

**PRIMARY HEALTHCARE FACILITIES' READINESS FOR ACCESS TO MENTAL
HEALTH SERVICES IN SELECTED COUNTIES IN KENYA**

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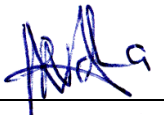
**A RESEARCH THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE
REQUIREMENT FOR THE CONFERMENT OF THE DOCTOR OF PHILOSOPHY
DEGREE IN HEALTH SYSTEMS MANAGEMENT OF KENYA METHODIST
UNIVERSITY**

OCTOBER, 2025

DECLARATION

Student Declaration

I declare that this research thesis is my original work and has not been presented for any academic award in this or any other university.

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DEDICATION

I dedicate this work to the Almighty God for what he has done for me, and my family, friends and the University fraternity for making this study a success.

ACKNOWLEDGMENT

I express my heartfelt gratitude to God for the abundant divine grace and favor that have guided me through my postgraduate studies. I am deeply thankful to my two supportive supervisors, Dr. Kezia Njoroge and Dr. Carol Kawila, for their patience, guidance, encouragement, and invaluable advice throughout my academic journey. I will always be grateful for their support and commitment to academic excellence. I extend my sincere appreciation to the staff and faculty of the Health Systems Management department; the completion of this work would have been significantly more challenging without your unwavering support. Additionally, I wish to convey my heartfelt thanks to my fellow PhD classmates for your tremendous support and friendship, which inspire me to strive for excellence. I am at a loss for words to adequately express my gratitude to my beloved husband and our children for the sacrifices you made to provide me with the time needed for my studies. Lastly, I offer special thanks to my parents, whose constant prayers, love, and guidance have shaped me into the person I am today.

ABSTRACT

Kenya's primary healthcare (PHC) system faces a substantial unmet need for mental-health care, with many clients first presenting at Levels 2–4 while services remain sparse, inconsistently financed, and weakly integrated, leading to delayed detection and low uptake. This mixed-methods study examined how financing, human resources, leadership and governance, and infrastructure influence access to mental-health services in public PHC facilities in Kiambu and Makueni Counties. The study population comprised PHC facilities (Levels 2–4) and frontline providers/managers; facilities were sampled proportionally by county and level to yield 179 facilities, and 355 respondents participated, while key informants were selected purposively. Quantitative analysis used logistic regression with standard diagnostics; qualitative data were analyzed thematically. Compared with out-of-pocket payment, insurance increased odds of access (OR=1.82, $p=0.014$), while lack of risk pooling (OR=0.24, $p<0.001$) and lack of resource mobilization (OR=0.45, $p=0.014$) reduced access. On human resources, no mental-health training (OR=0.084, $p<0.001$), no mental-health skills (OR=0.076, $p=0.001$), and poor staff distribution (OR=0.382, $p=0.046$) were associated with lower access. On leadership and governance, absence of capacity building (OR=0.065, $p<0.001$), policy implementation (OR=0.262, $p<0.001$), and monitoring and evaluation (OR=0.214, $p<0.001$) each predicted reduced access. On infrastructure, inadequate physical infrastructure (OR=0.109, $p=0.001$), health products/technologies (OR=0.360, $p=0.001$), and ICT (OR=0.277, $p=0.002$) lowered access. Model performance was acceptable (Nagelkerke $R^2=0.608$; Cox & Snell $R^2=0.304$; Hosmer–Lemeshow $\chi^2=3.076$, $p=0.215$). Qualitative findings triangulated these patterns, highlighting gaps in staff capacity, policy execution and supervision, medicines and supplies, and private counseling space. The study offers an immediately usable PHC screening protocol and a context-specific integration framework. It concludes that improving access will require targeted investments in workforce upskilling, reliable psychotropic supply chains, adequate infrastructure, and strengthened governance. County governments should train medical workers and establish mental-health infrastructure in PHC facilities to mainstream treatment. Future research should extend beyond Kiambu and Makueni to more of Kenya's 47 counties and include private hospitals.

ABBREVIATIONS AND ACRONYMS

CHMT	County Health Management Teams
COM-B Framework	Capability (C), opportunity (O) and motivation (M) are essential for any behaviour (B) to change
HAART	Awareness Against Human Trafficking
HIV	Human Immunodeficiency Virus
HPT	Health Products & Technology
IT	Information Technology
KAP	Knowledge Attitude and Practice
KeMU	Kenya Methodist University
KMCT	Kenya Medical Training College
LMIC	Low-Middle Income Countries
ME	Monitoring and Evaluation
MH	Mental Health
MHA	Mental Health America
MHP	Mental Health Practitioners
MHS	Mental, Neurological, and Substance use
MNSD	Mental, Neurological, and substance use disorders
MOH	Ministry of Health
NACOSTI	National Commission for Science, Technology & Innovation
PHC	Primary Health Care
SSA	Sub-Saharan Africa
TB	Tuberculosis

UCG	Uganda Clinical Guidelines
UHC	Universal Health Coverage
UK	United Kingdom
UMHCP	Uganda Minimum Health Care Package
WHO	World Health Organization
WHO-AIMS	World Health Organization Assessment Instrument for Mental Health Systems
WHO mhGAP	WHO Mental Health Gap Action Programme
WHO/WONCA	World Organization of Family Doctors

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CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Everyone agrees that a strong and fair healthcare system can't be built on anything less than primary healthcare [PHC]. It promotes the objectives of Universal Health Care [UHC] by acting as the first point of contact for communities, families, and individuals requiring medical treatment (World Health Organization [WHO] 2020). Mental health is gaining more and more attention in public health conversations as a result of its substantial influence on the worldwide burden of disease. Mental health services are still not adequately integrated into basic healthcare in low- and middle-income countries (LMICs) like Kenya, where there are many systemic obstacles and limited resources (World Bank, 2021).

Mental health disorders are a major problem in healthcare systems around the world. According to the WHO, over one billion individuals around the world deal with mental health issues such as schizophrenia, bipolar disorder, anxiety, and depression (WHO, 2020). A third of all non-fatal illnesses and 10% of all diseases in the globe are caused by mental health concerns. Furthermore, these problems have significant monetary ramifications; in fact, mental health issues may cost the world economy around \$16 trillion by 2030 owing to healthcare costs, lost productivity, and societal effects (World Economic Forum, 2019). The WHO (2020) states that mental health must be prioritized in public health and development agendas due to the high personal and societal costs of these disorders.

World Bank (2021) reports that the Coronavirus disease 2019 [COVID-19] epidemic exacerbated pre-existing mental health issues and revealed structural weaknesses in the provision of mental health services. The necessity for strong healthcare systems that can handle both every day and emergency mental health needs is highlighted by the increased incidence of anxiety, sadness, and stress during the pandemic. Mental health services were already under pressure in low- and middle-income countries (LMICs) like Kenya before the epidemic hit (Ministry of Health [MOH],2020). Mental health services were underfunded and underutilized due to this reallocation. Compounding the challenges caused by movement restrictions and lockdowns was the restricted availability of digital mental health solutions as well as inadequate preparedness for telehealth interventions (WHO, 2020).

The challenges of delivering mental healthcare are particularly apparent in Sub-Saharan Africa. A disproportionate number of people in the area suffer from mental health concerns, and there aren't enough resources to help (World Bank, 2021). Inadequate funding, cultural stigma, and an absence of trained mental health professionals are all contributors to these problems. When compared to high-income nations, Sub-Saharan Africa has a much lower number of mental health professionals per 100,000 inhabitants, at 1.4 (WHO, 2020). National health initiatives often fail to prioritize mental health, and resources are primarily allocated to communicable diseases and maternity and child health, despite the increasing prevalence of mental health disorders (World Bank, 2021).

When it comes to the broader mental health challenges in Sub-Saharan Africa, Kenya is a prime example. Substance abuse disorders, anxiety, and depression are prevalent mental health issues in the country (MOH, 2020). On the other hand, according to the MOH, (2020), mental health services in the country receive less than one percent of the total health budget. Worse yet, there is

an extreme shortage of mental health professionals to deal with the population as a whole; there are fewer than 500 psychiatrists, clinical psychologists, and psychiatric nurses to cover everyone (WHO, 2020). Societal stigma prevents people from obtaining the treatment they need, and mental health treatments based in urban areas leave rural populations neglected. People with mental illness are less likely to seek medical help, and the healthcare system is already struggling due to cultural beliefs that link mental illness to spiritual or supernatural origins (World Bank, 2021).

Owing to programs like the Mental Health Policy of Kenya (2015–2030) and the Taskforce on Mental Health (2019), the Kenyan government has shown its dedication to improving mental health services despite these obstacles (MOH, 2020). Promoting community-based mental healthcare models, increasing the number of mental health professionals, and integrating mental health into existing healthcare systems are the main goals of these programs. (WHO, 2020) notes that insufficient finance, competing health priorities, and limited mechanisms for monitoring and evaluation continue to impede the practical implementation of these policies.

The backbone of Kenya's healthcare system is its primary care system. Health clinics, dispensaries, and community health units are now more decentralized under the devolved governance framework that the Kenyan Constitution of 2010 established, which has expanded access to primary healthcare (MOH, 2020). The goal of these establishments is to ensure that all Kenyans have access to inexpensive, accessible, and fair healthcare. WHO (2020) reports that basic healthcare is still plagued by challenges like as an inadequate supply of medical equipment, an overworked workforce, and inadequate infrastructure. With few chances for capacity building and few resources available, many healthcare personnel at PHC facilities lack proper training in mental health (World Bank, 2021). This makes it difficult to identify, diagnose, and treat mental health

disorders early on. In addition, it is challenging to offer comprehensive therapy due to the lack of integrated health services, which include mental well-being (WHO,2020).

Including mental health services in primary healthcare is a commonly held belief as a solution to the problem of mental illness in low- and middle-income countries. According to the WHO, (2013), this plan is in accordance with their Comprehensive Mental Health Action Plan (2013–2030) and it aims to increase access to mental health treatments in primary healthcare settings. The term "integration" describes the process of incorporating mental health therapies into the day-to-day operations of primary healthcare facilities. Both task-sharing and capacity-building play crucial roles; the former entails training general practitioners to offer mental health services, while the latter entails equipping institutions with the means to do so (WHO, 2020). To guarantee the effectiveness and sustainability of integrated services, supportive policy frameworks are also vital. Health outcomes, stigma reduction, and healthcare accessibility are some of the potential benefits of integration that have been shown in other low- and middle-income countries (LMICs) such as South Africa and Uganda (World Bank, 2021).

The mental health services in Kenya can be integrated into the primary healthcare system because of its wide reach and focus on community-based care (Kenya Ministry of Health, 2020). But nothing is known about how prepared primary healthcare facilities in Kenya are for this kind of integration. If we want to know what might be a help or a hindrance to integration, how to allocate resources effectively, and what policies to implement, we need to assess this readiness (WHO, 2020). A sustainable and inclusive approach of mental health integration necessitates examining the interaction between governmental commitment, community awareness, technology improvements, and financial investment (World Bank, 2021). By thoroughly analysing the

readiness of primary healthcare facilities for integration, this research aims to support the overall mission of enhancing mental health services in Kenya.

Funding for healthcare is crucial if primary care facilities are to provide mental health services that are accessible, available, and sustainable. Better service delivery, more healthcare worker training, and stronger mental health infrastructure are all possible thanks to well-designed financial mechanisms. The WHO, (2020) notes that this is particularly crucial in low- and middle-income countries like Kenya, where primary care mental health integration has long been hindered by a lack of funding.

Growing access to primary care mental health treatment requires viable funding sources. Facilities can acquire the necessary supplies, drugs, and diagnostic instruments for mental health diagnosis and treatment with sufficient money. Healthcare providers can better provide evidence-based strategies for mental health if they have access to funding that supports capacity-building programs. Investing in teaching primary healthcare workers who are not specialists in mental health to address common mental health issues is crucial in Kenya, where the mental health workforce is severely understaffed. The global scarcity of mental health professionals can be alleviated through task-sharing programs, which have the support of the World Health Organization (WHO, 2023a).

More people will be able to afford mental health services if public programs like health insurance are in place. As the National Hospital Insurance Fund (NHIF) in Kenya has shown, expanding coverage to include mental health services could reduce families' and individuals' out-of-pocket expenses. The high out-of-pocket costs associated with mental health care are a major barrier to treatment, particularly for individuals living on low incomes. More people would seek treatment

for their mental health issues if the National Health Insurance Fund (NHIF) was adequately financed and integrated (MOH, 2020).

Funding systems should also make it a top priority to establish community-based mental health services. In order to ensure that underprivileged populations receive services and to decrease stigma, community-oriented initiatives have been successful. Community mental health centres integrated into primary care systems can be a valuable resource for the early identification and treatment of mental health conditions in Kenya. Evidence from other low-resource settings, such as Uganda, shows that integrating community-based mental health care into existing health systems is cost-effective (World Bank, 2021).

In contexts when domestic funding is limited, international donor support and collaborations can be an invaluable supplement. Countries like Kenya receive financial and technical support from global programs like the Mental Health Gap Action Programme (mhGAP) of the World Health Organization (WHO). Nevertheless, in order to guarantee sustainability, it is necessary to supplement reliance on external finance with long-term initiatives for mobilizing domestic resources (WHO, 2020).

In addition, primary healthcare facilities might be incentivized to prioritize mental health treatments through innovative finance techniques like results-based financing (RBF). RBF incentivizes facilities to increase service coverage and implement efficient procedures by linking money to performance results. If a facility meets a certain metric, like increasing the number of mental health consultations or community outreach activities, it may be eligible for further funding (World Bank, 2021).

A person's ability to get mental health treatment is highly dependent on HRH's accessibility, distribution, and capability. In Kenya, where there are many barriers to providing mental health care, HRH components are essential in bridging the gap between the increasing demand for these services and their actual provision. If we want more people, especially in underprivileged areas, to have access to mental health care, we must solve problems including a lack of trained professionals, problems with retention, and uneven distribution.

The accessibility of mental health practitioners with the necessary training is a critical factor in improving access. WHO (2020) reports that there is a critical shortage of psychiatrists in Kenya, with less than one per 100,000 inhabitants. This compares to an average of nine worldwide. The increasing mental health burden is being made harder to manage due to the shortage of resources. It is essential to bolster the workforce by funding medical schools, scholarships, and incentives. Furthermore, the MOH (2020) states that psychiatric nurses, clinical psychologists, and social workers should be prioritized for recruitment to promote the formation of interdisciplinary teams that can handle a wide range of mental health issues.

Another important factor is the fair distribution of human resources for health [HRH]. Rural communities in Kenya are underserved due to the concentration of mental health experts in urban locations. Disparities are worsened, particularly for underprivileged populations, due to this urban-centric focus. Interventions in policy, such as housing subsidies, financial incentives, and chances for professional advancement, have been successful in other settings, like Rwanda and Ethiopia (World Bank, 2021).

An effective method for increasing the availability of mental health services is task-sharing. This includes preparing primary care physicians, community health workers, and others who do not

have advanced training in mental health to provide this vital service to their patients. The WHO (2020) cites research out of India and Uganda that demonstrates how task sharing can boost service coverage without sacrificing quality. If primary care providers in Kenya were better trained to identify, assess, and treat common mental health conditions, access to care in areas where experts are scarce would be substantially enhanced. Cultural competence training can help decrease stigma and increase patient participation.

One of the most important things that can keep mental health services going is keeping healthcare professionals. Inadequate compensation, bad working conditions, and a lack of opportunity for advancement all contribute to high turnover rates, which in turn affect service continuity. Offering competitive compensation, establishing clear professional growth tracks, and building supportive work cultures are all approaches that can be taken to address this issue. By incorporating mental health treatments into primary care, the strain on specialists can be further reduced, leading to happier workers and less burnout (MOH, 2020).

Maintaining one's skill set through ongoing education and training is crucial. Mental health treatment is an area where many primary care physicians are under equipped. There needs to be consistent training that emphasizes the use of digital resources, integrated care strategies, and evidence-based methods. In order to improve the quality of services, these programs should also embrace trends such as trauma-informed care and patient-centered approaches (World Bank, 2021).

Opportunities to enhance HRH capability in mental health care are abundant because to technological advancements. Digital training platforms, telepsychiatry, and health applications for mobile devices can increase access to mental health care, particularly in under-served areas.

Having the right infrastructure and proper training is crucial for these technologies to be used effectively. Aligning with current HRH policies, investing in these areas allows for the innovative and scalable delivery of mental health treatments (WHO, 2020).

In order to effectively mobilize and optimize human resources involved in providing mental health treatments, strong governance and policy frameworks are required. Human resource strategies should be in sync with the larger goals of the health system, and national frameworks should make it a priority to integrate mental health into primary-level care delivery systematically. The Mental Health Policy (2015–2030) of Kenya is a good illustration of this trend; the policy prioritizes training mental health professionals and integrating mental health treatments into primary and community-based service delivery systems. Full monitoring and evaluation systems, along with long-term, cross-sectoral cooperation among relevant institutional actors, are essential for these policy goals to be realized (MOH,2020).

The efficiency of healthcare services is dependent on well-developed health infrastructure, which in turn affects accessibility, quality, and equity. Individuals coping with mental health concerns can be assured of timely diagnosis, effective treatment, and all-encompassing support through a robust mental health care infrastructure. As a result of structural shortcomings, mental health problems are exacerbated in low- and middle-income countries (LMICs) like Kenya, where there is a critical lack of infrastructure to meet the needs of the people (WHO, 2020).

The backbone of any healthcare system is its physical infrastructure. Mathari National Teaching and Referral Hospital and other urban centers in Kenya provide the vast majority of the country's mental health services, leaving rural areas with limited access. Primary healthcare facility expansion of mental health services to underserved and rural areas can decentralize care and

improve accessibility. People can get the care they need more easily and at a lower cost if mental health units are integrated into community health centres and dispensaries. In addition, facilities that have therapy rooms, private consultation rooms, and other accommodations for people with disabilities create an atmosphere that is trustworthy and respectful, which in turn encourages people to use the services offered (MOH, 2020).

Another crucial part of health infrastructure is the accessibility of diagnostic equipment and necessary medical supplies. Care delays and subpar results are common because many primary healthcare facilities in Kenya do not have the necessary equipment to screen for and diagnose mental health disorders. To improve early detection and intervention, these facilities should be equipped with standardized diagnostic devices and healthcare staff should be trained to use them. Maintaining a steady supply of psychiatric drugs is also critical for the treatment of mental health issues like schizophrenia, anxiety, and depression. Essential medications, especially in rural regions, must be made available despite obstacles such as disjointed supply chains and inadequate financing (World Bank, 2021).

Opportunities for mental health care are being revolutionized by technological improvements, especially in telehealth. By utilizing digital platforms such as telepsychiatry and mobile health applications, underprivileged areas can have access to treatment regardless of their location. Despite travel limitations caused by the COVID-19 epidemic, telemedicine was able to continue providing services to those in need. Nevertheless, Kenya must prioritize investments in internet connectivity, platforms that are easy to use, and digital literacy if it wants to fully profit from these opportunities. WHO (2020) notes that in order to enhance service delivery, healthcare staff must be trained to integrate telehealth solutions into their practice.

By bringing mental health services closer to populations, community-based infrastructure complements facility-based care. Early intervention, stigma reduction, and awareness can all be achieved through the establishment of community mental health clinics and the integration of mental health services into current community health initiatives. Psychosocial assistance, education, and preventative treatment can all be centralized in these institutions as well. Examples of community-based care that have been successful in South Africa and Uganda show how it can increase availability while still being culturally relevant. In order to promote accessibility and inclusivity, Kenya can modify comparable approaches to fit its specific sociocultural dynamics (World Bank, 2021).

Robust legislative frameworks back the incorporation of mental health treatments into pre-existing healthcare systems. The Mental Health Policy of Kenya (2015–2030) stresses the need to build systems that enable holistic and integrated care. Mental health services should be integrated into primary care, dedicated mental health facilities should be established, and resources should be allocated according to requirements. But for these policies to be put into reality, there needs to be strong political will, cooperation across sectors, and systems to track progress (MOH,2020).

A well-functioning mental health system also requires a mechanism to train healthcare professionals. In order to adequately treat mental health disorders, healthcare providers can be well-trained in training centers that have access to up-to-date resources. Training programs that bring together experts in fields such as social work, psychology, nursing, and psychiatry are essential. Healthcare providers can be better prepared for the challenges of mental health care through the use of digital learning platforms, mentorship programs, and simulation labs. WHO (2013) states that healthcare providers should stay updated with innovations in the field by

participating in continuous professional development programs that focus on new trends including trauma-informed care and evidence-based practices.

The provision of mental health services can be further improved through the implementation of novel infrastructure strategies. In order to provide on-site care to disadvantaged and faraway areas, mobile clinics are outfitted with diagnostic equipment and treatment alternatives. The use of AI in mental health systems has the potential to improve early diagnosis, individual treatment plans, and ongoing patient monitoring. Such technologies, when integrated with more conventional methods of providing services, have the potential to increase accessibility and efficiency in mental health treatment (WHO, 2020).

Improved treatment that is coordinated around people's needs, respects their preferences, and is safe, effective, timely, affordable, and of acceptable quality might be possible through integrating mental health care into primary care, which would increase access to mental health services (Funk et al., 2008). Equity, human rights, evidence-based practices, temporal progression perspectives, multisectoral advances, and inspiring individuals alongside MNS diseases and psychosocial infirmities are important ideas for integrating mental health into primary health care. Integrating mental health services into primary care is the most realistic way to close the treatment gap and make sure individuals get the mental health care they need (WHO,2022). Therefore, the exercise's potential efficiency is dependent on the readiness of the primary health institutions.

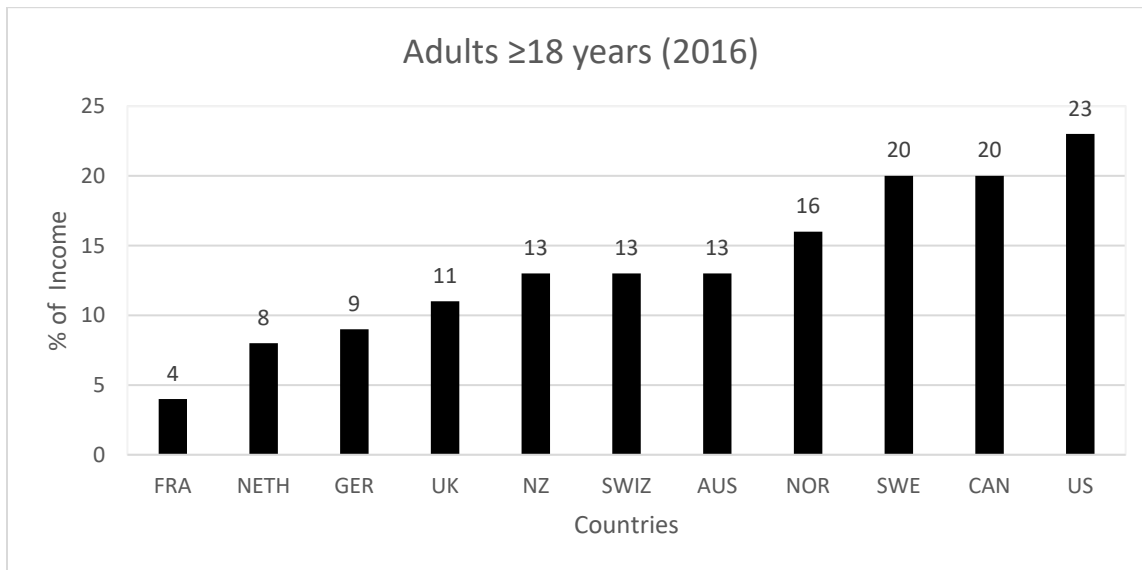
As a matter of public health, mental illness is a major concern. According to the WHO global mental health surveys, the effect of mental diseases is growing. These illnesses are widespread and devastating in many regions of the globe. Roughly fourteen percent of the world's disease burden is attributable to mental illness, which affects an estimated four hundred fifty million

individuals. Many healthcare systems are ill-equipped to deal with the impact of mental illness, which accounts for almost one-third of all impairments globally. Primary health care (PHC) settings account for about 70% of all follow-ups with patients who have mental health (MH). In an effort to bridge the treatment gap, the World Health Organization developed mhGAP, a set of guidelines for the integrated management of priority mental health illnesses in low-income nations. A variety of treatments backed by scientific evidence have been developed by various countries (Moreno & Sousa, 2021).

