHUMA KITUI of Mount Kenya University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Kiambu on the topic: ASSESMENT OF MENTAL HEALTHCARE AND TREATMENT SERVICES IN PUBLIC HEALTH FACILITIES IN KIAMBU COUNTY,KENYA for the period ending : 25/July/2024.

License No: **NACOSTI/P/23/27650**

288519

Applicant Identification Number

Director General
NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

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ASSESSMENT OF MENTAL HEALTH CARE AND TREATMENT SERVICES IN PUBLIC HEALTH FACILITIES IN KIAMBU COUNTY

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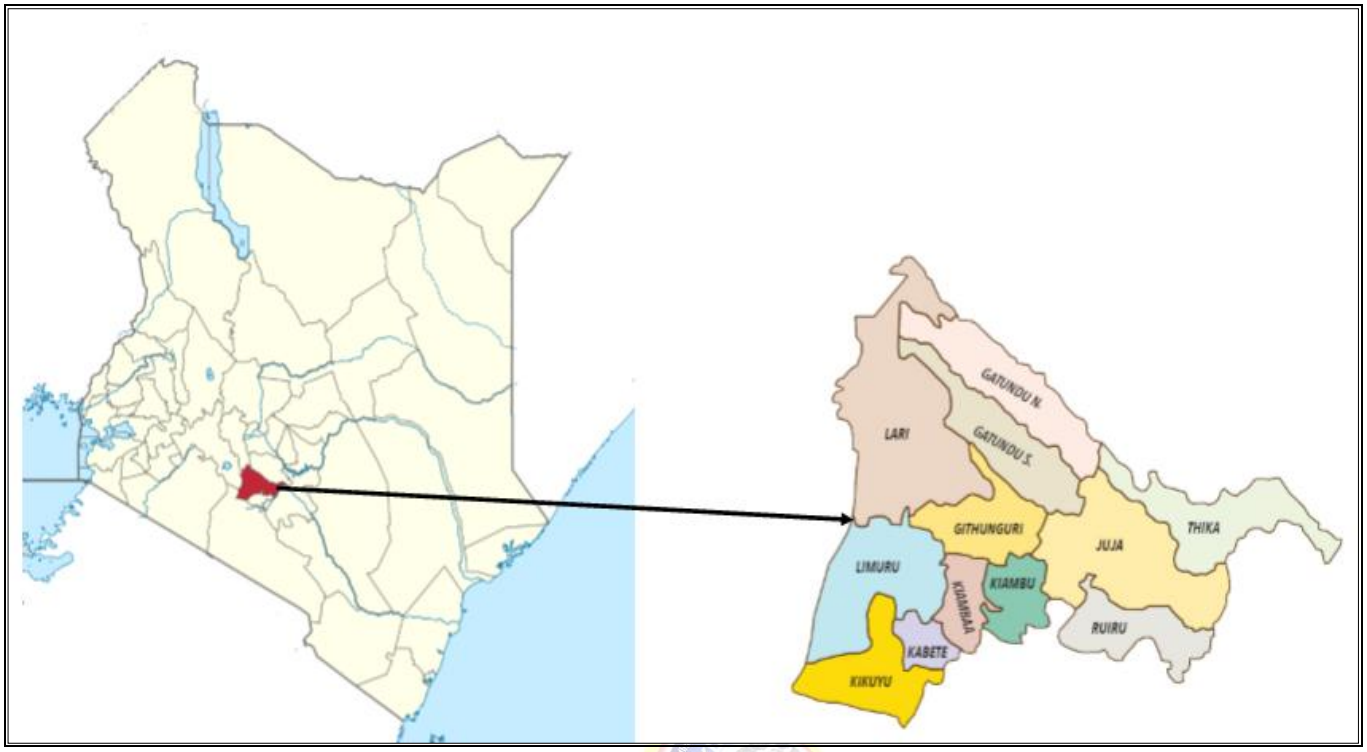
APPENDIX E: KIAMBU COUNTY MAP



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