A quarter of U.S. adults report ever having a mental health diagnosis, including conditions like anxiety, depression, or emotional disturbance. This country has one of the greatest rates among the eleven high-income nations. Even though Americans are ready to seek professional help for mental distress, they are also among the most likely to account for affordability considerations. (National Research Council of Finland, [NRCF], 2020).

Figure 1.1

Mental Health Burden in High-Income Countries



Source: 2016 Commonwealth Fund International Health Policy Survey

Out of all the diseases in the world, 10% are caused by epidemiology (MNSD). This necessitates prioritizing long-term financing for mental health, as well as strengthening and expanding providers (Whiteford et al., 2015). There exist regional and national inequalities in service accessibility because prime health systems respond to the demands of the people who use them. According to Eaton et al. (2018), Anyebe et al. (2021) and Muhorakeye and Biracyaza (2021), there are five main problems that prevent more people from getting effective mental health services: problems with funding, the current organization of mental health treatments, the lack of integration of primary care, the resources for mental health personnel, and the leadership in public mental health.

The first four tiers of Kenya's healthcare system are responsible for primary care. Although most people agree that primary healthcare is the best option for most Kenyans, and in many cases the only option, the majority of Kenya's health spending goes into tertiary facilities, which treat a

much smaller population. “Marangu et al., (2021a)” notes. Nonetheless, dispensaries (Level 2), health centers (Level 3), and main referral institutions (Level 4) are all considered primary health units under the Kenya Health Policy 2014–2015.

Three primary state-level institutions and a handful of private providers in larger urban centers make up Kenya's mental health care system. Less than five percent of Kenya's health budget goes toward mental health care, mirroring the situation in other low-income nations. The primary objectives of tertiary mental health institutions include the management of mental disorder episodes and the prevention of the associated risks. As a result, breaches are often associated with high prices. Many long-term health problems, such as diabetes and cardiovascular disease, have treatment-related advantages. Additional benefits include improved mental health promotion and prevention, more effective treatment and follow-up, and lower costs associated with enhanced capacity to handle challenges (Marangu et al., 2021a).

Kenyans suffer greatly from mental disease. Jenkins et al. found that 10.8% of adults in the small town of Maseno in the Nyanza district of Kenya suffered from prevalent mental disorders. Also, according to Kiima et al. (2010), one out of four people who go to the doctor have some kind of mental illness. An estimated 85% 'treatment gap' has been created, according to Marangu et al. (2021a), due to criticisms of accessibility, efficacy, and equity. On the other hand, mental health issues related to chronic diseases can be better managed with a healthcare system that becomes a part of daily life. Furthermore, this improves the financial assistance that patients and their families receive to deal with mental health issues. It improves accessibility and fairness in healthcare recommendations as well. Research has not been conducted in Kenya. This study centers on the primary health care readiness of integrating mental health in general health services, since it provides smooth referral mechanisms throughout the six levels and in special programs. Until

mental health is incorporated into levels 14 of health, this population's access to mental health care is severely limited to the case load that any level 5 hospital can handle.

Models predict that in the next four decades, the number of people in Sub-Saharan Africa (SSA) who will be disabled due to mental illness would more than double. Mental illness is stigmatized in many SSA settings, much like HIV, and treatment requires community involvement and long-term care. Mental health issues, similar to HIV, are stigmatized and require community involvement and long-term care for treatment. But, in contrast to HIV, the public mental health care cascade has not been sustained, even though there is clear evidence of scalable ways (Gbadamosi et al., 2022; Meffert et al., 2021). Many persons with a range of mental illnesses face obstacles while trying to get treatment because of the lack of available options. Because they aren't getting the care they need or because their encounters with caregivers make them feel bad about asking for help, this is the result. Facilities must prepare ahead of time for mental and neurological illnesses because there is a severe lack of trained staff, insufficient financing for mental health care systems, and weak legal and social safeguards for people with mental disorders (Kohrt, et al., 2018; Wainberg et al., 2017).

A 2018 survey conducted by the Office of the Auditor General found that out of 3,956 government-owned hospitals in Kenya, only 29 of the 284 institutions of level four and above provide mental healthcare services. Mathari National Referral Hospital is Kenya's sole mental health referral facility. This represents 10% of all facilities at Level 4 and above and 0.7% of the 3,956 healthcare facilities held by the government. Despite statements suggesting they should be included, people seeking treatment in primary care institutions do not have access to mental health resources (WHO, 2023b). On top of that, the personnel at Mathari National Hospital is overburdened, and the facility

isn't big enough to deal with all the specialized cases that come through the door for people in Kenya who need mental healthcare.

Makueni and Kiambu provide analytically contrasted PHC ecologies for examining access to mental-health services under devolution. In Makueni, county-embedded adoption of the WHO Mental Health Gap Action Programme Intervention Guide (mhGAP-IG) has combined step-wise community engagement with frontline upskilling to integrate detection and basic management across Level 2–4 facilities; however, routine access remains constrained by psychotropic supply reliability, limited specialist back-up, and infrastructure gaps at lower levels of care. In Kiambu's denser peri-urban system, service entry points have expanded through platforms that bundle PHC with counselling and referral linkages and have been institutionalized within county services, yet first-contact access still hinges on workforce competencies, commodity security, and protected space for counselling at Level 2–4 facilities. Taken together, these counties offer the necessary variation to test whether the same health-system inputs, financing, human resources, leadership and governance, and infrastructure, operate similarly across divergent delivery contexts, thereby strengthening the external validity of the study and the transferability of recommendations to other Kenyan counties.

1.2 Problem Statement

An estimated 10% of the population suffers from a common mental illness (MoH, 2020). Mental health issues affect forty percent of Kenyan inpatients and twenty-five percent of outpatients, according to the country's Mental Health Policy 2015–2030. This is significantly higher than the 1% prevalence in the overall population. Kenya is home to 47,564,296 inhabitants, according to the 2019 census. Some 475,633 of these may be suffering from major mental illness. The country's mental health strategy is being drafted by the mental health taskforce, which was established in

2019. Through the development of appropriate programs, the goal of the 2015–2030 policy is to facilitate the public's testing for signs of mental illness. To assist primary care physicians in identifying mental health issues at an early stage, no screening method is currently available. Making sure that everyone can access comprehensive mental health services is incredibly crucial. Based on the World Mental Health Report 2022, it appears that Kenya has not fully implemented its Mental Health Policy 2015–2030.

The first and sole National Referral Mental Hospital was Mathari Hospital in 1910. Out of 73 campuses of the Kenya Medical Training College, just three provide training in mental health treatment, and there are just 17 such facilities in 47 counties. Access to mental health care is severely impaired due to the current state of healthcare reform. Mental health treatments should be a part of primary care systems for several reasons. Marangu et al. (2021b) found that it can improve mental health treatment for persons with chronic conditions such as diabetes and heart disease.

This means that mental health services must be included in Kenya's basic health care system. One of the most effective means of ensuring that all people have access to quality, reasonably priced healthcare is through PHC, according to the Alma-Ata Declaration. The integration's stated goals are the following: to lessen the social stigma associated with mental illness; to facilitate access to treatment; to inspire community involvement; and to decrease the prevalence of long-term sufferers (Esponda et al., 2020). Improving access to mental health care can be achieved by integrating it with primary health services. Along with being safe, effective, timely, inexpensive, and of good quality, this ensures that the resources are delivered in a way that considers the person's needs and wants (Colizzi et al., 2020; Goodrich et al., 2013; Jenkins et al., 2010). Concerns about the preparedness of the Kenyan healthcare system to provide these therapies at less prestigious

institutions persist. Therefore, this study aims to develop a strategy for incorporating mental health services within primary healthcare facilities and determine their readiness for such integration.

1.3 Purpose of the Research

The purpose of this study was to design and validate a practical mental health integration framework and facility-level screening protocol for Kenyan primary care to enable earlier case identification and timely linkage to evidence-based treatment.

1.4 The Study's Objective

1.4.1 General Objective

To assess primary healthcare facilities' readiness for access to mental health services to enhance early detection in selected counties in Kenya.

1.4.2 Specific Objectives

- i) To determine the influence of healthcare funding in primary care facilities on access to mental health services in Kenya.
- ii) To assess the influence of human resource factors in primary care facilities on access to mental health services in Kenya.
- iii) To examine the influence of leadership and governance in primary care facilities on access to mental health services in Kenya.
- iv) To investigate the influence of healthcare infrastructure in primary care facilities on access to mental health services in Kenya.
- v) To develop a framework for integrating mental health care into primary care facilities alongside a mental health screening protocol to improve early detection and access to mental health services in Kenya

1.5 Research Hypotheses

Hypotheses that guided the investigation were:

H0₁: Healthcare funding in primary care facilities has no statistically significant effect on access to mental health services in Kenya.

H1₁: Healthcare funding in primary care facilities has a statistically significant effect on access to mental health services in Kenya.

H0₂: Human resource factors in primary care facilities have no statistically significant effect on access to mental health services in Kenya.

H1₂: Human resource factors in primary care facilities have a statistically significant effect on access to mental health services in Kenya.

H0₃: Leadership & governance in primary care facilities have no statistically significant effect on access to mental health services in Kenya.

H1₃: Leadership & governance in primary care facilities have a statistically significant effect on access to mental health services in Kenya.

H0₄: Healthcare infrastructure in primary care facilities has no statistically significant effect on access to mental health services in Kenya.

H1₄: Healthcare infrastructure in primary care facilities has a statistically significant effect on access to mental health services in Kenya.

H0₅: Framework for integrating mental health care into primary care facilities alongside a mental health screening protocol does not improve early detection and access to mental health services in Kenya.

H1₅: Framework for integrating mental health care into primary care facilities alongside a mental health screening protocol improves early detection and access to mental health services in Kenya.

1.6 The Study's Justification

The issue of mental health has grown in importance on a national, regional, and worldwide scale. According to projections from the WHO (2022), around one in eight persons globally suffers from a mental illness, yet almost three-quarters of people in low- and middle-income nations do not get the proper care. Persistent issues, including low financial investment, a lack of human resources, and poor governance of the health system in Sub-Saharan Africa, contribute to the widening of the treatment gap. With mental health treatment being overlooked in terms of finance and policy execution, Kenya is especially impacted as it continues to suffer from both communicable and non-communicable disorders (Kenya Mental Health Taskforce, [KMHF] 2020).

The urgent need to close the treatment gap by integrating mental health services into primary healthcare systems, which are often the first point of contact for the majority of Kenyans, particularly in underserved and rural areas, justifies our study. Although primary healthcare provides the most feasible starting point for enhancing access, it is still unclear how ready the system is for integration. Effective integration of mental health services is hampered by obstacles such as inadequate financing, a lack of qualified staff, poor institutional leadership, and infrastructure deficiencies. The goal of the current research is to thoroughly assess these preparation areas in order to provide information that will guide practice and policy regarding the integration of mental health care.

From a policy standpoint, the research supports the integration of mental health into mainstream healthcare, which is emphasized in both the Kenya Mental Health Policy (2015–2030) and the [UHC] agenda. Notwithstanding these pledges, service delivery is dispersed, and execution has remained uneven. The research will identify systemic deficiencies and provide workable solutions that align with national goals by examining finance, workforce, governance, and infrastructure.

From a theoretical perspective, this research adds to the literature on integration and health systems by putting out a locally applicable framework for evaluating and improving preparedness. The proposed approach is expected to enhance academic discussions on building health systems, especially in settings with low resources.

The results will be useful from a practical standpoint for development partners, politicians, and health management. The evidence produced will back up the judicious use of funds, the development of health professionals' skills, and the governance changes required to increase the availability, calibre, and equality of mental health care. In the end, the results should guide tactics that close the treatment gap, enhance health outcomes, and move Kenya closer to UHC.

1.7 Study Limitation

Since the research for the thesis took place in the public sector, its applicability to the private sector may be limited. The researchers may not be able to account for unexpected extraneous factors at the study site, which could change the study variables and conceptual framework.

1.8 The Scope of the Research

To be carried out in designated public primary care centers that have easy access to mental health care providers who can ensure the study's success. Financing, human resources, leadership and governance, healthcare infrastructure, and organizational elements were the five aims of the study. In order to ensure that all respondents had an opportunity to fully express themselves and that qualitative and quantitative data could be triangulated, the data collection tool included both structured questions and a key informant interview guide.

1.9 Significance of the Study

County and sub-county administrations make decisions about mental health care provision in their areas, so this study is crucial for them. Better access to mental health therapies will be possible as a result of the findings.

The findings inform the development of regulations that facilitate access to mental health services at the primary care level. Policymakers and regulators can use these results to design and scale programs that expand access to treatment and reduce illness rates through improved healthcare accessibility (Colizzi et al., 2020).

The study will provide further information that will enhance our understanding of the accessibility of mental health care. Since the findings of this study contribute to what is already known, they are of interest to researchers and academics who seek to learn more and perform additional research.

1.10 Research Assumptions

The following assumptions formed the basis of the study: -

That everyone who took the survey would be cooperative and truthful. That the variables chosen affect the availability of mental health services. Additionally, the study presupposed that the participants in the samples were real and readily available to answer the questions. Since the data collection instruments were administered alongside the study participants' regular work schedules, it is assumed that they will furnish accurate information.

1.11 Operational Definition of Terms

Accessibility: means that you are accessible and have services available.

Integration of services for mental health - People can get the care and treatment they need near where they live thanks to the availability of mental healthcare in primary healthcare, maintaining family unity, support systems, and the capacity to fully engage in society and contribute to household productivity (Colizzi et al., 2020).

Health: a condition of full health not just individuals lead the fronts. (WHO, 2022).

Health financing- a part of a health system responsible with raising, collecting, and allocating funds to meet both the individual and group health requirements of those utilizing the system. (Liaropoulos & Goranitis, 2015).

Mental health: when have satisfying relationships with others (Pan American, n.d.).

Mental health problems: the range of mental issues that might affect someone, from severe troublesome found signal subsequent conditions (Health (US) & Study, 2007)

Mental health services: such as evaluation, therapy, provided improvement both settings. (England et al., 2015)

Preparedness – availability of healthcare workers who can manage mental healthcare, medical products and supplies for mental health, infrastructure to support mental health service provision

Provider: A person who is legally permitted to deliver healthcare in this state either through the regular course of their company or as part of their vocation (O’Neill, 1998).

Primary care health facility: a hospital that the government owns and supports financially. A government hospital is another name for it. (Kairu et al., 2021).

Resources: The tools at hand for running health systems, including personnel, infrastructure, supplies, and financial resources as well as knowledge (Jamison et al., 2006).

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The chapter talks about the theoretical framework, the empirical literature review, the conceptual framework, and the research gaps that the study wants to solve when it comes to how integrating care services affects access to mental health.

2.2 Mental Health Services' Accessibility in Kenyan Basic Healthcare Facilities

2.2.1 Geographical

Getting mental health care is still very hard for many people around the world, and there are many things that make it hard for people to get care. Rural and underserved populations are disproportionately affected by these factors, which include financial limitations, geographic isolation, and a lack of mental health professionals (Substance Abuse and Mental Health Services Administration [SAMHSA], 2022; American Psychological Association [APA], 2024). People who live in remote places typically have to drive a long way and pay a lot of money to get mental health care. This is made worse by the fact that there aren't many providers available (Cantor, 2024). Even with laws like the Mental Health Parity and Addiction Equity Act of 2008, which attempted to promote access to mental health treatments by ensuring equal treatment by insurance providers, many persons continue to endure insufficient coverage and care-related difficulties (SAMHSA, 2022).

Another important concern is the paucity of mental health practitioners, as the demand for services is expanding and there are considerably more qualified specialists than there are accessible. There aren't enough mental health providers in many locations, especially rural ones. This means that

people have to wait a long time for appointments and, in some cases, they have to skip therapy (Cantor, 2024). This deficit is worsened by broader socioeconomic trends, such as the increased prevalence of mental health problems, that place further burden on an already stretched healthcare system (National Institute of Mental Health [NIMH], 2024). Even with these problems, the need for mental health services has grown a lot, especially after the COVID-19 pandemic made people more aware of how important mental health is.

Telehealth has become a viable way to make mental health care more available, especially for people who live in locations that don't have many services. During the epidemic, telehealth made it possible to keep providing services even while people had to stay apart. Telehealth has proven to be a beneficial tool, but its use has not been consistent. Some places, especially rural ones, still have problems that make it hard to use telehealth services effectively, like not having easy access to reliable internet and other technology (SAMHSA, 2022). Additionally, there are still substantial worries concerning the standard of care in remote regions, especially for people with more complicated mental health need (Cantor, 2024).

The mental health field also suffers from chronic underfunding, which means that many systems can't offer full care that includes both prevention interventions and long-term management. This lack of funding makes it harder for mental health services to work with primary care and other parts of the healthcare system (NIMH, 2024). Additionally, some groups, such people involved in the criminal justice system, often don't get the mental health care they need, which leads to high rates of untreated mental illness and bad social outcomes (SAMHSA, 2022). This shows that mental health services need to be better integrated into the criminal justice and healthcare systems as a whole.

It is necessary to concentrate on legislative change, technology infrastructure, and workforce expansion in order to overcome these structural impediments. Increased investment in training mental health practitioners, particularly in marginalized areas, will be critical to fulfilling the increased demand for services. Additionally, developing the telehealth infrastructure will guarantee that people from all walks of life can get mental health care without being hampered by technological or geographic limits (NIMH, 2024). Also, making people more aware of mental health issues and decreasing the stigma around them will lead to earlier intervention and better outcomes for people who need help.

According to a study conducted in South Africa by Mokwena and Mokwena (2022), there are numerous benefits to using PHCs, including fact that majority of these facilities are located in communities and that many patients can reach the nearest clinic on foot (Mokwena & Mokwena, 2022; West et al., 2021). But just because a building is there doesn't mean that it will provide great treatment. Some clinics don't even offer the basic services that they say they will. This shows that it is vital to periodically review in order determine applicability & efficacy delivering based on the community (Mosadeghrad, 2014). Integrated care can reduce stigma and make care more accessible. This means that it's often possible to address both physical and mental health problems at the same time. Also, mental health services are much easier to go to because they are often close to homes. Integrating makes UHC better by making it able to meet new needs (Funk et al., 2003).

There are more cases of mental illness in low- and middle-income countries, such Sub-Saharan Africa. By 2050, it is anticipated that sub-Saharan Africa (SSA) will have 45 million years lived with disability (YLDs). Mental and substance use problems were the most common causes of YLDs in 2010. Earlier research, such as the 1990 Global Burden of Disease (GBD) report, has also demonstrated that mental illness is growing increasingly widespread in SSA and other low- and

middle-income countries (LMICs). LMICs don't have the money or people to deal with this expanding problem. There aren't many resources, and they aren't very well spread around. Kwabah et al. (2023) say that mental diseases get only 0.4% of health development aid and 1.6% of government health spending in low- and middle-income countries.

About 4% of all medical problems in Kenya are mental health illnesses, which is about the same as the global incidence. Kenya's mental health care system is missing a lot of things. There aren't enough qualified mental health professionals or money to pay for them. There are less than 500 qualified mental health specialists in Kenya, a country of more than 50 million people. About 100 of these psychiatrists work mostly in Nairobi, and about 12 neurologists work mostly in private hospitals in cities.

According to a Swiss study, asylum seekers have restricted access to mental health care. Language problems, a bad view of psychiatry, fear of social stigma, not knowing about accessible psychiatric treatments, low levels of education, and trouble with the local language were named as the main reasons why people can't get mental health care (Bartolomei et al. 2016).

2.2.2 Mental Services Availability

The treatment of psychiatric illnesses and the progress of general well-being depend greatly on mental health services. However, the accessibility and availability of these services continue to be important global concerns, with notable gaps persisting across different geographical locations, socioeconomic groups, and healthcare systems. Recent scholarly investigations spanning the period from 2018 to 2024 have critically analyzed the degree of accessibility of mental health care, exposing considerable hurdles such as labor limitations, fiscal limits, and uneven geographical distribution. A lot of people are also talking about how adding mental health services to primary

healthcare systems and expanding digital mental health interventions could make them more accessible.

Evidence from the real world shows that mental health services are still very unevenly distributed. There are a lot of psychiatric care facilities and specialists in cities, but there aren't enough in rural and distant areas. A comprehensive assessment undertaken by Johnson et al. (2020) found that more than 60% of rural inhabitants in low-income countries lacked access to professional mental health care. Similarly, Smith et al. (2021) reported a fivefold gap in psychiatrist-to-population ratios between rural and urban locations in the United States, resulting to prolonged wait times and unmet mental health needs for persons dwelling in less densely populated regions. This geographical disparity is made worse by financial problems that make it even harder to get mental health care. According to Martinez and Lopez (2019), who looked at insurance claims and healthcare utilization data, those with lower incomes were twice as likely to put off or skip mental health treatment altogether because they couldn't afford it. Complementing these findings, Chatterjee et al. (2023) highlighted direct out-of-pocket healthcare expenses as a key disincentive to receiving psychiatric therapy, particularly in developing nations where health insurance penetration remained low. These studies collectively indicate that even in environments where mental health treatments exist, economic hurdles continue to hinder their effective utilization.

The shortage of qualified mental health specialists also makes it exceedingly challenging for patients to access services. Patel et al. (2020) state that more than half of the people in the globe live in places where there is less than one psychiatrist for every 100,000 people. This is a serious worry in low- and middle-income countries. Given these limits, experts have called for alternative modes of care delivery, including task-shifting, where general healthcare staff obtain specialized training to provide core mental health support. Research in the real world has demonstrated that

these kinds of models function. Ndetei et al. (2022) looked at Kenyan mental health programs and found that community health workers who learned basic psychological counseling skills helped improve mental health outcomes by 40% in populations that weren't getting enough help. Thornicroft et al. (2021) also found that incorporating mental health therapies into primary care settings dramatically enhanced service availability and utilization, especially in places with limited resources. These results suggest that using current community healthcare systems in new ways to hire people could help mental health services proliferate faster.

Adding psychiatric treatment to primary healthcare systems is another smart method to make mental health services easier to get. Khan et al. (2022) looked at healthcare systems in South Asia and found that when psychiatric care was included to primary healthcare clinics, the use of mental health services went up by 35%. Lund et al. (2020) undertook a similar study in South Africa and found that adding mental health services to primary care resulted to a 25% decline in psychiatric hospitalisations. This means that getting help early in the community can cut down on the need for more acute psychiatric care. Policy frameworks are very important in deciding what services are available, in addition to structural integration. Eaton et al. (2021) did a comparative study and found that countries with clear and committed mental health policies had better service coverage and resource allocation than countries where mental health policies were either not present or poorly executed. Some nations, especially, spend less than 1% of their total healthcare budget on mental health, which makes the gaps in treatment much worse. The evidence makes it obvious that mental health needs to be a major priority for policymakers when they build national healthcare programs to make sure that services are offered in a fair and long-lasting fashion.

Telepsychiatry and internet mental health platforms are two new technologies that have shown promise in bridging the gaps in mental health care. Telehealth solutions were quite popular because of the COVID-19 pandemic. Torous et al. (2022) say that the number of telepsychiatry consultations went up by 400% in 2020, and this tendency has persisted following the epidemic. Similarly, Naslund et al. (2021) reported that mobile mental health applications enhanced therapy adherence by 30% among young adults, suggesting the transformative potential of digital interventions in increasing mental health outcomes. But even with these improvements, there are still some problems. Baker and Brown (2023) concluded that data privacy issues, a lack of digital literacy, and inadequate internet connectivity in rural places are important hurdles to the effective utilization of digital mental health services. Gupta et al. (2023) further observed that nearly half of the patients in low-income regions faced substantial difficulties in accessing telepsychiatry services due to infrastructural limitations, thereby highlighting the need for hybrid service delivery models that combine both digital and in-person care to ensure broader accessibility.

The collection of empirical data examined here shows that the availability of mental health services is affected by a complicated mix of factors, including where they are located, economic limitations, workforce limits, policy frameworks, and technology progress. Although substantial achievements have been achieved in increasing mental health services through community-based interventions, primary healthcare integration, and digital platforms, considerable hurdles exist, particularly in low-resource settings. Future research must focus on evaluating the long-term sustainability and effectiveness of digital mental health interventions, identifying scalable models for integrating psychiatric services into primary healthcare, and conducting cost-effectiveness analyses to determine the most viable approaches for expanding mental health service delivery. Addressing

these gaps will be critical in ensuring that mental health services are available to all populations, regardless of geographic location or socioeconomic position.

2.2.3 The Affordability of Mental Services

A major issue on a global scale, especially for low-income populations, is the affordability of mental health services. Financial obstacles are substantial, despite the fact that access to mental health treatment is critical for general health. Despite the fact that mental health issues are a major contributor to the global sickness prevalence, only regions with little financial resources have sufficient resources allocated to mental health care Rohwer et al., 2023; World Health Organization [WHO], 2023b). High deductibles, co-pays, and treatment restrictions make it difficult for many people to get the medical care they need, even in high-income nations. These problems still exist in 2025, (even though there have been numerous initiatives to increase funding for mental health services (Kaiser Family Foundation [KFF](n.d).

Mental health services are underserved and frequently not covered by national health insurance programs in many low- and middle-income nations. One example is the shortage of mental health experts in Sub-Saharan Africa; in fact, in some locations, there is fewer than one psychiatrist for every 100,000 people (WHO, 2023). The stigma associated with mental health issues prevents many people from getting treatment, which in turn worsens the shortage. Consequently, a lot of people have their quality of life reduced and suffer for lengthy periods of time without getting the treatment they need (WHO, 2023).

When it comes to the pricing of mental health services, Kenya is no different from many other African countries. A lack of sufficient financing for mental health services persists across the nation, notwithstanding policy advances like the Mental Health Policy 2015 and efforts to integrate

mental health into basic healthcare. Because these services are typically concentrated in urban areas, rural individuals are disadvantaged (Ministry of Health, 2015). Even though mental health coverage has begun to expand through Kenya's National Hospital Insurance Fund (NHIF), many individuals still have to pay a hefty sum out of pocket for treatments that are really essential (Karanja & Kibuchi, 2022).

To improve mental health services in the country, the Kenyan government has launched community-based programs. Community health strategies and similar programs aim to provide low-income communities with access to mental health services. These initiatives have challenges with funding, resources, and the demand for more qualified workers (MOH, 2015). Service quality, availability, and affordability remain significant challenges, despite the fact that public awareness campaigns have reduced stigma and encouraged people to seek treatment.

Particularly in remote locations where transportation is expensive, the lack of qualified mental health specialists makes it much more difficult for people to get the help they need. A lot of people can't afford mental health treatment because of all the money they have to pay out of pocket, including for transportation, medicine, and therapy. Consequently, a significant number of Kenyans persist in enduring untreated mental health issues. The existing mental health coverage provided by the NHIF is insufficient for the majority of people, thus widening the gap between the well-off and the poor (Karanja & Kibuchi, 2022).

For these systemic issues to be addressed, Kenya must prioritize increasing the number of mental health professionals available, allocating more funds to mental health care, and expanding the variety of services covered by the NHIF insurance program. This plan requires the full support of

foreign governments if mental health is to be treated with the same seriousness as other critical health concerns.

Esponda et al. (2020) state that mental health can be enhanced by integration with general healthcare, leading to better access to care, as well as efficient and affordable improvements in both physical and mental health. To ensure that everyone can afford to get the medical treatment they need without worrying about going into major debt owing to exorbitant deductibles and copays is the driving force behind the movement for universal health coverage. Plans and preparations to host these services must be made by the health system in order for this to be achieved (Future & National Academy of Medicine, 2016; Mosadeghrad, 2014). It covers health promotion, prevention, treatment, rehabilitation, and palliation, among other potential financial catastrophes.

Integrating and interacting with different platforms is crucial for the first platform to supply various forms of healthcare, such as self-care, informal healthcare, and specialized care (Funk et al., 2008). Integrating mental healthcare with primary care reduces healthcare inequalities by making it more accessible, affordable, and acceptable to patients and their families. This guarantees that these individuals will receive ongoing treatment. When people with mental health issues seek help, they should be able to do it in a welcoming environment free of stigma. Patients with both physical and mental health difficulties are more likely to receive comprehensive, well-coordinated, and patient-centered care when mental health is integrated into primary care. There is a growing treatment disparity for mental illness because, despite the evidence, the majority of nations continue to reject successful component treatments (Jenkins et al., 2011).

Mental health issues are expensive, but spending on them can improve people's emotional wellbeing. Poverty, insufficient education, gender inequality, illness, and violence are only few of the worldwide concerns that are exacerbated by poor mental health. The person can't do their work successfully, reach their maximum potential, or contribute to society in any meaningful way. The global world is finally coming to terms with the fact that mental health and other invisible disorders are real, and that they pose a significant impediment to attaining development goals that have been widely recognized (Tikkanen et al., 2020).

2.3 Mental Health Service Accessibility and Healthcare Funding

Access to mental healthcare is significantly affected by healthcare financing. Mental health services can be more or less accessible, affordable, and of high quality depending on factors such as insurance coverage, governmental and private funding, out-of-pocket costs, and creative financing strategies. In order to overcome financial obstacles, a comprehensive plan is needed that prioritizes efficiency, sustainability, and equity. To address the issue of inadequate access to mental healthcare, policymakers should look into creative financing structures, raise public funding, restrict the private sector's involvement, and promote comprehensive insurance systems. A more effective and inclusive mental healthcare system that can serve various populations can be achieved through these endeavours.

A well-funded healthcare system is essential for patient care. In this case, allocating resources makes the goals and policies a reality. At present, national coverage is severely lacking in terms of affordability and accessibility for anyone requiring medical treatment (Funk et al., 2003). How people are able to pay for medical treatment has a major bearing on their ability to get mental health services. Particularly in low- and middle-income countries (LMICs) and other economically disadvantaged regions, a lack of financial resources is a major barrier to providing equitable mental

health treatments. To learn more about the complex connection between healthcare financing and the availability of mental healthcare, this study compiles results from research published in the past six years. It delves at issues like insurance coverage, governmental and private funding, out-of-pocket prices, and innovative financing options, plus their effects on the accessibility, quality, and equity of mental healthcare.

One of the most important factors determining access to mental health services is insurance coverage. There is a strong correlation between the accessibility and affordability of mental health care and the extent to which national insurance plans cover these costs. Countries with comprehensive insurance schemes, such as several European countries, show higher rates of mental health service consumption compared to those with fragmented systems or that rely on out-of-pocket payments. For example, Green et al. (2021) found that the prevalence of mental health treatment was three times more in countries with UHC compared to those without. On the flip side, many people are unable to afford the care they need because of inadequate insurance coverage, which in turn reduces access.

Because public healthcare systems in LMICs are underfunded, mental health services are often de-emphasized. The World Health Organization's Mental Health Atlas (2021b) reports that as compared to total national health spending, the majority of LMICs have mental health budgets that are less than 2%. Drugs, trained staff, and specialized facilities that are essential are hard to get by due to budget constraints. People in rural areas and those with lower incomes are particularly impacted by resource shortages because of their vulnerability. The accessibility of mental healthcare varies significantly among socioeconomic groups, as shown by Patel et al. (2022). There is a fivefold disparity in the rates of mental health care between low-income and wealthy households.

Disparities in access to mental healthcare are made worse by out-of-pocket expenses. Patients in many LMICs pay the lion's share of healthcare costs out of pocket, which puts a burden on low-income families. People sometimes have to pay a lot of money out of pocket for mental health care, even in nations with high incomes. For instance, Johnson et al. (2023) pointed out that Americans still face high deductibles, co-pays, and coverage restrictions when it comes to mental health care, despite the Mental Health Parity and Addiction Equity Act. Worst health outcomes and higher long-term expenses result when people are discouraged from getting timely care due to financial barriers.

Increasing people's access to mental healthcare requires public funding and investment. The accessibility, utilization, and quality of mental health services are all improved in nations where substantial public funding is dedicated to this area. As an example, all Swedes have affordable access to mental healthcare thanks to the country's well-funded public mental health system (Andersson et al., 2019). On the other hand, countries that don't have a lot of money in the budget usually rely on foreign aid and grants, which can't last forever. Furthermore, service delivery can become fragmented when relying on external finance, since donor priorities might not match up with local requirements.

There have been conflicting impacts on equity and accessibility as a result of the growing private sector engagement in funding mental healthcare. Even though private investment can increase access to services, especially in cities, it usually favors those with more disposable means, leaving disadvantaged communities unmet needs. Private mental health facilities in India mostly serve the well-off, according to Rathod et al. (2021), creating a two-tiered system where the well-off have access to top-notch treatment and the poor must make do with inadequately financed public

services. It is evident that regulatory frameworks are necessary to ensure that private sector actions are in line with equity objectives.

To fill the budget shortfalls in mental healthcare, new forms of financing have evolved. To improve service delivery and mobilize resources, mechanisms like public-private partnerships, social impact bonds, and pay-for-success models have been tested. One example is a British pilot program that reduced costs and increased effectiveness in community-based mental health treatments by using social impact bonds to finance these programs (Smith et al., 2022). To avoid over-commercialization or ignoring complicated instances, two potential unforeseen consequences, these approaches require meticulous planning.

Donor money and global health initiatives are vital for mental healthcare funding, particularly in regions with little resources. Low- and middle-income countries (LMICs) have benefited from mental health initiatives run by the World Bank and the Mental Health Gap Action Programme (mhGAP) run by the World Health Organization (WHO). Access to basic mental health treatments has been enhanced through the implementation of these programs, which utilize task-shifting approaches to educate healthcare providers who are not specialists in providing care (Van Ginneken et al., 2022). Problems with sustainability arise, nevertheless, when relying on external support, especially in the event that funding ceases or donor preferences shift.

It is also necessary to fix healthcare financing systems inefficiencies for everyone to have equal access to mental healthcare. It is possible for investments in mental health to be undermined by corruption, misallocation of resources, and inefficiencies in public spending. Funding for community-based treatment is severely underfunded in many LMICs, according to Saxena et al. (2020), since a large amount of mental health budgets go to centralized psychiatric hospitals. Early

intervention, less stigma, and easier access can result from reinvestment in primary and community-based healthcare.

When looking to reform healthcare financing, it is important to take into account how mental health is impacted by other social factors as well. Unemployment, poverty, and a dearth of social safety nets exacerbate mental health problems and make access to treatment even more challenging. Incorporating mental health into larger social protection programs, such housing assistance and unemployment compensation, can help overcome these obstacles. According to Lund et al. (2021), low-income families in Brazil have shown improved mental health outcomes after participating in the Bolsa Família program, which offers both financial assistance and healthcare access.

A robust healthcare finance system is crucial for mental health, as the COVID-19 pandemic has shown once again. Demand for mental health services has surged due to the pandemic's psychological toll, putting a strain on current resources. In light of this, some governments increased spending on mental health as part of disaster relief packages. One example is the increased use of telemedicine and crisis support services in Australia, which was made possible by greater money granted during the pandemic (Kowal et al., 2022). To address mental health issues in the long run, however, these short-term fixes must give way to more permanent investments.

Essential mental healthcare coverage is severely lacking in most low- and medium-income nations, both in terms of availability to those who need it and of their ability to pay for it or receive benefits. Low service and coverage levels are determined by supply and demand rules. Concerning the demand side, individuals with mental illness cannot know what they're dealing with, be oblivious to treatment options, suffer from a missed diagnosis, or be afraid to seek care because of prejudice

and stigma. When it comes to the supply side, mental health treatment resources are few and sometimes linked to subpar quality of service or even human rights abuses. As a result of limited access to quality services and insufficient social health protection, people with mental health issues often have to pay for treatment out of pocket, which can lead to a decrease in other areas of spending or investments, the liquidation of savings or assets, or even the loss of treatment completely (Chisholm et al., 2019).

Many different types of taxation, both general and designated, as well as public and private insurance, community-based funding, and individual and family contributions all have a role in the overall cost of healthcare (Kairu et al., 2021; Robin et al., 2021). How much money is available, who pays the bills and has control over the finances, and whether health spending inflation can be controlled are all determined by the funding model a nation picks (Liaropoulos & Goranitis, 2015). Mental, neurological, and substance use disorders (MNSD) comprise 10% of the world's diseases, are chronic, debilitating, stigmatizing, and linked to high rates of premature mortality, according to epidemiologists (Docrat et al., 2019). Even beyond the medical field, they have far-reaching effects on the economic and social stability of individuals, households, and communities (WHO, 2020).

When it comes to mental health, many developing nations' governments are silent. In other nations, the necessary paperwork has been prepared but has not yet been approved, suggesting a severely inadequate setting for securing funding for mental health (Chisholm et al., 2019).

Mental health treatments, both in terms of availability and affordability, face a number of obstacles. Concerns voiced in the global literature on mental health are very similar. The first issue is that mental health issues and their prevention or treatment are not given enough attention,

leading to insufficient funding and large gaps in service provision. Second, local mental health services are generally scarce, leading to significant access inequality. This means that low-income people are disproportionately impacted by the fact that they cannot afford the services, which are only offered in faraway specialist centers of care, particularly in rural areas where people have to pay out of pocket. Finally, thirdly, low- and medium-income nations have disproportionately high poverty rates. Inadequate information systems, antiquated laws, and slow economic growth make up the fourth point (Chisholm et al., 2019).

2.3.1 Resource Mobilization and Access to Mental Health Services

Health systems are able to continue operating thanks to the financial frameworks that support them. These plans and preparations cover the system's funding level, the mechanism of cash transmission from payment processes, and more. General and mental healthcare in Kenya continues to face severe funding, staffing, and infrastructure shortages (Tonso et al., 2016).

A situational analysis on the integration of mental well-being was conducted with the participation of six emerald countries. The results demonstrated that this integration would call for a dedication to investing in mental health services, as well as the resolution of resource shortages, mental health policies, and laws. New laws pertaining to mental health are supposedly in the works, as revealed by this research. New Mental Health Care Acts were also enacted in South Africa in 2004 and in India in 2016, respectively. Each of the six countries has its own unique approach to mental health. The lack of fully formed policy is probably due to the failure to effectively organize funds for basic healthcare and mental healthcare. Many countries have inadequate national health spending, even though they have the highest and lowest percentages of health plans dedicated to mental health, respectively. Other critical factors that encourage integration, such as the health care personnel

and the care environment for services, were found to be inadequate in all of the nations studied (Tonso et al., 2016).

The lack of financial and service-based support from LMICs makes mental health care less affordable and less accessible for those who need it, according to Chisholm (2019). His research focused on six countries in sub-Saharan Africa: India, Nigeria, Ethiopia, Nepal, and South Africa and Uganda. Its goal was to find out what these countries are doing wrong and how they might fix it so that mental health spending is more equitable and sustainable. Though opportunities exist due to renewed political interest in mental health and recent reforms in the national insurance system, the principal obstacles to sustainable financing of mental health services are poverty, inadequacy in funding, and large access disparities (Chisholm et al., 2019). Although Singapore is a reasonably rich country, mental health services and health care funding have been sparse due to the country's history of putting other concerns before of mental health. This is typical of many Asian nations.

Better mental PHC delivery is possible with a more robust financial infrastructure, which in turn allows the system to better meet the growing demand for mental health services among the population (Hanson et al., 2022). Each country's mental health focal point within the Ministry of Health was given a questionnaire as part of a study that included 89 nations (Bitta et al., 2017). The research aimed to learn how much of their health budget goes toward mental health services, as well as how they track policies, programs, and resource indicators related to mental health, including things like the availability of beds, personnel, and medication. According to the results, only 32 percent of the 89 countries had a dedicated fund for mental health, while 36 percent allotted less than one percent of their total health budget to this area. The majority of these countries were located in Africa (79%) and Southeast Asia (63%). There was a striking difference between the global burden of mental health and the burden of illness and resource allocation in LMIC. Low-

and middle-income nations (LMICs) spend less on international aid than high-income nations. While most low- and middle-income countries rely on personal resources to meet costs (16.4%), taxes remain the primary source of funding for mental health treatment in most nations (60.2% according to Chisholm et al. (2019)). The allocation of funds for mental health services varies substantially between countries' health budgets.

There is a huge gap between countries and regions since most studies in low- and middle-income countries show that diseases have a considerably bigger effect on mental health than federal funding. Research like this calls for careful service integration, infrastructure reallocation, and targeted training for service providers to better meet the needs of marginalized communities. In order to offer vital services, these countries must prioritize allocating funds to mental health. Saxena et al. (2003) argue that countries whose mental health care is mostly paid for out of pocket should implement social insurance systems. There has been minimal success in including mental healthcare within the universal coverage goal and attaining UHC in the majority of sub-Saharan African countries, as per an evaluation by Kumar, and Osborn et al. (2021). Reasons for this include the fact that the majority of the population lives in abject poverty and cannot afford sufficient medical treatment, a large portion of the population does not have health insurance, and mental healthcare is not well-funded within the national healthcare system.

Many financial barriers, such as funding inequalities, a lack of employment benefits, and insufficient insurance to cover the prescribed course of treatment, prevent primary care physicians (PCPs) from providing mental health services as part of PHC. Community programs and services, unsustainable budgets, and the high expense of employing nursing care staff are some of these challenges (Azevedo, 2017; Fleming et al., 2019). The reduced cost of basic healthcare treatments, particularly in low-resource economies, makes mental health care services more accessible

(Mokwena & Mokwena, 2022). In a recent quantitative study, researchers utilized the World Health Organization Assessment Instrument for Mental Health Systems (WHO-AIMS Version 2.2) to gather data. The study's authors concluded that there is an immediate need for increased financing for mental health services, the creation of specialized infrastructure and human resources, and legislation safeguarding the rights of individuals with disabilities (Qureshi et al., 2021).

2.3.2 Pooling of Risks

A key component of health finance, risk pooling seeks to lower healthcare expenditures by spreading them out over a bigger population (Kutzin et al., 2017). Risk pooling is being more acknowledged as a way to improve service usage while reducing financial risk in the context of mental health services, where accessibility and cost continue to be chronic difficulties (WHO, 2022a). Risk pooling has the potential to improve access to mental health services, but how well it works will depend on national health financing models, insurance coverage, and reimbursement regulations (Saksena et al., 2022).

Patients are more likely to use treatments and have more financial security under national health insurance models that incorporate mental health care into their overall health coverage programs. Public funding of mental health treatments has reduced individual out-of-pocket costs in countries like Germany, Canada, and the UK thanks to strong risk pooling arrangements (Friedrich, 2019; WHO, 2021). Comprehensive mental health services are provided by the United Kingdom's National Health Service (NHS England, 2021) at no direct cost to the patient. This model has been linked to a rise in early diagnosis and a decrease in emergency psychiatric admissions. Nevertheless, there are still issues with service availability, such as high wait times for mental

consultations and regional discrepancies in access to expert care, even though this model provides financial protection.

Medicare, Canada's national health insurance program that runs through individual provinces' health insurance plans, has also increased access to mental health services, but there are still holes in the coverage for counseling and psychotherapy, so patients often need to pay out of pocket or use additional private insurance (Marchildon, 2020). However, there are still obstacles to integrating psychiatric care into primary healthcare settings, even though mental health coverage is mandatory under Germany's statutory health insurance model, which has led to a marked increase in the utilization of mental health services (Busse & Blumel, 2019).

The availability of mental health services is further complicated by mixed financing structures, which include both public and commercial health insurance programs. Private employer-sponsored insurance and state programs like Medicare and Medicaid make up the majority of the funding for healthcare in the US. Empirical research shows that there are still disparities in the availability of mental health services, especially for low-income populations that rely on Medicaid (McClellan et al., 2022; SAMHSA, 2021), even though the Mental Health Parity and Addiction Equity Act was passed to guarantee equal coverage of mental health services. Access remains limited due to mental health provider shortages and administrative complications, even after Medicaid expansions under the Affordable Care Act.

Risk pooling for mental health services has been moderately successful in Australia's hybrid finance approach, which mixes private insurance alternatives with public Medicare coverage. Although mental health consultations are covered by Medicare for everyone, low-income groups still face financial obstacles due to hefty co-payments for specialist mental care (Duckett, 2021).

Mental health services are frequently neglected in larger health finance frameworks in low- and middle-income countries (LMICs) due to the lack of robust risk pooling mechanisms (WHO, 2022b). Mental health benefits have been increasingly included in Kenya's National Health Insurance Fund, which has resulted in a notable rise in the consumption of psychiatric services (Barasa et al., 2018). Nevertheless, the complete effect of risk pooling has been hindered by lack of mental infrastructure and provider shortages. Although mental health disorders are partially covered by Ghana's National Health Insurance Scheme, providers have been reluctant to participate due to poor payment rates for psychiatric services (Amporfu, 2021).

Although health insurance coverage has increased because to China's dual insurance system, which distinguishes between rural and urban areas, mental health services are still underfunded. Financial incentives for providers to give specialist psychiatric care are limited in China due to the fact that reimbursement rates for mental health treatments are far lower than those for regular medical treatments under the country's national health insurance systems (Wang et al., 2021).

There have been new developments in risk pooling systems that go beyond the conventional health insurance models. To support mental health services, several nations have instituted designated taxation schemes (Atun et al., 2020). Studies conducted in Latin America have shown that these finance strategies have helped make mental healthcare funding more sustainable, which has allowed underserved areas to expand their mental services.

Adding telehealth to risk pooling models has shown promise in improving access to mental health services, especially in underserved rural areas (Shore et al., 2020; Torous et al., 2021). There was a marked uptick in the use of telepsychiatry services in countries where it was part of their national insurance program.

2.4 The Role of Human Resources in Health and the Availability of Mental Health Services

2.4.1 Staff Training

Thanks to integration, HIV programs may now share space and staff, which has increased patient access to care through standardizing procedures and better training for healthcare providers. Managerial and supervisory training in mental health Mounier-Jack et al. (2017) aims to enhance healthcare personnel's competence in four areas: knowledge, attitude, behavior, and skill. Identifying a person's mental health issue can be challenging (Rahim et al., 2021; Rathod et al., 2017). Being able to make accurate diagnoses requires a great deal of education and experience. Create interventions in reaction to an event or based on the provision of health benefits by experts in the field. As of right now, health education and advocacy are only proactive in promoting physical health (Ayano et al., 2017a).

Workers on the COM-B framework for facilitators and barriers revealed a profound ignorance about the many mental diseases, their origins, and treatment options as a result of training that was conducted solely for the sake of passing exams (Esponda et al., 2020). The key is to increase access to care and improve their capacity to detect, evaluate, and manage community-wide mental health issues (Marangu et al., 2021b). Improving primary care providers' understanding, viewpoint, and practice is critical for optimizing performance and integrating effectiveness since these elements are crucial. It is necessary to provide primary health authority with mentoring and coaching. In order to learn how mental health training for primary healthcare providers impacts

the integration of mental health into primary care, researchers in Ethiopia employed quantitative data collection methods from October to December 2016 to examine the effects of knowledge, attitudes, and behaviours. The study used quasi-experimental approaches both before and after the trial, and 94 primary healthcare professionals were included. Knowledge, attitudes, and practices (KAP) among primary health care providers showed a substantial improvement ($p < 0.05$) throughout the post-intervention survey. Mental, neurological, and drug use illnesses are best treated by medical experts, as shown in the study's findings. The success of PHC's mental health integration depends on this. According to the study conducted by Ayano et al. (2017b), primary care clinicians can benefit from mental health training in order to gain a better understanding of, and ability to manage, mental, neurological, and drug use disorders.

2.4.2 Staff Distribution

Specialists are finding it more challenging to treat mental diseases globally due to a shortage of psychiatric nurses, psychiatrists, social workers, and psychologists (WHO, 2022). Since most mental health specialists live and work in cities, rural communities sometimes lack access to their services. It is estimated that 25% of inpatients and more than 50% of outpatients in Kenya suffer from a mental disease. However, out of a total population of about 52 million, there are approximately 0.2 providers per 1,000 and 0.19 psychiatrists per 100,000. The number of individuals in need of services has been increasing globally due to a significant disparity in care treatment (Meyer & Ndeti, 2016).

According to the World Health Organization's mental health treatment gap action program (mhGAP), low-income nations, particularly those in Asia, Latin America, and sub-Saharan Africa, are more negatively impacted by the worldwide chronic shortage of medical personnel. Although a large amount of variation exists in the accessibility of healthcare in peri-urban regions, 70% of

the population resides in urban areas (Kumar et al., 2022). Psychiatric specialists are available in the majority of private hospitals and clinics in major urban areas. As a result, the exact number of mental health care providers is difficult to ascertain (Kenya Mental Health Policy, 2015–2030). This descriptive cross-sectional study examined the distribution of beds at community mental health clinics in the Eastern Cape Province of South Africa. It used audit questionnaires to gather data. Only three of the province's seven districts met the minimum need for acute beds per 100,000 residents, according to the statistics. The private mental health sector has over twice the number of medium- to long-stay beds as the public sector. Inequitable distribution of human resources, information systems, and institutions characterizes the province's eastern and western regions. Now is the time for the provincial government to quickly implement a more equitable model of service delivery, say Sukeri et al. (2014).

Due to population inequality, mental health care in Nepal is challenging to deliver. Take the country's supposedly pitiful number of psychiatrists: 27. Only urban areas have access to mental health facilities due to inequitable service distribution across the nation. When dealing with mental health issues, the majority of people seek out traditional healers (Dixon, 2006).

2.4.3 Staff Skill Mix

The health sector is grappling with a shortage of skilled people and an uneven distribution of different types of skills. Having the most cost-effective combination of jobs and people should be an organization's top priority, even if many believe that sufficient staff and a diverse set of skills are the most important components in meeting the healthcare needs of a community.

Care for patients is enhanced by the pooling of knowledge and expertise. In order to make the most of the current workforce, reach the optimal staff-patient ratio, and obtain the appropriate skill

mix among workers, legislators and system managers have devised a number of policies and initiatives. These initiatives place an emphasis on staff competencies rather than employee type or efficient utilization. As part of its mission, the initiative advocates for a methodical strategy that accounts for factors beyond the purview of conventional human resource management practices, such as organizational and institutional settings.

Task shifting, according to Fulton et al. (2011), is a skill mix strategy that entails assigning responsibilities to current or newly hired cadres without the same level of expertise. This paves the way for service providers to offer cost-effective mental health interventions. Problems with a lack of workers and an uneven distribution of skills have been alleviated by this. For example, in contrast to physician obstetricians and gynaecologists, assistant medical officers with surgical expertise in Mozambique produced comparable patient outcomes while significantly reducing healthcare costs.

Providing mental healthcare primarily through task shifting is inappropriate. Because these less experienced healthcare workers can collaborate with lay providers, there shouldn't be a black-and-white decision about who will deliver healthcare. Integrating healthcare systems means prioritizing evidence-based mental interventions when treating patients and providing psychological support, listening to and considering patient perspectives and inputs, making patients the center of important healthcare decisions, and appropriately empowering care teams to be more responsive, effective, and resilient.

Mental health professionals, such as psychiatrists and psychologists, are in extremely short supply in the United States. In the United States, about one-third of facilities have on-site mental health

specialists, whereas in Sweden and the Netherlands, over 90% of primary care facilities do (Tikkanen et al., 2020).

More than a quarter of South Africans who see a primary care physician struggle with mental health difficulties. Mental health campaigns, ensuring that patients with mental illness have access to treatment, and supporting their recovery are the core responsibilities of primary care clinics. Despite the prevalence of mental disease, mental health receives little funding and support in South Africa. Patients in these institutions do not receive enough treatment as a result. Many nurses have prejudices and misunderstandings about patients who suffer from mental illness, and even fewer know how to identify and treat mental health issues. In most cases, this leads to services that fall short of expectations. It was published in 2022 by Chu et al.

2.5 Mental Health Service Accessibility, Leadership, and Governance

Leadership and governance have a crucial role in determining the availability of mental health care by shaping policy, allocating resources, and coordinating systems. How high up on national health agendas mental health treatments are placed depends heavily on the strength of institutional frameworks, political determination, and governance systems. In the last six years, there has been a surge of empirical research on the effects of leadership and governance on mental healthcare access, which has shown inequalities in the availability of services across various health systems. Many low- and middle-income nations (LMICs) continue to face challenges related to fragmented policies, inadequate funding, and weak institutional accountability, in contrast to high-income countries that have made strides in creating organized governance structures and committed mental health leadership. If mental health policies are to result in real gains in equity, accessibility, and quality of services, the available research shows that robust governance structures are required.

A large body of empirical evidence suggests that mental health service coverage and integration into primary healthcare are both greatly improved by well-established national leadership structures devoted to the field. Thornicroft et al. (2019) found that service utilization rates were greater in countries where national health frameworks included comprehensive policies for mental health. The importance of ministerial-level leadership in promoting accountability, guaranteeing budgetary sustainability, and increasing the availability of mental health services was further highlighted by this study. In support of this claim, Kestel et al. (2020) looked at changes to European health system governance and discovered that better mental health leadership was associated with more public money and better results from mental health services. These results suggest that in order to improve access to mental health services, governance frameworks are required that incorporate transparent accountability mechanisms, legislative measures, and clearly defined institutional cooperation. Governance systems that make it easier to put policies into action and hold officials accountable will determine how much of an impact good leadership has on improving service access.

Many low- and middle-income nations (LMICs) still have insufficient governance institutions, characterized by underfunding and fragmented decision-making, despite progress in high-income countries. According to a worldwide evaluation of mental health governance by Patel et al. (2021), many poor countries' governments still show little support for mental healthcare. According to the research, national health ministries frequently had chronic budget constraints and inconsistent policy execution due to a lack of committed leadership. In a similar vein, Saraceno et al. (2019) pointed out that low- and middle-income countries (LMICs) paid less than one percent of their overall health spending on mental health services. People experience high out-of-pocket expenditures, inadequate access to specialized care, and long wait times as a result of these

governance inadequacies, which contribute to a chronic treatment gap. The results highlight the need of systems of governance that put mental health funding first and guarantee that promises made in legislation have adequate, long-term support.

New findings have emerged from a plethora of studies investigating the effects of decentralized governance on mental health care delivery. Decentralization, according to some academics, allows for more responsiveness and flexibility, which in turn allows for local governments to better address the unique mental health needs of their constituents. Research by Saxena et al. (2022) comparing mental health governance in Brazil and India found that decentralized health systems encouraged the development of innovative mental health programs at the regional level. Nevertheless, the study warned that insufficient funding and technical knowledge could make service availability gaps worse under decentralization. There were large disparities in the accessibility and quality of mental health care in decentralized settings where the capacity for effective governance was low. While decentralization might make things more flexible, these results show that it needs robust national supervision systems and sufficient funding to avoid service delivery disparities.

The effective administration of mental health services also requires their integration into broader healthcare systems. Countries that view mental health as an integral part of primary healthcare tend to have more accessible services overall, according to the research. Researchers Gureje and Jenkins (2020) found that basic healthcare settings that included psychiatric care increased service utilization and decreased stigma in sub-Saharan African mental health system changes. Demonstrating the importance of commitment at the policy level for successful integration, their study emphasized the role of national leadership in promoting these reforms. Laws mandating universal mental health insurance coverage increased the number of people using these services,

according to research by Evans-Lacko et al. (2021) that looked at high-income nations. Supporting the claim that more equitable and accessible healthcare is a result of governance frameworks that push for mental health services to be part of broader healthcare policy, these findings add weight to the case.

National governments aren't the only ones that have an impact on mental health policy implementation; NGOs and international organizations play a significant role as well, particularly in resource-constrained settings. Studies have shown that there has been an impact from global initiatives to enhance mental health treatment accessibility and governance frameworks. Intersectoral coordination and financial resource allocation improved in nations whose national policies were in line with international mental health standards, according to Vigo et al. (2019) review of the WHO Mental Health Action Plan. Many mental health programs continued to be supported internationally rather than domestically, which the report highlighted as a sustainability concern. The function of NGOs in delivering community-based mental health interventions, especially in neglected areas, was also examined by Lund et al. (2022). While the study did find that NGO-led initiatives greatly increased service accessibility, it also notes that many of these programs were not formally integrated into government health strategies, which raised worries about their long-term viability. National ownership, stable funding sources, and governance mechanisms that integrate external interventions into broader health systems are necessary for long-term success in expanding mental health services, according to these findings. International partnerships and civil society organizations do help, but these factors alone will not be enough.

Several structural obstacles still exist, though, and they reduce the efficacy of government in the provision of mental health services, notwithstanding these improvements. When it comes to mental health services, stigma is still a big obstacle that influences financing priorities, policy

choices, and the general provision of care. According to Knaul et al. (2020), governments are less inclined to provide adequate funding for psychiatric care, leading to a lack of services, in nations where stigma around mental health is pervasive and when mental health services are not widely available. In such cases, people living in rural locations sometimes lack access to specialist care due to the concentration of mental health services in urban areas. Even with regulatory frameworks in place, the shortage of trained mental health professionals continues to limit treatment capacity. In their study on workforce retention in mental health services, Malik et al. (2023) discovered that low retention rates among mental health practitioners, especially in low- and middle-income countries (LMICs), are caused by governance failures such as inadequate funding for professional development and poor working conditions. A more inclusive and efficient mental health system can be achieved by implementing anti-stigma legislation, expanding community-based services, and developing a workforce that is better equipped to handle these systemic difficulties.

The examined empirical literature stresses that leadership and governance have a crucial role in determining who has access to mental health care. There has been a marked improvement in service usage and equity in countries that have implemented thorough governance frameworks, integrated psychiatric treatment into primary healthcare models, and built strong policy oversight mechanisms. Still, problems with leadership, insufficient funding, and a lack of institutional capacity are common in low- and middle-income countries (LMICs), making it difficult to put policies into action. The long-term impacts of international partnerships on national mental health governance, viable financing options for mental health care, and models of governance that effectively combine decentralization with national monitoring should all be the focus of future research. It is critical to fix these governance problems so that mental health therapies are accessible, fairly distributed, and financially stable.

Kenya has made strides in developing mental health policy, as shown by important frameworks such as the Kenya Health Sector Strategic Plan (2018-2023) and the Kenya Mental Health Policy (2015-2030). According to the Kenya Ministry of Health (2023), these policies align with the constitutional right to health assurance by prioritizing accessibility, integration, and fair distribution of mental health care. Nevertheless, difficulties in putting these frameworks into action continue to arise as a result of a lack of stakeholder cooperation, lax institutional monitoring, and variable county-level prioritizing of mental health (WHO, 2023). Despite the importance of national leadership in policy execution, obstacles including disjointed decision-making and a lack of political will make it difficult to achieve mental health policy goals.

A shortage of funds has been one of the key obstacles to effective mental health governance in Kenya. One of the most underfunded sectors is mental health, which continues to receive less money than what is recommended worldwide, according to the Kenya Health Sector Strategic Plan (2018-2023). In spite of the World Health Organization's (WHO) recommendation that nations allocate at least 5% of their resources to mental health, Kenya only allocates 1% of its health budget to this area (WHO, 2023c) - a failure to adequately fund mental health care results in inadequate infrastructure, shortages of necessary medications, and an inadequate number of qualified mental health professionals. According to empirical research published in the IOSR Journals in 2023, the growth of mental health services will be hindered by the persistence of implementation challenges in policy frameworks until Kenya increases its financial investment in mental health.

Mental health service delivery in Kenya has been impacted by the decentralization of healthcare governance, which has brought both opportunities and challenges. The 2010 Kenyan Constitution called for healthcare decentralization with the goal of making services more accessible,

accountable, and efficient. Some counties, like Nyeri and Makueni, have put a lot of money into mental health programs, but others are falling behind because they don't have the resources or the right people (MOH, 2023). This has led to huge inequalities in access to mental health services across regions, with the worst impacts felt in more remote places. Prioritizing national oversight, equitable resource allocation, and capacity-building measures at the county level are crucial for decentralization to effectively improve mental health accessible, according to research (WHO, 2023).

A major obstacle to the availability and efficacy of mental health care in Kenya is the pervasive stigma that surrounds them. Deeply ingrained stigma prevents many people from getting treatment, even though national regulations support the incorporation of mental health services into primary healthcare. Research has demonstrated that mental health is still undervalued in comparison to other health issues, and that this prejudice is present both in the population and in healthcare facilities (IOSR Journals, 2023). Government initiatives to increase access to services are hampered by this institutionalized stigma, which influences the distribution of resources, the ability of the workforce, and the execution of policies. A rights-based approach to mental healthcare was promoted and suicide was decriminalized as part of the Mental Health Amendment Act (2022), a critical piece of legislation that sought to eliminate legislative and regulatory hurdles (MOH, 2023). Nevertheless, these reforms could not have the desired effect unless there are ongoing educational programs and campaigns to raise public awareness.

Another issue with government oversight that restricts access to mental health services is the severe scarcity of qualified mental health workers. The World Health Organization recommends one psychiatrist for every 100,000 people, while Kenya only has about 0.19 psychiatrists per 100,000 (WHO, 2023b). The scarcity of mental health specialists is a direct result of this shortage

in the workforce, which forces primary care physicians to treat mental illness patients even when they do not have the necessary expertise. To close this gap, policymakers must prioritize mental health workforce development, expand training options, and institute incentive systems for mental health professionals. According to research published in the IOSR Journals in 2023, task-sharing models have proven to be beneficial in increasing treatment reach in underserved areas. These models involve educating non-specialist health workers in fundamental mental health interventions. But these plans won't function unless there are systems in place to oversee organized supervision, professional growth, and healthcare service integration.

There were significant governance deficiencies in Kenya's mental health system, and international organizations and non-governmental entities were instrumental in closing those gaps. Strategic frameworks, capacity-building initiatives, and technical assistance for policy implementation have all benefited from collaborations with the World Health Organization and other international health organizations (WHO, 2023b). When government programs for mental health are inadequate, non-governmental organizations (NGOs) step in to fill the void. Many mental health efforts are not government-supported programs but rather run as externally funded ventures, which creates sustainability difficulties (MOH, 2023). Expanding domestic funding, improving public-private partnerships, and including mental health into Kenya's Universal Health Coverage (UHC) framework are all ways to fortify the country's governance processes and guarantee their long-term viability.

2.5.1 Capacity Building

Mental diseases continue to have a significant influence in Tunisia, despite their high occurrence. The condition is still not being appropriately addressed or diagnosed. As has been noted in other countries, medical professionals had a low average baseline knowledge score (24.6/100) before

first guidance, and distinctive criterion scores ranged from 0.11-0.47. This highlights the knowledge gap and insufficient training on mental health. (Poudiougou et al., 2021)

Both studies (Keynejad et al., 2021; Ojagbemi et al., 2022) emphasized the need of primary care physicians in Mali having sufficient knowledge to diagnose patients' illnesses. According to Spagnolo et al. (2017), students showed significant improvement in their average tallies completed during primary and subsequent training sessions (150 percent, $p=0.001$ and 39.6 percent, $p=0.001$, respectively). As a result, they achieved a relatively good mean grade and knowledge grade at the end of the subsequent guidance term (70.1 out of 100).

Training is essential for developing a workforce that can respond quickly to changing demands, but current mental health training programs are inadequate. Staff members must engage in ongoing professional development to acquire the knowledge and skills necessary to integrate mental health services (Dube & Uys, 2016). Their continued need for support following training is met by resources provided by both the hospital and the community. It is recommended to use digital technology to facilitate mentorship and supervision in areas where there is a scarcity of professionals relative to the dispersed population (Kohrt, et al., 2018).

It is essential to empower the leadership in order to implement decisions that are specific to the setting. The level of empowerment felt by leaders is directly tied to the success of any endeavour. According to Kumar, et al. (2021), empowering leadership is critical for the successful delivery of mental health services because treatments differ among ethnic groups and environments.

2.5.2 Putting Policies into Action

More and more, the societal and cost-effective costs of mental illness are being recognized, along with its significant impact in physical damage. Subsequently, mental health policies are receiving

an increasing amount of government attention. In numerous countries, it is long overdue. If governments are serious about protecting and improving their citizens' health, they must consider policies that impact mental health in both direct and indirect ways (Jenkins et al., 2010). Although programs in Mexico promoted their integration, a study of the execution process found that mental health services are still severely underdeveloped in the country (Miguel-Esponda et al., 2020).

The link between mental illness and scarcity can be broken by the implementation of mental health policy. This was achieved by developing and implementing crucial cross-sectoral policies and programs for mental health that address the economic, social, psychological, and physical needs of people at risk or dealing with mental health problems (Lund et al., 2013).

In order to ensure that interventions for both physical and mental health are structured around the reasonable needs and prospects of the population, a strong people-centered approach to mental health is necessary. Participation from the community in making decisions, carrying out processes, and monitoring interventions was emphasized.

A multipronged strategy is required to elevate and strengthen mental health since government policies, programs, and laws must incorporate primary mental health care that is consistent with UHC objectives and abides by universally acknowledged principles of moral justice (Chisholm et al., 2019; Kumar, et al., 2021). The integration of mental health into primary care is a strategic objective that needs to be defined and implemented with the help of many other stakeholders in government. According to Jenkins et al. (2010), mental healthcare plans should have clear objectives, allocated funds, agreed-upon dates, and responsibilities to help with plan implementation and increase accountability.

Challenges arise during policy implementation as a result of ground arrangements that are not well-defined and plans and frameworks that are not sensitive enough. Sensitizing practitioners is a crucial first step in implementing integrated mental healthcare. If clinicians are aware of the need to incorporate mental healthcare into their overall caregiving strategies and have the means to do so, then policy and practice are in harmony (Kumar, et al., 2021).

According to Wakida et al. (2018), the COM-B framework was used to identify the barriers and facilitators to the integration of mental health services into primary healthcare, as well as the potential, choice, and motivation for mental healthcare among workers. The research concluded that mental health in-service training and the distribution of condensed Uganda Clinical Guidelines (UCG) for easier reference would be beneficial to the personnel. Providing them with easily referenced charts would do this. They also mentioned that they couldn't check-up time contact when faced with a new condition since they didn't have access to the UCG, which was a difficulty with point-of-care access when dealing with mental health difficulties. It is possible to enhance point-of-care access with the use of visual cues, such as concise instructions in books or charts the size of a pocket (Esponda et al., 2020).

2.5.3 Policy implementation

Much of what we know about the challenges and opportunities in mental health access comes from studies of monitoring and evaluation (M&E), which have focused on LMICs like Kenya. Four counties in western Kenya were surveyed descriptively, and the results revealed a lack of county-specific mental health policies, poorly coordinated services, and a lack of integration of mental health care within primary health facilities. It is difficult to adequately monitor and assess mental health services due to inadequate data collection and reporting processes, according to the study (Mwiti et al., 2021).

Primary health care practitioners in Kenya were the subject of a cross-sectional survey that indicated just 13% had valid certifications in mental health and 8.7% had completed relevant continuing professional development in the past five years. The percentage of people who correctly identified depression was 35.6%, and the percentage of people who correctly identified schizophrenia was much lower at 15.7%. These findings highlight the need for primary care physicians to have additional education and funding in order to deliver and assess mental health treatments effectively (Olima & Mungai, 2023).

Numerous challenges, including a dearth of trained mental health professionals, budgetary and administrative concerns, and pervasive community stigma, were identified in a comprehensive analysis of the factors limiting access to mental health treatment in primary care settings in LMICs. According to Saxena et al. (2018), these factors make it more challenging to establish and assess primary care mental health services.

Better health program decisions may be possible with the help of participatory monitoring and evaluation methods. Participatory monitoring and evaluation (M&E) greatly enhanced the quality of decision-making in mom and infant health programs in Mombasa County, Kenya, according to research. Although this study primarily dealt with maternal health, the concepts of participatory monitoring and evaluation might be applied to programs dealing with mental health in order to encourage participation and responsibility from stakeholders (Aliev et al., 2023).

In order to improve access and outcomes in LMICs, researchers have investigated community-based mental health interventions. As emphasized by a qualitative study including international specialists, mental health services should be integrated into existing health systems and stakeholders should be actively involved in their development and implementation. There are

ongoing challenges with logistics and resource allocation, however these tactics have the potential to enhance the efficacy and durability of mental health therapies (Alpadri, 2023).

2.6 Mental Health Services Accessibility and Health Infrastructure

Access to mental health care is influenced by the quality of the health infrastructure, which is particularly important in low- and middle-income countries (LMICs) due to restricted resources. Healthcare facilities, human capital, technology, and funding are all components of health infrastructure that collaborate to provide mental health care. An increasing amount of empirical research has investigated the impact of these infrastructure elements on the availability of mental health care. Factors such as facility location, staff availability, the integration of mental health services into primary healthcare, and the use of digital health solutions have all been considered in this study. The most crucial findings from this research are summarized in the following discussion.

The accessibility of mental health services is greatly impacted by the presence of mental health institutions, such as psychiatric hospitals, community-based mental health centers, and specialized wards in general hospitals. A large treatment gap exists in low- and middle-income countries (LMICs) due to the difficulty in accessing mental health care caused by a lack of facilities, as noted by Thornicroft et al. (2018). According to research by Patel et al. (2018), individuals are less inclined to seek mental health care when they are required to travel long distances due to a lack of resources in certain areas, particularly rural ones. Contrarily, high-income nations have demonstrated that enhancing mental health infrastructure facilitates access to treatment. A study conducted in Australia by Meadows et al. (2019) demonstrated that an increase in community-based mental health services reduced hospital admissions. This was attributed to the fact that patients were able to receive quick outpatient therapy, which reduced the need for inpatient

treatment. These findings highlight the critical need for well-located and adequately funded mental health facilities in order to increase their utilization.

Access to care is also impacted by the availability of a well-trained and evenly distributed mental health workforce. Research consistently shows that access to mental health treatments is severely impaired due to disparities in the availability of mental health experts. According to WHO, (2020), low- and middle-income countries have significantly fewer mental health workers per 100,000 persons compared to high-income nations. Because of this, the treatment disparity widens even further. Findings from studies conducted in Kenya indicate that access to mental health services is hindered due to a shortage of personnel. Since there are less than two psychiatrists per 100,000 Kenyans, non-specialist medical professionals are tasked with providing mental health treatments (Jenkins et al., 2021). One potential solution to this problem is task-shifting models, which teach primary care physicians and nurses to deal with basic mental health issues. Improving patient health and service quality is possible with training primary care workers on mental health, according to studies in Pakistan (2016) and Ethiopia (Fekadu et al., 2019).

To avoid infrastructural issues, many have proposed integrating mental health services into primary healthcare (PHC) frameworks. Including mental health treatments in primary care settings greatly improves accessibility, particularly in resource-limited places (Semrau et al., 2019). By allowing patients to receive treatment in familiar settings, this approach promotes early intervention and reduces stigma. A case study conducted in South Africa by Lund et al. (2019) demonstrated that the inclusion of mental health services within primary health care (PHC) facilities increased the utilization of these treatments, particularly for prevalent issues such as depression and anxiety. Community health workers (CHWs) in Kenya were better able to refer

patients and follow up after receiving training in basic psychosocial therapies and mental health screenings, according to research by Jenkins et al. (2021).

The accessibility of mental health care has been transformed by technological advancements in health infrastructure, including telemedicine and digital mental health platforms. A thorough evaluation by Naslund et al. (2020) found that digital treatments, such as online counselling and mobile health apps, have greatly increased access to services, particularly for individuals residing in underprivileged or distant areas. The disparity in access to mental health care in low- and middle-income countries (LMICs) has been significantly reduced with the use of mobile health (mHealth) solutions. An Indian study by Mohr et al. (2019) found that mobile-based mental health treatments reduced symptoms of depression and increased treatment adherence among depressed individuals. Similarly, a study conducted in Kenya (Kivunja et al., 2021) came to the conclusion that telepsychiatry services enabled individuals residing in rural areas to access mental health specialists. This, in turn, improved their mental health by making it easier for them to attend appointments.

Funding for mental health infrastructure is another critical factor influencing treatment accessibility. An analysis of the costs and benefits by Chisholm et al. (2019) demonstrated that increased funding for mental health services significantly reduced overall healthcare expenditures and increased worker productivity. However, with less than one percent of total health expenditure going toward mental health, many low- and middle-income nations continue to suffer from severe underfunding (WHO, 2020). Research in the real world demonstrates that more service facilities, greater professional education, and the use of digital health technologies might greatly improve access to mental health care. Roberts et al. (2018) examined the mental health reforms in Ghana and found that more government funding meant more community mental health services and less

people needed to go to the hospital. This points to a shift towards more accessible and prevention-oriented care models.

Improving mental health infrastructure remains a challenging task, despite these advancements. Major issues, such as insufficient funding, weak political backing, and ineffective policy implementation, were identified by Thornicroft et al. (2018). Additionally, particularly in LMICs, investment and infrastructure development are hindered by the stigma that surrounds mental health. The lack of coordination across various healthcare systems is another major issue. People in Ethiopia had a tougher time getting the help they needed due to poor referral mechanisms and broken service structures, according to an analysis of mental health service delivery by Hanlon et al. (2019). We need to increase funding, increase participation in mental health advocacy, and maintain policy changes if we want to overcome these obstacles.

Having access to quality healthcare facilities is crucial for those with mental health issues, according to numerous empirical studies. Access to services is improved when facilities are well-equipped, teams are qualified, primary healthcare systems are involved, new technologies are invested in, and there is enough money to invest in them. Despite numerous advancements, access to mental health care remains limited due to systemic inefficiencies, a lack of funding, and an inadequate workforce. We need to address these issues through evidence-based interventions and legislative reforms so that people of all income levels and locations have access to mental health care.

2.6.1 Physical Infrastructure

Access to mental health services is impacted by the quality of physical infrastructure, which is particularly problematic in low- and middle-income countries (LMICs) due to the lack of funding

in healthcare systems. The physical infrastructure includes things like hospitals, roads, utilities (such as water and power), and the systems that enable mental health therapies to be provided. How these aspects of the physical environment impact the accessibility, efficacy, and availability of mental health services has been the subject of substantial empirical investigation. The most crucial results demonstrate that there are disparities in the distribution of facilities, transportation problems, digital infrastructure, and the general condition of mental health institutions.

The primary elements influencing the ease of access to mental health care are the number and accessibility of mental health facilities. Psychiatric hospitals, community mental health centers, and specialized mental health sections of general hospitals are not evenly distributed across low- and middle-income countries (LMICs), which makes it difficult for some areas to receive the treatment they need (Thornicroft et al., 2018). According to Patel et al. (2018), many developing countries' mental health facilities are located in urban regions, resulting in insufficient care for rural residents. This disparity forces people living in rural areas to travel greater distances for medical treatment, which in turn increases the time and money needed to get it. Meadows et al. (2019) cite research from high-income nations that shows a reduction in the need for inpatient care and an improvement in access to care when there is a well-developed network of mental health institutions, especially decentralized community-based services.

One major factor influencing the frequency of mental health service utilization is transportation infrastructure. Researchers Semrau et al. (2019) discovered that individuals in rural and peri-urban areas are less likely to seek mental health treatment due to factors such as poor roads, expensive public transportation, and extended travel times to healthcare facilities. Access to mental health care was hindered in rural parts of Kenya due to a lack of transportation options, as demonstrated by Jenkins et al. (2021). This further widened the disparity between city dwellers

and those living in rural areas. Also, mental health treatment is often out of reach for those living in rural regions due to cost and accessibility issues, according to research out of Ethiopia (Fekadu et al., 2019). Access to services in areas with a shortage can be improved through the use of mobile clinics and community outreach programs that assist individuals in getting about (Lund et al., 2019).

When considering the quality and accessibility of mental health services, it is crucial to consider the condition and maintenance of mental health facilities. Research in the real world shows that mental health treatments are less successful in areas with inadequate infrastructure, such as poorly maintained hospitals, a lack of medical equipment, and erratic power and water supplies. Poor funding and a lack of resources cause mental health facilities in many low- and middle-income countries (LMICs) to provide subpar treatment, according to the WHO, (2020). Research by Chisholm et al. (2019) demonstrated that healthcare facilities were associated with higher patient satisfaction and use rates after investments in their physical condition were made. Improvements made to mental health institutions in Ghana, for instance, improved patient retention and treatment adherence (Roberts et al., 2018).

For communities without easy access to physical medical care, digital infrastructure like telemedicine and EHRs has emerged as a lifeline for mental health services. By reducing travel time and increasing accessibility to specialists, telepsychiatry services greatly improved access to mental health care for individuals living in remote or underserved areas, according to a comprehensive analysis by Naslund et al. (2020). Researchers in India found that depressed patients were more likely to complete their prescribed treatments when they used mobile-based mental health interventions (Mohr et al., 2019). Digital mental health platforms enhanced service delivery by enabling individuals in rural areas to access psychological treatment and consultations

remotely, according to a study in Kenya (Kivunja et al., 2021). To fully utilize telehealth solutions, however, issues such as sluggish internet connections and a general lack of digital literacy must be addressed.

Improving access to mental health care also depends on spending money on physical infrastructure. A cost-effectiveness analysis conducted by Chisholm et al. (2019) concluded that mental health facility construction and maintenance were very cost-effective. Workers' output increased, and healthcare expenditures for those with untreated mental illnesses decreased. WHO (2020) estimates that less than one percent of health budgets in many low- and middle-income countries (LMICs) go toward mental health infrastructure. Access to services and mental health can both benefit from investments in well-planned facility expansions, technological infrastructure improvements, and improved transportation. Roberts et al. (2018) examined mental health reforms in Ghana and discovered that increased government funding resulted in an increase in community mental health services and a decrease in hospital admissions. This, in turn, fostered more accessible and preventive care models.

Despite these advancements, intractable obstacles continue to impede the development of more effective mental health infrastructure. Not enough funding, lack of political will, and poor policy execution were among the major issues identified by Thornicroft et al. (2018). More often than not, other healthcare services are prioritized above mental health infrastructure because of the stigma associated with mental illness. The ineffectiveness of mental health therapies was attributed to the dysfunctional healthcare system, inadequate referrals, and a lack of service integration, according to Hanlon et al. (2019) who examined the delivery of mental health services in Ethiopia. Building mental health infrastructure must remain a high priority if we are to overcome these challenges, which will need continued investment, new regulations, and more advocacy.

The importance of physical infrastructure in facilitating access to mental health services has been extensively documented. The ease of access to services is affected by a number of factors, including the distribution and availability of facilities, the quality of transportation networks, the quality of healthcare infrastructure, the integration of digital health solutions, and financial investments. Though much has improved in some sectors, insufficient funding, infrastructure, and systemic flaws continue to make it difficult for all people to access mental health care. We need to address these concerns with evidence-based therapies, increased funding, and policy reforms so that everyone, regardless of where they live or their financial situation, can access mental health services.

2.6.2 Health Product and Technology (HPT)

Especially in primary care settings, health products and technologies (HPT) play a crucial role in enhancing the delivery of mental health treatment. The availability, efficacy, and quality of mental health therapies can be substantially enhanced with the use of digital platforms, diagnostic tools, and electronic health systems, among numerous other technologies. When integrated into primary care, these technologies offer a potential solution to the persistent problem of underserved areas' inability to receive mental health services. Therefore, HPTs are thought of as a means to alter the administration and accessibility of mental health therapy, thereby assisting in systemic problem-solving and filling service shortages.

People without physical access to mental health professionals can now get the help they need through telemedicine and telehealth. People living in remote areas or those without easy access to mental health professionals can now get the help they need through telemedicine consultations. The availability of mental health care is increased by telehealth services, which help to eliminate obstacles such as stigma, financial difficulties, and limited access. Patients report high levels of

satisfaction using telepsychiatry, and research confirms its efficacy compared to in-person consultations (Hubley et al., 2016). Better patient outcomes are a direct result of the fact that telehealth systems allow healthcare providers to constantly monitor their patients. This allows them to assess a patient's progress, adjust treatment plans as needed, and ensure that interventions occur promptly.

Another major technological advancement that facilitates the integration of mental health treatment into primary care settings is electronic health records, or EHRs. Many pieces of patient data, particularly those pertaining to mental and physical health, can be collected and organised with the use of these systems. By providing a more comprehensive view of a patient's health, electronic health records aid doctors in identifying co-occurring disorders and facilitating treatment coordination between general practitioners and mental health specialists. Care continuity and improved therapeutic outcomes are both contributed by this simplified method of information sharing (Salisbury et al., 2017). Electronic health records also allow you to monitor the efficacy of treatment, which is crucial for ensuring that treatments are prompt and suitable for the patient's evolving health status.

Another game-changer in the delivery of mental health care is the rise of mobile health apps, or mHealth. These apps equip users with the means to monitor their mental health symptoms, engage in self-care, and access necessary mental health resources at any time. Anxiety, sadness, and other mental health issues can be better managed with the help of certain applications that include therapeutic features, such as cognitive behavioural therapy (CBT) exercises or mood tracking. By providing individuals with the means to actively participate in their own healthcare management, mHealth interventions have shown promise in assisting those suffering from mental health issues,

particularly anxiety and depression (Firth et al., 2017). The long-term management of mental health is aided by mHealth apps because they promote greater engagement and autonomy.

Data analytics and the proliferation of artificial intelligence (AI) have further transformed primary care for mental health. In order to discover and intervene early in cases of mental health issues, AI-powered technologies can sift through mountains of data in search of patterns and warning signs. As an example, AI has the ability to analyze a patient's demographics, behavior, and environment to determine the risk of mental health issues like anxiety and depression. This lets healthcare providers take proactive steps to prevent these diseases (Benton et al., 2019). Furthermore, decision support systems driven by AI provide real-time, evidence-based guidance to doctors, enhancing the precision of treatment decisions through personalized suggestions. By highlighting possible dangers and monitoring patients' development over time, this individualized method improves clinical decision-making and optimizes patient care.

In primary care settings, point-of-care diagnostic technologies are being used more and more to better identify and manage mental health disorders. Hormonal imbalances and stress levels are two examples of physical elements that can impact or be affected by mental health. These tools make it possible to quickly examine these issues. Along with conventional psychological evaluations, they allow for the rapid screening and identification of mental health issues, which in turn aids in the provision of a more comprehensive diagnosis. Timely interventions are crucial for enhancing outcomes, and early diagnosis utilizing these diagnostic techniques guarantees that patients receive just that.

In tandem with these developments, decision support tools and training programs are enhancing primary care physicians' abilities to manage mental health issues. Clinicians, especially those

without specialized training, can benefit from these systems' evidence-based recommendations and clinical decision rules when it comes to diagnosing and treating mental health concerns. Healthcare practitioners can standardize care, decrease diagnostic errors, and guarantee that treatment decisions are based on the most recent research and best practices by providing these tools. In addition, primary care clinicians can participate in ongoing professional development through the training modules offered by these systems, which allows them to learn about the most recent innovations in mental health care.

Although these technologies have many benefits, there are still several obstacles that need to be overcome before they can be effectively used in primary care. The affordability and expense of the necessary technologies is one of the biggest obstacles. The upfront and ongoing expenses of obtaining and maintaining cutting-edge medical technology can be too much for many primary care clinics, particularly those located in rural or low-income regions. Furthermore, the capacity to successfully deploy these technologies can be hindered by technical infrastructure difficulties like inconsistent internet connections, an absence of technical support, and an inadequate power supply. In addition, there may be logistical hurdles to overcome when integrating these tools into preexisting healthcare systems, thus thorough preparation and cooperation are essential.

When it comes to improving the accessibility and quality of primary care mental health services, health products and technologies play a crucial role. We must continue to invest and innovate in these technologies because, despite ongoing issues with cost, infrastructure, and integration, they have the potential to bring about numerous benefits, such as increased accessibility and more tailored treatment. Incorporating HPTs into mental health care is likely to become a crucial part of delivering complete, equitable, and effective treatment for all patients as healthcare systems keep changing.

Electronic health records and other forms of health technology are essential to the delivery of mental health services in Kenya, as stated in the country's Mental Health Policy 2015–2030. Health technologies facilitate the development of capabilities and the effective use of available resources. Consider culturally appropriate, user-friendly, and cost-effective technology when you work to enhance community mental health.

The state's essential medicine formulary must include information on psychotropic medications and related technologies. Purchasing and inventory management will both be improved as a result of this. No one should have to go without the treatment they need for their mental illness, and everyone should have a fair chance to get better or get back on their feet (Norris et al., 2016).

A patient's ability to integrate mental healthcare effectively is contingent upon their access to sufficient drug supplies. People with mental health issues are less likely to relapse and end up back in mental institutions when there is an appropriate supply of medication. Maintaining a well-stocked consulting room and an adequate supply of pharmaceuticals are both essential requirements of any mental health facility (Hlongwa & Sibiya, 2019).

The optimal strategy for incorporating mental health services into primary care, as proposed by Seleus Sibomana (2020), entails training both generalist and specialised mental health workers, establishing a mental health care system, lowering the cost of psychotropic medication, promoting effective leadership and governance, and sharing mental health information through the health information system. It all starts with the six pillars of health system strengthening that the World Health Organization has put forward. By enhancing coverage, accessibility, care quality, and safety, it aims to make the health system better and more functional, which includes mental health treatments at primary health services. Incorporating mental health services will boost demand for

care in a roundabout way by making it easier to provide those services. Training mental health professionals and those working in the field on the job will also be part of this offering. The national health system was strengthened and the foundation for a mental health care system was laid by providing subsidized psychotropic medications, sharing mental health data through the health information system, using the national insurance system, and fostering leadership and governance in the health system.

2.6.3 Information Communication Technology

With the help of ICT systems, care providers are able to keep tabs on patients' status and provide continuous treatment. In addition, they encourage patients to follow all of the prescribed treatments and preventative measures. When patients require treatment from many healthcare professionals, ICT solutions facilitate effective collaboration in their care. One example is when a patient sees a primary care physician who may prescribe medication, conduct initial diagnostic tests, and even refer the patient to a specialist. This ensures that all clinicians have access to the same basic data and makes it easier to transmit patient information, which leads to better collaborative patient care.

A hospital in south London saw an improvement in communication between healthcare providers. Outpatient psychiatry, psychotherapy, emergency evaluations, and discharge planning have all made use of it. A psychiatric clinic and a primary care physician's office were able to work together via videoconferencing to make this a reality (McLaren, 2005). Better treatment for patients is possible because the right people can access their records when they need them.

More access to mental health care, particularly in underserved areas, can be achieved through the use of telemedicine, and more especially telepsychiatry. Telepsychiatry improves access to mental

health care, according to research by Lu et al. (2020), which focused on rural areas. By eliminating the need for patients to travel great distances, telemedicine made care easier and more accessible. Most telepsychiatry patients were satisfied with the service, according to the study, and that was likely due to the convenience of being able to receive treatment without leaving the house. Consistent with this, a review by Yellowlees et al. (2018) highlighted the ease with which mental health care might be accessible in rural locations through telepsychiatry. They recommended it as a supplement to or replacement for in-person consultations, particularly in areas with a shortage of mental health experts.

More and more, people are turning to mobile health apps (mHealth) as a means of accessing mental health care. For the purpose of controlling mental health illnesses such as depression and anxiety, Firth et al. (2017) conducted a meta-analysis of several mHealth therapies. Apps that tracked mood, symptoms, and cognitive behavioural therapy (CBT) had the most beneficial benefits on mental health, according to their research. In addition, the study found that mHealth technology empowered users to monitor their own mental health, which in turn motivated them to remain engaged and manage their symptoms in the long run. Turner et al. (2020) conducted a more in-depth investigation examining the advantages of mHealth in primary care. In particular, they noted that these apps facilitated constant two-way communication between patients and medical professionals. The ability to interact in real-time was crucial for taking prompt action, following up with patients, and identifying potential mental health issues at an early stage. People in remote areas or those who feel too ashamed to seek out conventional in-person therapy now have an easier time accessing mental health care because to mHealth platforms.

The use of electronic health records (EHRs) has greatly facilitated the improvement of access to and coordination of primary care for mental health issues. Integrating mental health records into

electronic health record systems improved communication and collaboration between general practitioners and mental health experts, according to research by Chaudhry et al. (2018). Electronic health records allow doctors to retain meticulous records of their patients' mental and physical health, which aids in the diagnosis and treatment of co-occurring disorders. The study highlighted how mental health data could be easily exchanged through EHRs, which improved treatment planning and decision-making and ultimately led to faster, more effective interventions. Electronic health records (EHRs) helped decrease care fragmentation, according to Salisbury et al. (2017), because they facilitated communication and information sharing amongst various healthcare practitioners. Since mental health records were more easily accessible with EHRs, care quality and continuity were both enhanced.

Online mental health platforms, such as web-based therapy and virtual mental health communities, have further simplified access to mental health care in primary care settings. Anxieties and depression can be effectively treated with internet-delivered cognitive behavioural therapy (iCBT), according to research by Andersson et al. (2019). People who preferred to remain anonymous or who were too embarrassed to seek treatment in person found iCBT sites to be particularly useful, according to the study. Research by Spek et al. (2019) on the efficacy of CBT delivered via the internet found that it improved mental health outcomes, particularly for those suffering from mood disorders. In cases when resources or mental health professionals are in short supply, our findings highlight the significance of online platforms in expanding access to and scalability of mental health therapies.

Despite the numerous advantages of ICT in expanding access to mental health care, certain issues must be resolved prior to its use. Inadequate technology, inaccessibility of devices, and concerns about patient data protection are among the major obstacles to the use of ICT in mental health care,

according to Deleger et al. (2021). Particularly in places with spotty internet service or a general lack of computer knowledge, these obstacles can limit the usefulness of information and communication technology (ICT) tools for patients in low-resource settings. In addition, the efficacy of ICT tools could be hindered if healthcare providers aren't properly trained to use them. Furthermore, ethical concerns have been highlighted by data security and patient confidentiality issues, highlighting the necessity for strong security measures and protocols. Full utilization of ICT to improve access to mental health care depends on addressing these barriers.

2.7 Integration of Mental Health Services on Primary Health Facilities

In low-and middle-income countries (LMICs), where specialized mental health services are frequently difficult to find, Patel et al. (2018) discovered that mental health services, when integrated into primary healthcare (PHC) systems, become more accessible. A promising strategy to increase access to care and reduce treatment disparities, task-shifting educates general healthcare personnel to provide mental health services, according to the study's authors. Primary care settings that include mental health services make it simpler to detect and treat common mental health diseases early, according to a comprehensive study by Semrau et al. (2019). This alleviates part of the strain on secondary and tertiary healthcare facilities.

Integration improves access to mental health services, according to empirical evidence in Ethiopia. Fekadu et al. (2019) investigated the implementation of the Mental Health Gap Action Programme (mhGAP) in primary care settings in Ethiopia, which is sponsored by the WHO. The results demonstrated that mental health visits increased thrice after general practitioners and nurses were trained to manage mental health conditions such anxiety, psychosis, and depression. The fact that patients reported an improvement in their quality of care is more evidence that integration is successful in fostering confidence and active engagement.

Further support for these findings comes from Kenya's past. Community health workers (CHWs) were instrumental in the integration of mental health services into primary care, which Jenkins et al. (2021) investigated. The study discovered that individuals in rural areas had an easier time accessing services due to community health workers' (CHWs) ability to facilitate referrals and follow-ups after receiving training to evaluate mental health and provide basic psychosocial therapies. Additionally, individuals were more likely to complete their treatment plans when mental health services were integrated into primary care. This was because patients could seek help in settings where they already felt comfortable, which reduced the stigma associated with seeking therapy.

South Asian data also lend credence to the notion that integration is beneficial. In a cluster-randomized controlled trial conducted in Pakistan, Rahman et al. (2016) trained community-based PHC workers to assist depressed mothers. Mothers who received treatment reported a 40% reduction in depressive symptoms; hence, it is clear that incorporating mental health services into maternal health programs greatly facilitates access to treatment and recovery. Mother and child health has also been enhanced in sub-Saharan Africa through comparable programs (Lund et al., 2019).

Beyond simply making things more accessible, integration also makes them more cost-effective. Integrating mental health services into primary care is economically viable, according to cost-effectiveness research by Chisholm et al. (2019). This is due to the fact that individuals who do not seek treatment for their mental health issues end up being less productive and having their healthcare costs reduced. There would be a fourfold return on investment (ROI) for treating anxiety and depression in primary care, according to the study.

The implementation of integrated mental health services is still fraught with difficulty, even if there is encouraging empirical evidence. Issues highlighted by Thornicroft et al. (2018) include inadequate financing, a dearth of training for PHC clinicians, and inadequate referral systems. Problems with political will and conflicting health priorities are two of the main impediments to the integration of mental health services in many low- and middle-income countries. Addressing these obstacles would necessitate ongoing funding for mental health workforce development, changes to policies, and community education programs to increase understanding of mental health issues and use of available services.

There is a significant disparity between the number of people suffering from mental illness and the number of effective treatments available, and this is especially true in low- and middle-income nations (Rathod et al., 2017). The overarching goal of this research is to offer a synopsis of the opportunities and threats associated with innovative care delivery systems in the field of global health and mental health.

The primary idea of Mental Health America's campaign is supported by scientific research, which emphasizes the unity, interlocking, and dynamic nature of the brain and body. One way to fix the broken American healthcare system is with integrated care, which uses a team approach. (The Man of Health, 2015). I agree with Mental Health America (MHA) that treating the whole person by combining physical and mental health services can reduce healthcare costs, increase efficiency, improve health across the board, speed up access to high-quality treatment, and save money (Funk et al. 2008; Mental Health America (n.d.). Potential broad strokes in provisioning global systems are the focus of this research.

Haiti, which is currently treating thousands of people, is a case study for the following global mental health service challenges, according to Raviola et al. (2020): (1) constructing mental health care services from the bottom up, (2) establishing prearranged services in areas without many mental health services, (3) improving treatments and making care more accessible, (4) recruiting and retaining staff to provide mental health services, (5) adjusting health system and policy responses, and (6) maintaining income and energy for service provision in areas with limited resources. The lessons learned in his case study are a compilation of research on mental health research and service delivery that has focused on many components, such as training, specialized interventions, and overall planning. It lays out everything that must be present in order to complete this challenging task (Esponda et al., 2020 & Wainberg et al., 2017). The following steps have been taken: (I) Establish dependable anchor partners to lay a solid groundwork; (II) Develop a Theory of Change (ToC) and an understandable, consensus-driven framework for system planning; (III) Convert these foundations into practical skill sets and pathways for care delivery to assist those with conditions deemed a priority in the region; (IV) Gradually identify the roles and duties of stakeholders; and (V) Monitor the development of these initiatives.

The mental health system and the system for first attention should work together. Two teams forming an integrated whole with a common goal: to enhance the health of communities and populations through the coordinated application of shared resources (including data, people, and physical space) and the provision of coordinated care to patients (Alotaibi & Federico, 2017; Linde-Feucht & Coulouris, 2012). Dube and Uys, (2016) and Jenkins et al.(2010) Unfortunately, they are often seen as separate entities that struggle for scarce resources.

Countries like India and Australia have shown how to integrate mental health services into primary healthcare systems in a streamlined manner. Collaborative, supportive, and shared care is the idea

behind it, and it requires primary care, specialist services, and community services to all work together. A multidisciplinary mental healthcare team provides outreach comprehensive medical services, which include managing difficult cases directly, training primary care workers, and providing support overall. According to the World Health Organization and the World Organization of Family Doctors (2008), patients may access therapy in their local communities because the institution had essential mental medications on hand.

Integrating with general healthcare was indicated in Chile's national policy (1993–2000); the practice was established in a health center in the Macul metropolitan municipality. The actual distribution of mental health services would be as follows: general practitioners would be responsible for diagnosing and prescribing medication for mental disorders, community health workers would be there to support patients and their families, and psychologists would be available for individual, family, and group therapy (WHO & World Organization of Family Doctors, 2008).

Substance misuse has been on the rise over the past few decades, and the health care system has not been able to keep up with the demand for related services. It is evident from the ratio of medical quality that primary health care (PHC) in Africa is headed by nurses. Reason being, these expenses are covered by the state. See also: Mokwena et al. (2020) and Maphumulo and Bhengu (2019). Considering the advantages and disadvantages of conducting research in Uganda, developing programs to prevent mental health issues, training primary healthcare providers to apply critical psychosocial and behavioral science skills, and creating an efficient system to refer patients to specialists are all important (Kigozi & Ssebunnya, 2009; Wakida et al., 2018). Nevertheless, on occasion, the same system and staff are needed to treat severe mental diseases such as psychoses and manic-depressive disorder due to the insufficient referral services. As a result, training PHC employees has expanded to cover topics such as how to deal with the most significant

aspects of severe mental illness. Included in PHC are efforts to decrease stigmatization of people with mental illness and their families, improve access to care, protect human rights, lessen chronicity, strengthen communism, and increase capacity resources, among other things. Enhanced access, availability, and affordability of services, resulting to better outcomes, as compared to the preceding institutional care model (Kigozi & Ssebunnya, 2009; Wakida et al., 2018).

To summarize, a realistic method to improve access to mental healthcare is to integrate mental health services into primary care, as firmly supported by the empirical data. Integration improves health outcomes, decreases stigma, increases early diagnosis, and increases treatment consumption, according to research from a variety of areas, including Pakistan, Ethiopia, and Kenya. It is possible to scale up integration initiatives with the use of evidence-based strategies such as task-shifting, community involvement, and cost-effective interventions, even though obstacles still exist. Ensuring equal access to mental healthcare and promoting mental health integration in primary care require ongoing research and policy advocacy.

2.7.1 Redesigned Model of Care

Teamwork amongst medical professionals to improve patients' overall health and provide them with comprehensive care. For easily accessible mental health services in low-resource settings, this research looks at how the C4 paradigms - all-inclusive, coordinated, and community-based care-coexist. Improving infrastructure for mental health monitoring, increasing financing for mental health services in public health institutions, and bolstering the capacities of health workers are all components of this paradigm that aim to address the multi-faceted nature of mental health illnesses. Furthermore, it enables the merging of distinct mental health programs with community-based services, whether they pertain to health or not (Bolton et al., 2023).

Redesigning care pathways, bringing on board different subspecialists, establishing interrelationships between multidisciplinary guidelines, and taking on more responsibility for care integration across comorbid conditions are all parts of a redesigned model of care that Jenkins et al. (2010) propose. Conditions, regular and systematic case evaluations by mental health professionals of patients who do not show clinical improvement, patient involvement in treatment decisions, and integration of electronic health records for information sharing among different teams! We offer comprehensive treatment plans that cover all medical conditions, medications, psychosocial interventions (counselling), social services, and a referral system that allows patients to easily move between them. An essential part of integrating mental health services is redesigning the treatment paradigm. As a result, we need a strategy that is rooted in the community rather than one that is established in institutions and transfers services to communities. Combined care (CC) is an evidence-based approach to managing mental illnesses that occur with chronic ailments; it has been used in high-income nations as part of an effort to provide care in conjunction with collaborative care models. Patients with several chronic conditions and common mental health issues, such as depression, have responded well to CC treatment in the past. The primary objective of collaborative care is to enhance treatment quality, increase customer satisfaction, and system efficiency for patients with complex, long-term, and often palliative conditions that span several services, providers, and locations.

It is both feasible and cost-effective to incorporate mental health into health programs for specific physical ailments or groups, which improves the overall health of both the mind and the body. Because of its central location, obtaining is much easier and more thorough. (Funk et al., 2008; Lake & Turner, 2017). Most importantly, it can also help underprivileged people seek therapies for their problems. Whereas mental health units in general hospitals substantially aid national

efforts to overhaul mental health care. The hospital-based facilities offer inpatient discharge services, crisis care, and beds for short stays when necessary (Rathod et al., 2017; Søvold et al., 2021). Hospital mental health units are an integral part of a thorough referral system that links all three tiers of treatment because of their proximity to primary and secondary care centers (WHO, 2022).

It has been an acknowledged policy objective to integrate mental health into standard medical treatment since the 1970s. A wide variety of services and levels of implementation are possible (Funk et al., 2003). Efforts at general hospitals are just one example of the many ways mental health services can be integrated across settings (Eaton et al., 2018).

According to Mokwena and Mokwena (2022a), primary health care facilities should be improved so that they can meet the requirements of all patients, manage mental illness across settings, and provide the necessary consistency of care at all levels. Integrating community wellness experts into primary care increases community engagement, fosters the next generation of mental health advocates, and enhances the effectiveness of therapy for patients (Anyebe et al., 2021). Service availability differs by country and region because, in his opinion, the most effective healthiness organizations are those that adapt to the needs of the communities that rely on them; for example, in South Africa, these organizations meet the needs of people struggling with substance abuse and mental health issues by providing screenings, rapid interventions, treatment referrals, and ongoing support.

Argentina and Brazil have ambitious goals for healthcare delivery that include the integration of mental health into basic care. It hasn't happened yet in most places though. Treatment for mental health issues is likely to become more widely available in the years to come. A model of

collaborative care incorporating mental health and family services will emerge as a result of this. In a 2008 study, Funk et al. In these nations, primary care physicians assess their patients' emotional and physical well-being before prescribing medication or referring them to a specialist from the mental health team who visits family health centers. In 2018, the World Health Organization and the World Bank Group were partners. Doctors, patients, and inner specialists all meet together for consultations. To help primary care physicians become more competent and self-reliant in their treatment of mental diseases, these criteria are both a teaching tool and a monitoring tool. A high standard of mental health care is also guaranteed. (Held et al., 2018; Kohrt, -et al., 2018).

There has been an improvement in mental health care in the Dominican Republic since 2014. This nation's mental health plan has stakeholder support, and it aims to dismantle its lone psychiatric hospital while simultaneously creating a network of community-based treatments. In 2005, W.H.O. Day centers, assisted living facilities, and clinical services and support included within healthcare facilities generally all contributed to psychological rehabilitation. These centers currently offer treatment for every neurological disease that is difficult to treat in primary care settings. There has been an increase of 76 to 113 short-stay beds and 9 to 15 mental health units at district hospitals since 2008, (Alliance (UK), 2020). Up from 33% in 2008, these facilities now make up 53% of the nation's public sector mental health beds (WHO 2022a).

2.7.2 Advocating for Mental Health

Promoting understanding of mental health issues, helping to dispel stigma and discrimination, and increasing public understanding are all important goals of mental health advocacy (Hlongwa & Sibiya, 2019).

The goal of commemorating World Mental Health Day on the tenth of every year is to raise public awareness in order to mobilize resources, according to Jenkins et al. (2010). Advocacy affects a shift in perspective and action. It provides a forum where all key players in the field of mental health may come together to discuss the gaps in current initiatives and work toward a common goal of creating a global campaign for mental wellness and genuine care for all people. Empowering and including persons with mental disorders is crucial in the planning and decision-making process for services such as self-care, care livelihood, unrestricted maintenance sets and activities, and training of community health workers, teachers, and traditional healers. Actors and administrations working in the mental health sphere are in dire need of the abilities of committed advocacy and campaign priority.

Management and prevention of mental disorders are well-suited to the primary health care paradigm, which increases access to services while decreasing treatment costs (Mokwena & Mokwena, 2022 b). Unfortunately, many South African nations suffer from a chronic lack of these facilities, which means that therapy is severely limited for individuals who require it. Since the best caterers use these services, their availability varies by country and region. In response to an increase in new HIV infections, for example, primary healthcare facilities were upgraded, which allowed more people in the community to get the treatment they needed. The provision of comprehensive HIV-related healthcare services was also improved. Community health worker education to increase access to primary health care services to address community health needs, promotion of healthy behavior modification, and HIV health literacy were all part of these initiatives (Mokwena & Mokwena, 2022a).

2.7.3 Amount of Individuals Requesting Mental Health Services

As a result of mental health care being more accessible, acceptable, and affordable for persons with mental health conditions and their families, health inequities are minimized and stability of attention is ensured for this population. Stigma during therapy decreases as more individuals get the help they need. Mental health integration paves the way for the advancement of comprehensive, coordinated, and person-centered care for people whose mental and physical health problems occur together. Despite the mountain of data supporting this stance, most nations still disregard mental health, creating a significant treatment gap for those struggling with mental illness (Jenkins et al., 2010).

Maconick et al. (2018) found that as many as 75% of South Africans suffering from mental health disorders do not seek help. Many cases are missed because of the two-tiered approach to healthcare. One major issue is the poor physician-to-patient ratio in the public health sector, which provides care to 80% of the population, particularly in rural areas. According to the World Health Organization, mental health services that are individually adapted to each person's needs - including their preferences, safety, effectiveness, timeliness, affordability, and reasonable quality - would significantly cut down on the number of people suffering from mental illness. Preserving human dignity, closing the treatment gap, expanding access to mental health services, providing comprehensive care, and improving health outcomes are all possible.

Improving access to services for the largest possible population begins with improving the management and treatment of mental diseases in primary care settings. During resource shortages, primary health care systems are increasingly expected to provide a range of health services (Colizzi et al. 2020 ; Marangu et al. 2021a)

Collect a model for behavioral health integration Studer, (2021) The favorable circumstances required for coordinated assimilation. If the following are to be true, the framework may provide the setting necessary to carry out the care testament to the letter (Colizzi et al., 2020; Le et al., 2022). The first step was to assess patients who were visibly ill and came to the practitioner for signs of mental illness. If the patient was found to be suffering from mental distress, they were either followed up by a registered nurse or sent to someone else for help if the problem was too complex for them to handle. Utilizing the current fast-tracking system to swiftly monitor the mental health of all individuals constitutes the second tactic. Upon arrival at the clinic, those seeking mental health services undergo a screening process. If their results are positive, a mental health specialist will either prescribe medication or advise them to continue therapy.

If the patient's mental health cannot be stabilized after 72 hours of treatment, the next recommended step is an evaluation at the district hospital. Third strategy: clinic chronic patient management in accordance with the study's conclusions, all PHC clinics have protocols that enable patients undergoing mental health treatment who are also taking prescription drugs to be referred to a registered nurse who holistically manages chronic illnesses, including mental disorders. It's consistent with the model's suggestions for personalized disseminated recommendations for treating habitual illnesses, which includes helping those with long-term mental health issues (Hlongwa & Sibiya, 2019; Maconick et al., 2018). An ongoing treatment's principal objective is to integrate previously undertaken methodologies with current persistent outcomes (Hlongwa & Sibiya 2019).

Involvement of mental health specialists is also necessary in formal service delivery systems and clinical care. The overhaul panel's horizontal requires collaborative care, which includes precise character and duty observance by every crew member, cutting-edge consideration of care and

recommendations, and worthy relational interaction (Rosen et al., 2018; Stubbe, 2017). Lastly, it entails prompt communication and feedback, coaching, appreciation of team and individual challenges, competent facility-level team management, and referral bonuses. In addition to increasing consciousness, a system is needed to guarantee that prioritized perspectives are regularly put into practice at different levels (Kozlowski & Ilgen, 2006; Roussy et al., 2021; Zajac et al., 2021). These programs aim to ensure that integrated mental healthcare is not just a one-time thing, but rather a permanent part of healthcare organizations and services. The ability to detect symptoms associated with diseases or disorders driven by diseases makes patient level monitoring an essential component of therapy for illnesses. (Osborn, et al., 2021))

Mental health services should be considered a part of primary healthcare in the study. The idea stems from the World Health Organization's ten principles for effective integration, which state that all primary healthcare practitioners should be included in the treatment of people with mental diseases and that these conditions should be treated similarly to other health issues.

For instance, when the number of new HIV infections rose around the world, primary care clinics improved their HIV-related services, bringing treatment to more people in their communities (Bekker et al., 2018). Primary wellness care assistances were also improved to offer comprehensive HIV-related services, such as prevention, positive behavior change encouragement, and HIV health literacy. Providing information on how to stay healthy was just one of many services. Further improvement in access to PHC services and meeting the aspirations of the local population has been achieved through the adoption of rigorous community health worker training programs. Using local community workers who were able to identify important community needs was the key to this strategy's success. Mental wellness and sickness prevention can both benefit from the idea.

A growing number of South Africans are advocating for the integration of mental health services into primary healthcare (PHC). This may be due, in part, to the underrepresentation of mental health care providers in the workforce, especially in areas where people are underserved by existing systems. Unforeseen consequences of PHC's traditionally top-down approach to mental health care include a failure to acknowledge the significant role that mental illness plays in many PHC problems and a paradox in precaution.

While mental health issues did not rank among the top 25 diagnoses in a study of 18,856 consultations, physical problems such as headaches and nonspecific body discomfort were common in South African primary health care clinics. Chronic physical illnesses are known to be impacted by comorbid mental health disorders. The risk of depression is significantly higher for people with one or more chronic physical health conditions compared to those without such conditions, according to research from the World Health Surveys.

Recognizing and treating recession leads to better physical health outcomes. For example, there is strong evidence that HAART, or highly active antiretroviral therapy, improves HIV treatment outcomes. In order to address the limited resources of consultant psychiatry, there has been a request for specific mental health services to be "task-shared" with primary care practitioners. Some purported side benefits exist as well, such as a reduction in stigma. Primary care physicians in the Western Cape Province now have a resource to help them screen, evaluate, and treat patients with mental health issues using evidence-based procedures. This resource is part of the Hands-on Methodology to Care Kit and the recommendations made in Crucial Care 101. Training PHC staff to offer high-quality treatment implementing plan. Insufficient studies evaluating methods for their intended use. According to the data, most training programs were quite short and intense, and many of them involved working with experienced teachers from countries with high per capita

income. A clear, realistic, and sustainable strategy is necessary. In order to improve integration, we offer a program that the local team developed and implemented at the center.

Without a large influx of new human resources, this program aims to provide a paradigm shift in direction that may be implemented sustainably. The goals of the training sessions were to increase knowledge about mental health, provide PHC workers with a means of supervision, and enable them to provide feedback to the mental health team. Training in this paradigm is mainly provided by the district's mental health nurse. 'Coaching the mentors' and instructive mentorship are part of the initiative, which aims to help mental health workers improve their skills in monitoring and teaching methods. Success for "task sharing" hinged on the ability to cultivate these skills in dedicated teams. In addition to providing a more permanent and sustainable option to short, externally driven courses, enabling mental health nurses to improve services is a major benefit (Dube & Uys, 2016).

Integrating mental health services with primary care is the gold standard of treatment. An authorized medical community employee, psychologist, or other negotiating wellness specialist with expertise in mental health could be a part of an integrated strategy. Instead, it is a strategy to aid doctors in their work that is intended to be transferred. The acronym that defines model.

2.8 A theoretical Foundation

An established fact is a theory. A theory provides a structured explanation or prediction of an event by outlining the interrelationships of relevant variables and propositions. According to Brazil et al. (2005), a theory can help us understand how resources (inputs), activities (processes), and the outcomes (outputs) are related. The conditions of the intervention's setting are identified by theory.

2.8.1 Theory of System Thinking

Rather than dissecting complex systems element by element, systems thinking theory takes a holistic view by concentrating on the interconnections and links between them. Interdependence, feedback loops, and the evolution of systemic dynamics were central to the theory's development, which began with the research of academics like Ludwig von Bertalanffy and continued with the contributions of intellectuals like (Bertalanffy et al., 1968; Senge, 1990). This method shines when applied to complex systems like healthcare, where many different factors interact to determine the final result. Systems Thinking allows for the development of solutions that tackle the causes rather than just the symptoms by recognizing underlying patterns and structures within systems.

When it comes to mental healthcare, especially in primary care settings, Systems Thinking Theory offers a great foundation for removing obstacles to treatment. There are many moving parts to mental healthcare systems, such as healthcare practitioners, patients, community members, legislation, infrastructure, and cultural norms and expectations. A more thorough comprehension of the interplay and causal links between these factors and accessibility issues can be achieved by adopting a systems-thinking perspective.

The identification and mitigation of bottlenecks within mental healthcare delivery systems is a significant application of Systems Thinking Theory. For example, in low-resource areas, primary healthcare institutions often struggle with issues including understaffing, a lack of mental health training, and a lack of integration between mental health and general healthcare. All of these problems feed into one another; for instance, poor mental health diagnosis due to a lack of training for primary care physicians can cause patients to lose faith in their doctors and have less-than-ideal treatment. Mental health services should be integrated into general healthcare workflows, primary care physicians and mental health experts should work together, and capacity-building initiatives

for healthcare workers should be considered as solutions to address these difficulties holistically. Improved provider confidence and patient outcomes were observed in an Indian case study that examined the integration of mental health training into primary care services (Patel et al., 2018).

In mental healthcare systems, feedback loops - a pillar of systems thinking - are especially relevant. While negative feedback loops mitigate disturbances and stabilize systems, positive feedback loops amplify favorable developments. An example of a positive feedback loop would be the training of primary healthcare professionals in mental health treatment. This would lead to better patient outcomes, which would raise community trust and healthcare utilization. The stigma associated with mental illness is one example of a negative feedback loop that contributes to the perpetuation of unmet needs and bad consequences. To break these destructive patterns, it is crucial to combat stigma through training providers, educating the public, and advocating for policies that do just that. More people sought help and had easier access to mental health services when community-based anti-stigma initiatives in Kenya were implemented, according to a study conducted in that country (Jenkins et al., 2021).

When it comes to solving problems with mental health, Systems Thinking stresses the significance of working across sectors. Coordination of efforts across several sectors is necessary to address the myriad social determinants of mental health, including but not limited to poverty, housing, education, and employment. For example, when healthcare practitioners, schools, and community groups work together, it's easier to spot mental health problems early, get people referred quickly, and offer them all-encompassing help. As shown in a study conducted by Lund et al. (2010), children from underprivileged communities in South Africa had a considerable improvement in early identification and referrals after mental health screenings were integrated into school programs.

Another important area where Systems Thinking is extremely useful is the role of technology in improving access to mental healthcare. There may be ways to overcome geographical and resource limitations through the use of telemedicine platforms and mobile health technologies. With a systems-thinking perspective, we can examine how these technologies affect data management, workflows, and interactions between patients and healthcare providers. In Rwanda, for instance, community health workers were able to screen patients for mental health issues and link them with specialists through a mobile health app. This helped to decrease referral delays and improve treatment outcomes (Binagwaho et al., 2014). These innovations in technology are in line with the systems view since they handle various facets of care all at once.

A systems-thinking stance is useful in understanding cultural and policy issues as well. In order to fortify mental healthcare systems, it is essential to implement policies that adequately finance the field, create transparent referral channels, and incorporate mental health into primary healthcare. According to systems theory, it is crucial to tailor these policies to the specific social and cultural circumstances of each community. One cultural example is the idea that mental health programs can be more widely accepted and used if they include traditional healers and community leaders (Bhugra et al., 2014). Ethiopia provides a compelling case study that emphasizes the significance of culturally sensitive techniques; in this case, researchers worked with religious leaders to decrease stigma and boost the adoption of mental health services in rural areas (Fekadu et al., 2016).

This study presents a strong framework for tackling the complex issues related to mental healthcare access in primary healthcare settings, based on Systems Thinking Theory. Comprehensive, adaptive, and context-sensitive solutions can be more easily designed using this method, which involves studying the dynamic relationships within healthcare systems. Systems Thinking offers

practical solutions to improve the delivery of mental healthcare in a variety of ways, including but not limited to: strengthening provider training, fighting stigma, promoting cross-sectoral collaboration, and capitalizing on technological developments. Given the intricate structure of mental healthcare systems, its focus on interconnections and systemic adaptability makes it an essential tool for attaining fair and efficient mental health treatments.

2.8.2 Principles of resource-based theory

Strategic management's Resource-Based Theory (RBT) stresses the importance of resources in propelling an organization's success and maintaining its competitive advantage. An organization's capacity to attain exceptional performance, according to the idea put forth by Barney (1991), hinges on its strategic utilization of resources that are valuable, rare, inimitable, and backed by strong organizational structures, also known as the VRIO framework. Infrastructure and financial investments are examples of tangible resources, while specialized knowledge, competence, and corporate culture are examples of intangible resources.

Within the framework of mental healthcare access, RBT offers a theoretical perspective to analyze how optimizing resources might tackle inequalities and improve service delivery. According to Wernerfelt (1984) and Grant (1991), the framework helps to understand in more detail how different resources can be used strategically to remove obstacles and make mental health care accessible to everyone.

Successfully addressing mental health needs requires locating and implementing relevant resources, which is an essential part of RBT. Mental health facilities, telemedicine networks, and community-based care networks are all examples of the specialized infrastructure that falls under this category and plays a crucial role in improving service quality and accessibility. To illustrate

how significant expenditures in mHealth and telepsychiatry can help fill treatment gaps in neglected areas, consider Kenya (Bhugra et al., 2014). Effective and contextually relevant mental health interventions also rely on intangible assets like a trained and culturally competent staff (Patel et al., 2018).

The strategic importance of some resources in tackling mental healthcare concerns is further highlighted by their rarity. There is a severe shortage of psychiatrists, clinical psychologists, and other specialist mental health practitioners in many low- and middle-income nations (LMICs), Kenya included. For instance, out of every 500,000 individuals, there is less than one psychiatrist in Kenya. This highlights the importance of finding new approaches, like task-shifting, wherein general healthcare personnel are educated to offer essential mental health treatments (WHO,2020). By making the most of limited resources, task-shifting programs can lessen treatment gaps and increase service reach (Van Ginneken et al., 2021).

Another pillar of RBT is inimitable resources, which provide benefits in the long run by encouraging competitive difference that lasts. When it comes to mental health treatment, these tools include in-depth understanding of local social and cultural norms as well as culturally responsive care methods. A good example of this approach in action is community-based mental health initiatives, which combine contemporary therapy with more conventional forms of treatment. Reducing stigma and enhancing community acceptance of mental health care have been demonstrated through initiatives to align traditional and biomedical techniques in Kenya (Kohrt & Mendenhall, 2015).

The last part of the VRIO model is organizational support, which highlights the significance of frameworks, financing methods, and institutional structures in maximizing the use of resources.

One way in which legislative frameworks might help with resource efficiency is as shown with the passing of the Mental Health Amendment Act (2022) in Kenya. Mental health treatments must be a part of primary healthcare under this strategy, which also funds important projects including expanding digital health infrastructure and educating healthcare workers (Republic of Kenya, 2022). Such policies guarantee that resources are deployed efficiently to improve access to mental health by establishing an enabling environment.

Both the theory and practice of RBT's application to mental healthcare are highly consequential. To ensure that underserved communities have access to healthcare, policymakers and administrators should make it a top priority to find and improve effective resources like community health worker programs and telemedicine platforms. It is equally critical to address the shortage of rare resources by implementing capacity-building and targeted training programs. In addition, culturally sensitive care models and other unique resources can help overcome social barriers like stigma and increase people's use of mental health services (Patel et al., 2018).

The VRIO framework aids healthcare organizations in addressing mental health disparities to the best of their abilities by providing a systematic way to allocate resources. By bridging treatment gaps using cost-effective and resource-efficient ways, community-based initiatives in Kenya have shown how RBT principles may be utilized successfully. Integrating mental health services within the existing healthcare system and training community health workers to offer psychosocial support are two examples of scalable solutions that follow the principles of RBT (Bhugra et al., 2014).

This study uses Resource-Based Theory as a solid theoretical framework to tackle the multi-faceted problems of mental healthcare access. The RBT framework paves the way for the creation

of fair and long-lasting mental health systems by stressing the need of managing scarce, valuable, and unique resources with the help of solid organizational structures. The idea stresses the importance of community-driven initiatives, robust healthcare ecosystems that can handle a variety of mental health demands, and the need to optimize resources in tandem with supportive legislation.

2.8.3 Human Resource Theory

Investing in human qualities like education, skills, and health is emphasized in Human Capital Theory (HCT), which was developed by Gary Becker in 1964 and first proposed by Theodore Schultz (1961). Theoretically, these expenditures lead to higher output and more rapid economic development. A person's mental health is an important part of their overall wellness since it affects their ability to think clearly, make sound decisions, and participate in meaningful social activities, all of which contribute to monetary output. Economic inefficiencies, increased healthcare expenses, and less employment participation are outcomes of insufficient attention to mental health.

It is essential to include mental health services within PHC systems, according to HCT when it comes to mental healthcare access in primary healthcare (PHC) settings. Recognizing mental health as an essential part of human capital development, (WHO, 2020) stresses the importance of strategic investment in mental health services at the basic level of healthcare delivery. Not including mental health into PHC keeps social inequity, makes productivity losses worse, and makes treatment costs escalate.

One of the major obstacles to improving mental health care in primary healthcare, particularly in low- and middle-income countries (LMICs), is the shortage of trained professionals. This shortage

of workers makes it harder for people to get the help they need and adds to the severe treatment gap that already exists. Public health care professionals (PHCs) should be equipped with important mental health competencies, and HCT is an advocate for workforce investment in this area. A good example is Ethiopia, which improved its detection and intervention rates after adopting the Mental Health Gap Action Programme (mhGAP), which is supported by the World Health Organization (WHO). This program allowed non-specialist healthcare personnel to successfully identify and manage mental health issues (Fekadu et al., 2016). Similarly, task-shifting tactics increased treatment coverage in neglected areas of South Africa by providing specialized training to community health workers to deal with common mental diseases (Lund et al., 2010). Healthcare service delivery and general productivity are both improved by investing in worker development, as these cases demonstrate.

Reducing costs and improving health outcomes in mental healthcare requires both a sufficient staff and early intervention. According to HCT, it is more cost-effective to focus on prevention rather than treatment for severe mental health issues. Roberts et al. (2019) found that mental health assessments integrated into primary health care in Ghana significantly reduced the expenses of hospitalization for mental health problems. Mental health expenditures pay off in the long run, according to research out of Kenya (Jenkins et al., 2021) that found that PHC facilities that included depression management had a higher rate of staff retention.

Investments in mental healthcare also have intergenerational effects, which HCT highlights. All members of a community, not just the individuals themselves, get the benefits of effective interventions for mental health. For example, the effects on children's development of their mothers' mental health. Children in South Africa showed less occurrence of adverse childhood experiences and better cognitive development once maternal mental health interventions were

incorporated into PHC (Lund et al., 2010). Children in Bangladesh whose mothers received treatment for depression through primary health care facilities were more likely to attend school and did better in class (Rahman et al., 2013). These results provide credence to HCT's central argument, which is that spending money on mental healthcare leads to better workers and higher prosperity in the long run.

Another important area where HCT can be used is to ensure that everyone has equal access to healthcare. People living in rural areas sometimes lack access to competent mental healthcare treatments in many LMICs since these services are disproportionately located in urban centers. People in these regions typically struggle to access mental healthcare, which makes it much harder for them to work and contributes to economic inequality. Research conducted in Uganda found that when mental healthcare services were made available to rural primary healthcare facilities, people with mental disorders were more likely to stay in their jobs, which in turn increased their household income and economic involvement (Kigozi et al., 2019). These results emphasize the significance of easy access to mental health services in promoting economic security and decreasing poverty.

From a policy standpoint, HCT highlights the importance of mental healthcare investments from both the government and institutions. Improvements in public health and wider economic advantages accrue to lawmakers who make mental health funding a priority within PHC frameworks. Improving service reach and economic productivity can be achieved by integrating mental healthcare within PHC, according to the WHO (2020). According to Patel et al. (2018), nations like Chile and Thailand have seen better mental health outcomes, reduced healthcare expenditures overall, and more workforce participation after incorporating mental health into

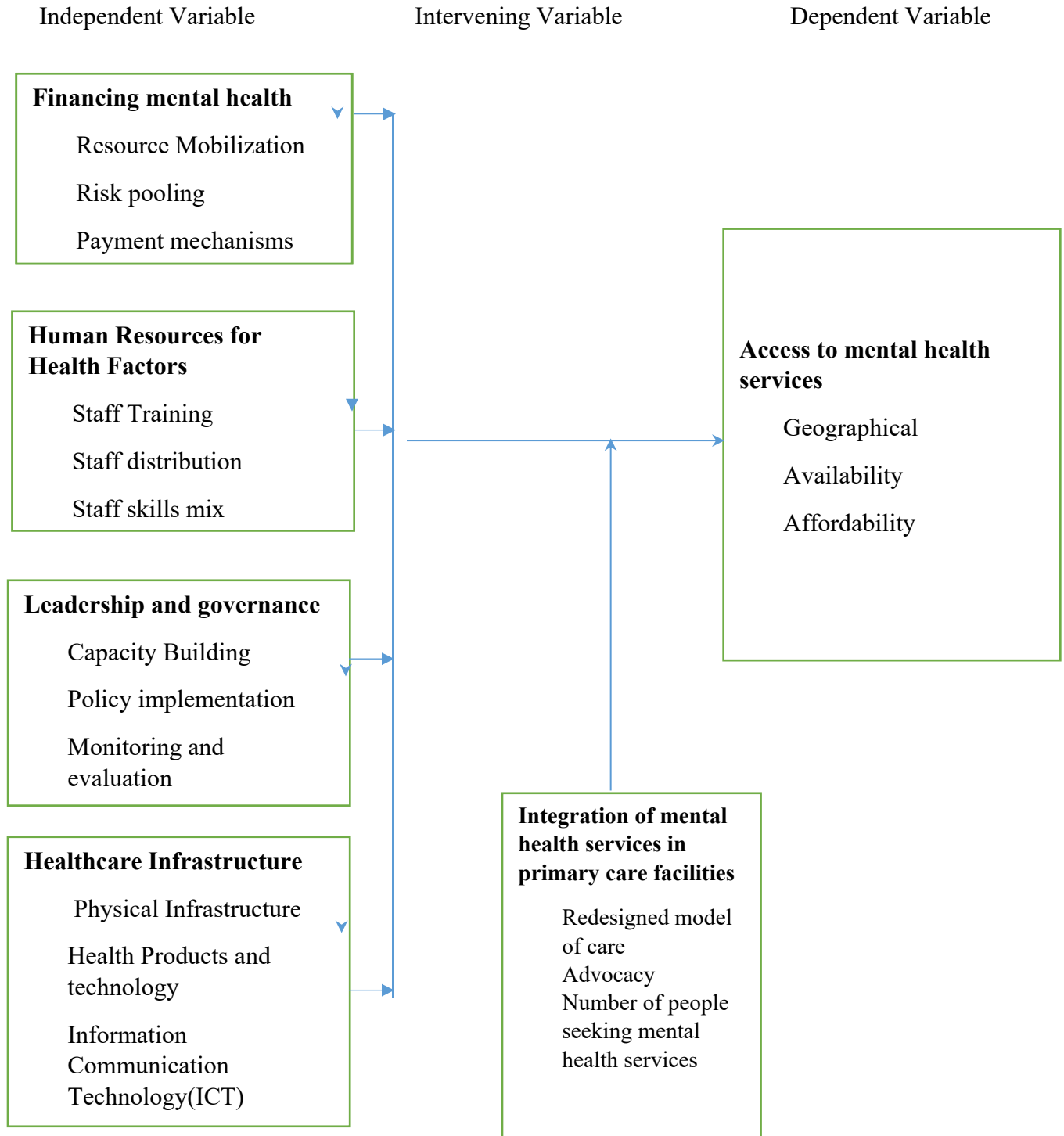
primary healthcare through national health policies. These examples support HCT's main point that investing in mental healthcare promotes long-term economic growth and stability.

To sum up, PHC mental healthcare can be better understood through the lens of Human Capital Theory. According to the hypothesis, public health care (PHC) investments in mental health services have multiple positive effects, including better individual health, more economic productivity, lower healthcare costs, and more social fairness. Public health and economic outcomes are improved when mental healthcare is prioritized and integrated into primary healthcare settings. This has been shown in various case studies across the world, including Ethiopia, Ghana, South Africa, Kenya, Uganda, and others. There is an urgent need for governments, lawmakers, and healthcare providers to enhance mental healthcare services within PHC frameworks to guarantee sustainable growth and economic stability, considering the growing global emphasis on mental health as a crucial determinant of human capital.

2.9 Conceptual Framework

Figure 2.1

Conceptual Framework



CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The research design, demographics, sample size, sampling procedure, data collection, analysis, and any ethical considerations are all covered in this chapter.

3.2 Research Design

The purpose of this cross-sectional study was to examine, using several data analysis methodologies, the assessment of primary healthcare facilities' readiness for access to mental health services to enhance early detection in selected counties in Kenya. Summary statistics are generated by correlation matrices in quantitative research designs and inferential statistics by correlational study designs. According to Almalki (2016) and Guetterman et al. (2015), this study used a hybrid technique approach that combined quantitative and qualitative record compilation.

3.3 Location of the Study

The study selected a study location based on the rate of mental health problems that are prevalent there. Nairobi County has the most prevalence of mental illnesses, followed by Kiambu County, Nakuru and Makueni County. This study does not include Nakuru County because of the similarities it has with Nairobi and Kiambu (KHIS 2023).

3.4 Target Population

The term "population" refers to an all-encompassing group of entities that share some defining characteristic (Mugenda & Mugenda, 2003). Levels 2, 3, and 4 healthcare personnel in Makueni and Kiambu Counties were the primary subjects of the study. Two health care providers were randomly selected to participate in the study. In primary care settings, a health maintenance

contributor is someone who has the necessary certifications to offer health care advice and treatments, including prescriptions, operations, and therapeutic procedures.

Table 3.1

Health Facilities

County	No. of facilities in Kiambu	No. of facilities in Makueni	Total
Dispensaries	62	165	227
Health Centers	29	45	74
Sub county/County Hospitals	11	13	24
Total No. of facilities	102	223	325

Criteria for inclusion

- i. Every group of registered nurses, doctors, and other medical professionals who provide mental health services in primary care settings
- ii. A readiness to give written informed permission in order to participate in the study

Criteria for exclusion

- i. Learners on an internship, student, or contract basis with less than one month's worth of experience
- b) Declining to participate in the study without first providing informed permission

3.5 Sample Size and Sampling Size Determination

Stratified sampling was employed for the selection of this study's sample. Each healthcare facility was assigned a level of care. Primary health care facilities classified as Levels 2, 3, and 4 were the focus of the study. A clinical officer and a nurse were picked at random from each of the

participating hospitals using a basic random approach. A member of CHMT and the County Executive Officer were also interviewed. Finally, this research encompassed all primary care facilities in the selected counties. The research only included two healthcare providers per facility if all of them were of the same cadre. Finally, it was expected that all facility managers would be able to take part in the interviews with the key informants.

The equations provided by Tara Yamane (1973) were utilized to determine the sample size.

$$n = \frac{N}{1 + N \cdot I^2} \dots\dots\dots \text{Eqn 1}$$

Where

n = Signifies the sample size

N = Signifies the population under study

e= represents the margin error or sampling error. $(0.05)^2$

This formula uses a 95% confidence level and a P value of (0.05)

$$\text{Sample size} = \frac{325}{1 + 325 \cdot (0.05)^2}$$

$$= \frac{325}{1 + 0.8125}$$

$$n = 179.3$$

$$n = 179$$

Table 3.2*Proportionate Sampling Frame by Level of Care*

County	Dispensaries	Health Centres	Sub-county/County Hospitals	TOTALS
Kiambu	19%(62)n=34	8.9% (29)n=16	3.4%(11) n=6	56 (31%)
Makueni	50.6%(165) n=91	13.9%(45)n=25	4%(13) n=7	123 (69%)
n	69.7% = 125	22.8= 41	7.4= 13	(179)100%
N	227	74	24	325

3.6 Tools for Research

Appendices 2 and 1 contain the Key Informant interview guide and questionnaire, respectively, that were utilized for the purpose of collecting primary data. All efforts made with the primary objective of enhancing, rehabilitating, or sustaining mental health are collectively referred to as a mental health system by WHO-AIMS. The mental health system encompasses all organizations and resources that aim to enhance mental well-being. Members of the CHMT and facility in-changers conducted 15 key informant interviews with 358 healthcare providers who had filled out the surveys to learn more about the mental health services provided by primary care facilities in the region and the preparedness of these facilities to handle mental health emergencies.

In order to allocate funds for mental health care, data was gathered using key informant interviewing methodologies. As a means of gathering information, key informant interviews were selected because of their ability to elucidate a topic and verify or refute claims or norms regarding a situation, task, or platform (Gilchrist, 1992). All of the providers were native English speakers, therefore that's how the data was acquired.

3.7 Pre-Testing Data Collecting Tools

The tools were pre-tested in Nairobi County, where 18 institutions were selected at random. This represents ten percent of the overall sample. The pre-testing activity used a random selection of 36 providers. To determine if the results were relevant to the study subjects, the completed instruments were entered into SPSS version 25 and analysed. If the tools didn't work, the right questions were picked, reorganized, and altered. The researcher skipped any questions that didn't seem required. The preliminary data collection tools were fine-tuned following field pre-testing. The interviewers were observed, field notes were taken, and reports were reviewed during the fieldwork. After each meeting, the notes from the interviews were quickly incorporated into a report.

3.8 Methods for Collecting Data

Research licenses were obtained by consulting the KeMU University Ethics Review Committee. After obtaining written informed consent (Appendix 4), the questionnaire was delivered to individuals who agreed to participate. Research assistants with the necessary credentials were brought in to help distribute the questionnaires for the study. The drop-and-pick approach was used to administer the questions. It was expected that respondents would administer the survey themselves.

Following that, key informant interviews were conducted with the CHMTs. At the outset, the researcher assured the interviewees of their anonymity while also outlining the goals of the interview and possible uses for the data. The informants were asked to justify their opinions and recommendations by providing more context.

3.9 Data Collection Procedure

The KeMU University Ethics Review Committee was consulted in order to obtain research license. The questionnaire was administered to people who agreed to participate after obtaining written informed consent (See Appendix 4). For the purpose of assisting with the distribution of the questionnaires, the study made use of research assistants who were professionally trained and qualified. For the purpose of conducting the questions, the drop-and-pick method was utilised. The survey was intended to be self-administered by the respondents.

After that, the Facility in Charge and CHMTs were the subject of key informant interviews. The researcher started by outlining the objectives of the interview, outlining the potential applications for the data, and assuring the respondents of their confidentiality. There was probing to elicit the informants' explanations for their judgments and suggestions.

3.10 Data Processing and Analysis

The gathered data's completeness, consistency, dependability, and eligibility were confirmed by verification and cleaning. That was done to fill in the blanks or correct mistakes. Quantitative data was processed and stored using SPSS version 25. Quantitative data were analysed using both descriptive and inferential statistics. Cross-tabulations, percentages, and frequencies are examples of descriptive statistics. Chi-square statistics were obtained by cross-tabulations. Using inferential statistics, the data was fitted to a binary logistic regression model. The outcome of interest was odds ratios, which demonstrated how likely it was that someone in Kiambu or Makueni County would get mental health care. When there are two mutually exclusive outcomes for the outcome variable, binary logistic regression is appropriate. Access to mental health services, which were classified as "accessible" or "not accessible," was the study's main outcome of interest. Mathematically, binary logistic regression can be written as:

$$P(Y_i) = 1 / (1 + e^{-(B_0 + B_1X_{1i} + B_2X_{2i} + \dots + B_kX_{ki})}) \dots\dots\dots \text{Eqn 2}$$

Where:

- P (Y_i) is the predicted chance that Y is true for case i

e is a number that stays the same and is close to 2.72.

b₀ is a consistent guess based on the data

b₁, b₂, b₃, and so on are b-coefficients that were found using predictor 1, 2, 3, and so on.

X_{1i}, X_{2i},....X_{ki} is the score that was seen on predictors X₁, X₂,....X_k for case i
 The N- Vivo 8 analysis program was used to manage qualitative data and thematic analysis method was used.

3.11 Ethical considerations/Approvals

The KeMU University Ethical Review Committee was consulted for approval of scientific procedures. The appropriate management of the health facilities was then to apply for NACOSTI clearance. The study only accepted voluntary participation. The respondents were given a detailed explanation of the research's purpose. Before each participant signed a written informed consent form, it was given to them and explained to them. Respondents were free to withdraw from participating at any time. There were no negative effects on the community or study participants. All respondents' information was kept private using special identifiers, and all study materials were carefully stored and locked up. The researcher was the only person with access to the lockable cabinet where the data was kept. The participants in this study did not receive any financial compensation or other benefits for participating.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

This section discusses the findings from the mixed-methods study of healthcare workers in Kiambu and Makeni Counties, Kenya, who were recruited at levels 2, 3, and 4. Appendices 1 and 2 contain the questionnaire and the Key Informant interview guide that were used to collect primary data. The survey responses of healthcare providers and the qualitative data gathered from 15 key informants are presented in the chapter's opening descriptive statistics. Finally, this chapter applies a logistic regression model to the survey data in order to determine the variables influencing the availability of mental health services at health institutions in Kiambu and Makeni Counties at levels 2, 3, and 4.

4.2 Response Rate

Three hundred and fifty-eight questionnaires were distributed. A response rate of 99 percent was achieved with 355 correct answers. As per Adji and Fernandes (2017), a return rate of 60%–70% is good, 50% is medium, and anything beyond 70% is excellent. The participants' data provision for analysis and drawing inferences was therefore considered to be accurately represented by this return rate.

Table 4.1

Rate of Return

	Number	Percent (%)
Completed	355	99%
Unreturned	3	1
Total	358	100.00

4.3 Validity and Reliability

This section examines the validity and reliability of the instrument in question. The reliability was assessed using the Cronbach alpha coefficient, while the validity was evaluated through the Kaiser-Meyer-Olkin Degree of Sample Appropriateness and Bartlett's measure of Sphericity. Section 4.3.1 presents the findings of the reliability assessment, while section 4.3.2 delineates the outcomes of the same evaluation.

4.3.1 Examination of Reliability

The analysis of reliability was performed utilizing pilot data, during which Cronbach's alpha was calculated for each construct. Table 4.1 presents the findings of the analysis.

Table 4.2

Reliability Test

Variable	Cronbach's Alpha Value	Number of Items measured
Financing Mental Health	0.791	14
Human Resource factors	0.783	14
Leadership and governance	0.839	12
Mental Health infrastructure	0.788	12
Mental health integration	0.791	15
Access to mental Healthcare	0.829	14

The data presented in Table 4.1 indicate that every variable achieved Cronbach's alpha values surpassing 0.7. This affirms that the data possesses an adequate level of reliability for subsequent analysis.

Table 4.3

Construct Validity Tests

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Degree of Sample Suitability.		0.849
Bartlett's Measure of Sphericalness	Chi-Square	40.107
	Df	12
	P-Value	0.006

Source: Research Data (2021)

As displayed in Table 4.2, the KMO value was 0.849, which is deemed acceptable, given that values closer to 1 indicate better suitability. Additionally, Bartlett’s test yielded a significant result ($p = 0.006$), which is below the threshold of 0.05. These results confirm that the instrument was appropriate for the study.

4.3.2 Validity Tests

The Kaiser-Meyer-Olkin (KMO) sample adequacy test and Bartlett's sphericity test assessed concept validity. Table 4.2 provides inquiry results.4.3 Socio-demographic characteristics of the respondents

This section presents the demographic characteristics of the study population so as to form a background for analysis of the study variables. The results are as follows:

4.3.3 Gender of the Respondents

The study sought to establish whether there is gender disparity in the provision of healthcare. The gender distribution is as presented in Table 4.2.

Table 4.4*Gender of The Respondents*

Gender	Frequency	Percent
Female	213	60
Male	142	40
Total	355	100

As presented in table 4.2, the majority (60%) of the respondents were females. This indicates that females dominate in the provision of mental health care.

4.3.4 Age Distribution of the Respondents

Age distribution of the respondents was also ascertained. Table 4.3 presents the results of the analysis.

Table 4.5:*Age Distribution of the Respondents*

Age Distribution	Frequency	Percent
Less Than 30 Years	48	13.5
30-39Years	201	56.6
40 and above	106	29.9
Total	355	100

As shown in table 4.3, majority (56.6%) of the respondents were aged between 30-39 years. This implies that provision of mental health is more or less dominated by youthful professionals.

4.3.5 Level of Education

Level of education was important in this study because it helped in determining the academic and professional qualifications of the mental health professionals. Table 4.4 presents the results of the analysis.

Table 4.6

Level of Education

Education	Frequency	Percent
Certificate	27	7.6
Diploma	257	72.4
Higher Diploma	19	5.4
Degree	49	13.8
Masters	3	0.8
Total	355	100

As shown in table 4.4, majority (72.4%) had diploma in health-related discipline. Those with higher diploma and degree were 5.4% and 13.8% respectively. Only 7.6% had a certificate. The results demonstrate that the respondents had requisite training to provide service in the facilities.

4.3.6 Designation

Designation of the mental health personnel was considered in this study to establish whether the facilities had adequate staff to offer mental related services. Table 4.5 presents the results of the analysis.

Table 4.7*Designation of The Respondents*

Designation	Frequency	Percent
Clinician	91	25.6
Medical Officer	36	10.1
Nurse	222	62.5
Psychiatrist	3	0.8
Psychologist	3	0.8
Total	355	100

The results as presented in Table 4.5, depict a worrying scenario. The proportion of both psychiatrist and psychologist was each 0.8 percent of the total population sampled which is extremely very small. The results confirm that there is indeed shortage of skilled professionals to handle mental illness in Kenya (Auditor general, 2017). This indicates that there is need for concerted efforts by the concerned state agencies to increase the number of personnel to address mental related health issues.

4.3.7 Working Experience

The purpose of work experience in this study was to ascertain whether the respondents had the adequate skills to carry out their duties effectively and efficiently. Results of the analysis are presented in table 4.6.

Table 4.8

Working Experience

Experience	Frequency	Percent
Below 5 Years	234	65.9
5 And Above Years	121	34.1
Total	355	100

As presented in Table 4.6, majority of the respondents had less than 5 years of working experience.

This indicates that the facilities are dominated by young professionals. The results collaborate those in table 4.3 which indicated that majority of the respondents were actually youthful.

4.4 Descriptive Analysis of the Study variables

This section presents the descriptive analysis of the study variables. The study variables were measured using 5-point likert scale. For ease of interpretation, the 5-point likert scale were further condensed to yield a 3-point likert scale. Lastly, the likert scaled items measuring each variable were used to compute the specific variables as specified in the conceptual framework. Results of the analysis are as follows:

4.4.1 Geographical Access to Mental Health

The study sought to establish whether mental health services were easily accessible. The results are as presented in table 4.7

Table 4.9*Geographical Access*

SN	Geographical access	Disagreed	Neutral	Agreed	Total
1	Our facility is one kilometer from the community around us	2(0.6)	57(16.1)	296(83.4)	355(100)
2	Our health facility is in operation 24 hours	281(79.2)	8(2.3)	66(18.6)	355(100)
3	Our health facility operates between 8am to 5 pm	63(17.7)	29(8.2)	263(74.1)	355(100)
4	I can easily walk to our health facility by foot	17(4.8)	212(59.7)	126(35.5)	355(100)
5	The roads in our area are impassible during rainy seasons	163(45.9)	176(49.6)	16(4.5)	355(100)

The results as presented in Table 4.7 indicated that the majority (83.4%) of the respondents agreed with the statement that the facility is one kilometre away from the community it serves. In relation to the duration of operation, majority of the respondents (79.2%) felt that the facility never operated for 24 hours, rather it operated between 8am and 5pm.

The results also demonstrated that access to the facilities was relatively good, with few respondents (16%) affirming to the statement that the roads are impassable. Results on accessibility were further condensed to yield the following results.

Table 4.10*Summary on Geographical Access*

Accessibility of Mental Health Facility Recoded	Frequency	Percent
Not Easily Accessible	162	45.6
Easily Accessible	193	54.4
Total	355	100

After consolidating all the responses on geographical access, the results demonstrated that majority of the respondents (54.4%) believed the facilities are easily accessible. Only 45.6% of the respondents felt that the facilities were not easily accessible.

4.4.2 Availability of Mental Health Services

The study sought to determine the availability of mental health services. The results are presented in table 4.9

Table 4.11*Availability of Mental Health Services*

Availability of mental health services	Disagree	Neutral	Agree	Total
Our health facility offers mental health services	221(62.3)	88(24.8)	46(13)	355
We have patients on a mental health service treatment plan	258(72.7)	70(19.7)	27(7.6)	355
Mental health diagnostic equipment are readily available in our facility	337(94.9)	18(5.1)	0(0)	355
We have easily been able to diagnose patients presenting mental health issues	332(93.5)	23(6.5)	0(0)	355
We refer to other facilities patients presenting mental health symptoms	0(0)	0(0)	355(100)	355

As shown in table 4.9 majority of the facilities were not offering mental health services (62.3%). Only 13 percent of the sampled respondents felt that the facilities were offering mental health services.

In relation to mental health services treatment plan, the results showed that most of the sampled facilities lacked patients on a mental health services plan with about 72.7 percent of the respondents disagreeing to the statement that “we have patients on a mental health service treatment plan” and a very small percentage (7.6%) agreeing to the statement.

The results further indicated that the facilities lacked the requisite mental health facilities with 94.9% of the respondents disagreeing to the statement that “Mental health diagnostic equipment are readily available in our facility”.

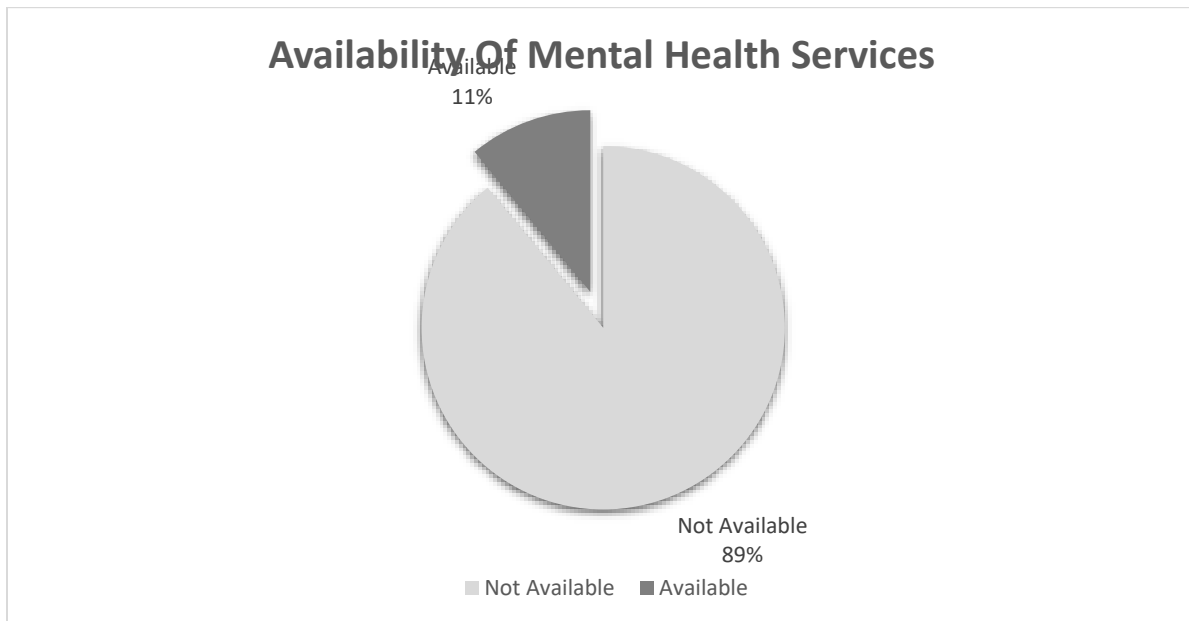
In terms of diagnosis of mental health issues, the results indicated that the facilities lacked capacity to diagnose mental health illnesses with 93.5 percent of the respondents disagreeing to the statement that “We have easily been able to diagnose patients presenting mental health issues”.

Lastly, the results indicated that the facilities refer patients presenting mental illnesses to other facilities with 100% of the respondents agreeing to the statement that “We refer to other facilities patients presenting mental health symptoms”.

Results on availability of mental health services were further condensed to yield the results presented in figure 3.

Figure 4.1

Availability of Mental Health Services



As shown in Figure 1, overall, the results showed that the facilities lacked mental health services.

The results are consistent with WHO (2022) and Marangu et al. (2021a), who emphasize that despite the global push towards integrating mental health into primary healthcare, actual implementation remains limited in Kenya. The absence of such services at primary levels suggests a substantial gap between policy and practice, necessitating more focused efforts on service decentralization.

This calls for concerted efforts to have the said services integrated into the primary health care units.

4.4.2 Affordability of mental health services

The study sought to determine the Affordability of mental health services. The results are presented in table 4.10

Table 4.12*Affordability of Mental Health Services*

Mental health Services affordability	Disagree	Neutral	Agree
We have adequate staff to manage mental health services in our facility	348(98)	7(2)	0(0)
Mental health services like other services are free	106(29.9)	199(56.1)	50(14.1)
Mental health services are paid for in cash in our facility	5(1.4)	268(75.5)	82(23.1)
Our mental health services are paid for by the patients NHIF cover	2(0.6)	337(94.9)	16(4.5)

As shown in Table 4.10, majority of the respondents felt that the facilities lacked adequate staff to manage mental health services with 98% disagreeing to the statement “we have adequate staff to manage mental health services in our facility”.

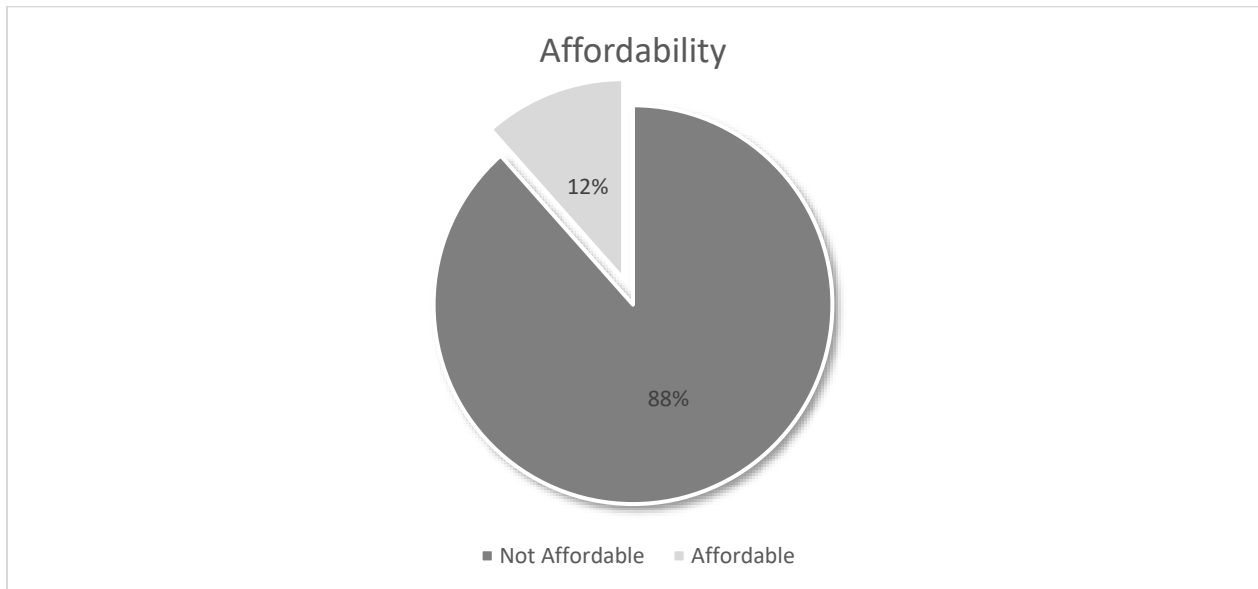
For most facilities, the respondents had no idea about the cost of mental health services with 56.1 percent neither agreeing nor disagreeing to the statement “mental health services like other services are free”

The results showed that most of the people who answered didn't know if patients pay for mental health services out of their own pockets or through their NHIF coverage. About 75.5% of the respondents who answered said they didn't agree or disagree with the statement "Mental health services are paid for in cash in our facility." About 95% of the people who answered said they didn't agree or disagree with the statement "our mental health services are paid for by the patients

NHIF cover." The results on how affordable mental health services are were further shortened to get the results shown in figure 4.

Figure 4.2

Affordability of Mental Health Services



As shown in figure 4, overall, the results showed that mental health services were generally not readily affordable. This calls for concerted efforts to have the said services integrated in the primary health care units.

4.4.3 Mental Health financing/payment mechanisms

The study aimed to investigate the financing of mental health services. The results are presented in Table 4.11

Table 4.13*Mental Health Financing/Payment Mechanisms*

Mental Health financing/payment mechanisms	Disagree	Neutral	Agree
Mental health services are covered under private health insurance	355(100)	0(0)	0(0)
NHIF covers mental health services	3(0.8)	335(94.4)	17(4.8)
The community has a program to manage mental health patients	277(78)	72(20.3)	6(1.7)
Our facility has donor-supported mental health services	355(100)	0(0)	0(0)
The county government allocates an adequate budget for mental health services	351(98.9)	4(1.1)	0(0)

The results presented in table 4.11 indicate mental health services are not covered under private health insurance with all the respondents (100%) disagreeing to the statement that “mental health services are covered under private health insurance.” Majority of the respondents had no idea as to whether NHIF covers mental health services with 94.4 percents neither agreeing nor disagreeing to the statement “NHIF covers mental health services”.

The findings further revealed that there are no programs to manage mental health patients, with 78 percent disagreeing with the statement, “the community has a program to manage mental health patients,” and 20.3 percent uncertain about whether the community has such a program.

The study also established that the sampled facilities did not have donors supporting mental health services with all (100%) of the respondents disagreeing to the statement that “Our facility has donor-supporting mental health services”.

Lastly, the results indicated that the county government do not allocates an adequate budget for mental health services with 98.9% of the respondents disagreeing to the statement that “the county government allocates an adequate budget for mental health services”. The results are in line with

what Green et al. (2021) found: people in countries with universal health care (UHC) were three times more likely to get mental health services than people in countries without such systems.

When the key informants were asked to give views as to why mental health is not a priority in PHC, one of the key informants had the following to say:

“There is prioritization of resources to other sectors compared to mental health. In this facility only small amount of money is allocated to cater for such issues” KI3.

4.4.4 Resource Mobilization

The study sought to determine whether the facilities undertook resource mobilization of mental health services. The results are presented in table 4.12

Table 4.14

Resource Mobilization

<i>Resource Mobilization</i>	Disagree	Neutral	Agree
1. It has been very easy to get funding for mental health services	355(100)	0(0)	0(0)
2. Our facility has staff specifically designated to offer mental health services	269(75.8)	60(16.9)	26(7.3)
3. Our facility has admission wards designated for mental health patients	355(100)	0(0)	0(0)
4. Our facility has adequate medications for mental care services	355(100)	0(0)	0(0)
5. There is a sufficient budget that has been allocated to cater for mental health	355(100)	0(0)	0(0)
6. Our mental health programs are seamlessly resourced continuously	344(96.9)	11(3.1)	0(0)
7. Funds for mental health are sufficient to meet treatment options.	352(99.2)	3(0.8)	0(0)
8. There is an equitable allocation of resources across all the primary healthcare facilities with consideration for mental health	351(98.9)	4(1.1)	0(0)
9. Resources are allocated based on the need-based for every facility	144(40.6)	208(58.6)	3(0.8)

As shown in table 4.12, the results demonstrated that it has not been easy to get funding for mental health services. All the respondents interviewed disagreed to the statement that “it has been very easy to get funding for mental health services”. The results also showed that the facilities do not have staff specifically designated to offer mental services with the majority (75.8%) disagreeing to the statement that “Our facility has staff specifically designated to offer mental health services”. The results collaborated with those of key informants. One of the key informants had this to say *‘There is no financing of mental health activities in the facility’ (K2). There is prioritization of resources to other sectors compared to mental health (K6).*

All the respondents (100%) disagreed to the following statements: “Our facility has admission wards designated for mental health patients, our facility has adequate medications for mental care services, and there is a sufficient budget that has been allocated to cater for mental health.” This implies that there no admission wards designated specifically for mental health patients, there are no adequate medicine for mental health patients and the same is not factored in the medical budget.

Further, the results indicated that mental health programs are not seamlessly resourced continuously with majority of the respondents disagreeing to the statement “our mental health programs are seamlessly resourced continuously”. Besides, 99.2 percent of the respondents felt that funds for mental health are not sufficient to meet treatment option. When asked after mental health financing, KI15 had this to say *“Mental health in relation to mental health financing is not a priority”*.

The results also indicated that there is no equitable allocation of resources across all the primary health care facilities with majority (98.9%) of the respondents disagreeing to the statement that “there is an equitable allocation of resources across all the primary healthcare facilities with

consideration for mental health.” The results agree with those of Tonso et al. (2016), who found that Infrastructure, personnel, and financial resources for general and psychiatric healthcare in Kenya are still scarce.

4.4.5 Risk Pooling

The study sought to determine whether the facilities undertook risk pooling of mental health services. The results are presented in table 4.13

Table 4.15

Risk Pooling

<i>Risk Pooling</i>	Disagree	Neutral	Agree
Our facility implements a population-based provider payment mechanism through capitation	280(78.9)	75(21.1)	0(0)
We have restricted medical care for mental problems	282(79.4)	59(16.6)	14(3.9)

The results presented in table 4.13 indicate that the facilities do not implement population-based provider payment mechanisms through capitation. Majority (78.9) of the respondents of the respondents disagreed with the statement that “our facility implements a population-based provider payment mechanism through capitation”.

The results further indicated that the facilities did not have restricted medical care for mental problems with 79.4% disagreeing to the statement “we have restricted medical care for mental problems”. The results agree with WHO, (2022) who assert that in low- and middle-income countries (LMICs), risk pooling mechanisms remain underdeveloped, with mental health services often marginalized within broader health financing frameworks.

4.4.6 Staff Training

The study sought to determine whether staff were trained to offer mental health services. The results are presented in table 4.14

Table 4.16

Staff Training

Staff Training	Disagree	Neutral	Agree
I am continuously trained in mental health services	273(76.9)	69(19.4)	13(3.7)
I am familiar with the standard procedure for offering mental health services	75(21.1)	230(64.8)	50(14.1)
I have been trained in mental health care	250(70.4)	94(26.5)	11(3.1)
I am knowledgeable in mental health	32(9)	230(64.8)	93(26.2)
I have sufficient training in mental health knowledge	288(81.1)	62(17.5)	5(1.4)
I support mental patients during general practice	2(0.6)	150(42.3)	203(57.1)
I have equity in the distribution of skilled mental health workers	349(98.3)	6(1.7)	0(0)
The staff skill mix is well distributed as per the set standards on mental health services (Mental Health Teams)	344(96.9)	11(3.1)	0(0)

The results indicated that majority of the respondents were not trained to offer mental health services with 76.9 % disagreeing to the statement “I am continuously trained in mental health services” and 19.4 % having no idea about training on mental health services. Besides, the results also indicated that majority of the respondents were not familiar with the standard procedure for offering mental health services with

I am familiar with the standard procedure for offering mental health services with 21.1 % disagreeing and 64.8 % neither agreeing nor disagreeing to the statement “I am familiar with the standard procedure for offering mental health services”.

Further, the results indicated that majority of the respondents have not been trained in mental health care with 70.4 % disagreeing and 26.5% neither agreeing nor disagreeing to the statement “I have been trained in mental health care”. This mirrors WHO (2020) and World Bank (2021) reports that highlight a severe shortage of trained mental health professionals in LMICs. Without adequate human resource capacity, integration efforts will likely remain ineffective, thus underscoring the need for widespread capacity-building initiatives. When asked about mental health care training, one of the key informants had this to say “*No medical training is conducted due to lack of adequate funds and resources.*” KI1

The results also indicated that most of the respondents were not knowledgeable in mental health with 64.8 percent neither agreeing or disagreeing to the statement “I am knowledgeable in mental health”. However, patients presenting mental illnesses are supported during general practice. Majority (57.1%) of the respondents agreeing to the statement “I support mental patients during general practice”.

The results further demonstrated that there is no equity in the distribution of skilled mental health workers. Majority (98.3%) of the respondents disagreed to the statement “I have equity in the distribution of skilled mental health workers”.

The following was suggested to enhance staff training: “

1. *By encouraging staff to attend symposiums on mental health,*
2. *Ensure at least there is training after every quarter.*
3. *Advocating for staffs to attend medical camps on regular basis*
4. *Ensuring all medical training facility provide mental health (KI 15, KI5, KI10)*

4.4.7 Staff Distribution

The study sought to determine distribution of staff offering mental health services. The results are presented in table 4.15

Table 4.17

Staff Distribution

Staff distribution	Disagree	Neutral	Agree
My supervisor supports the provision of mental health services	5(1.4)	305(85.9)	45(12.7)
I have an understanding of interventions for mental health cases	85(23.9)	213(60)	57(16.1)
I advocate mental health care in my departments	3(0.8)	67(18.9)	285(80.3)
We have designated interventions for mental health activities in our facility	256(72.1)	95(26.8)	4(1.1)

The majority of respondents (85.9%), as indicated in table 4.15, were unaware of whether their supervisors encouraged the provision of mental health services. Just 12.7% of respondents said that their managers encouraged the delivery of mental health services.

In relation to interventions targeting mental health cases, majority of the respondents had no ideas as to whether such interventions existed as demonstrated by 60% of the respondents who neither disagreed nor agreed to the statement “I have an understanding of interventions for mental health cases”. Besides, 24.9 % of the respondents disagreed to the statement “I have an understanding of interventions for mental health cases”.

Regarding mental health care advocacy, the vast majority of respondents (80.3%) said they support mental health treatment in their departments. This is an indication of demand to mainstream mental health services in the primary health care. However, most facilities have not designated

interventions for mental health activities in their facilities as demonstrated by the high (72.1%) number of respondents who disagreed to the statement, “we have designated interventions for mental health activities in our facility”.

When asked about staff distribution in their facilities, one of the Key Informant had this to say:

“We only have two staffs, so distribution is a challenge and we end up being overworked.” KI3.

Another Key informant had said *“We have no staffs for mental health.”* KI4

The findings support the WHO mental health treatment gap action program (mhGAP), which claims that low-income countries - especially those in Asia, Latin America, and sub-Saharan Africa - are disproportionately affected by the severe worldwide lack of medical professionals. Given that the bulk of people (70%) live in cities, there is a significant geographic disparity in the peri-urban care availability (Kumar et al., 2022).

4.4.8 Staff skills mix

The study aimed to ascertain the range of abilities possessed by the personnel providing mental health care. The results are presented in Table 4.16.

Table 4.18*Staff Skills Mix*

Staff skills mix	Disagree	Neutral	Agree
Mentoring and coaching are done on junior staff by senior staff	0(0)	64(18)	291(82)
I have a good attitude towards mental health	0(0)	20(5.6)	335(94.4)
I have adequate knowledge of mental health services	273(76.9)	78(22)	4(1.1)
We have adequate acute beds for mental health patients in our facility	333(93.8)	16(4.5)	6(1.7)
Our facility has a specialized psychiatric care unit	354(99.7)	1(0.3)	0(0)
Task shifting is very well embraced by staff in our facility	37(10.4)	280(78.9)	38(10.7)
Our facility does surveys frequently to gauge customer satisfaction	1(0.3)	210(59.2)	144(40.6)
Our facility offers mental care campaigns frequently	147(41.4)	194(54.6)	14(3.9)
Our facility rehabilitates mental patients' cases	354(99.7)	1(0.3)	0(0)
Our facility has a well-established mental care unit	348(98)	7(2)	0(0)

The results presented in Table 4.16 showed that there are coaching and mentoring initiatives among the junior staff by their respective seniors on mental health-related issues. This is confirmed by the majority (82%) of the respondents agreeing to the statement “mentoring and coaching are done on junior staff by senior staff”.

The results further demonstrated that the health practitioners had good attitude towards mental health. Over 94% of the interviewed health practitioners agreed to the statement “I have a good attitude towards mental health”. However, the same practitioners lacked adequate knowledge on mental services with about 76.9% disagreeing to the statement “I have adequate knowledge of mental health services”. The results collaborate those of Tikkanen et al. (2020) who established that in America, there is severe lack of mental care doctors, predominantly psychologists and

psychiatrists. Only 1/3 of United State facilities have psychological well-being doctors at site, in contrast to the Netherlands and Sweden, where more than 90% of primary care facilities do.

The results also indicated that the facilities lacked acute beds for mental health patients and specialized psychiatric care unit. Regarding acute beds for mental health patients, almost 94% of the respondents disagreed to the statement “we have adequate acute beds for mental health patients in our facility” and 99.7% of the respondents disagreed to the statement that “Our facility has a specialized psychiatric care unit”.

Further, the results indicated that most staff had no idea about task shifting with over 78% neither agreeing nor disagreeing to the statement.

In terms of surveys to gauge customer satisfaction, although majority (59.2%) had no idea about existence of such surveys in their facilities, a relatively large proportion (40.6%) felt that facilities conducted surveys to gauge customer satisfaction in as far as mental health care is concerned. However, concerning mental health campaigns, majority of the respondents had no idea about the existence of mental health campaigns as demonstrated the majority neither agreeing nor disagreeing to the statement “Our facility offers mental care campaigns frequently” and 41.4 % disagreeing to the same statement.

Lastly, the respondents unanimously felt that the facilities do not rehabilitate mental health patients and that the facilities lack well established mental units as demonstrated by 99.7% of the respondents who disagreed to the statement “Our facility rehabilitates mental patients’ cases” and the 98% who disagreed to the statement that “Our facility has a well-established mental care unit”.

Concerning skill mix, one of the Key informants had this to say:

“Skilled staffs are inadequate. There is lack of knowledge among the staffs” KI 1

To improve skills, the following was suggested:

“Ensure all staffs have knowledge on mental health by training and equipping their knowledge through talks on the importance of mental health.” KI 9 & KI10).

Leadership and governance and access to mental health services

4.4.9 Capacity Building

The study sought to determine the status of capacity building in the selected health facilities. The results are presented in table 4.17

Table 4.19

Capacity Building

Capacity Building	Disagree	Neutral	Agree
We have a functional mental health policy framework	275(77.5)	72(20.3)	8(2.3)
My manager supports my continuous development of mental health emerging trends	43(12.1)	284(80)	28(7.9)
Our staff have adequate competency to offer effective mental health services	332(93.5)	22(6.2)	1(0.3)
I am /was mentored staff by a senior staff	1(0.3)	87(24.5)	267(75.3)
Our manger is very supportive of the staff in the mental health unit	54(15.2)	278(78.3)	23(6.5)

As shown in table 4.17, the facilities lacked functional mental health policy framework as demonstrated the majority (77.5) disagreeing to the statement “we have a functional mental health policy framework.” In addition, the results indicate that staff are not aware of existence of

opportunities for continuous development of mental health emerging trends as supported by 80% of the respondents who neither agreed nor disagreed to the statement “my manager supports my continuous development of mental health emerging trends” and 12% who disagreed to the same statement.

The results further indicated that the sampled staff lacked adequate competency to offer effective mental services as demonstrated by the over 93.5 % of the respondents who disagreed to the statement “our staff have adequate competency to offer effective mental health services”.

However, the majority of the respondents had no idea as to whether their manager is supportive in the mental health unit. This is backed by the 78.3 % who neither disagreed nor agreed to the statement “Our manger is very supportive of the staff in the mental health unit “and the over 15% who disagreed to the same statement.

On capacity building, one of the key informants had this to say:

*“The leadership should encourage staff to adopt the policies on mental health awareness.”*KI5.

The results agree with those of Poudiougou et al. (2021) who established that, despite their great incidence, mental illnesses still have a substantial impact in Tunisia but, it is still being treated and diagnosed inadequately. The average baseline knowledge score for medical professionals before to first guidance remained low (24.6/100), and distinctive criterion scores ranged from 0.11-0.47, demonstrating the knowledge gap and insufficient training on mental health, which have also been highlighted in other countries.

4.4.10 Policy implementation

The study sought to determine there are policies to support the implementation of mental health care. The results are presented in table 4.18

Table 4.20

Policy Implementation

Policy implementation	Disagree	Neutral	Agree
There are cost-effective strategies implemented to support mental health cases	276(77.7)	79(22.3)	0(0)
The government has shown commitment to safeguarding the mental health of the citizens	346(97.5)	6(1.7)	3(0.8)
Our manager ensures that mental health patients are treated in the general practice	1(0.3)	220(62)	134(37.7)
I use a people-centered approach to mental health patient's needs	32(9)	250(70.4)	73(20.6)
There are strategies in place to implement the incorporation of mental health care to remain aligned with UHC	324(91.3)	28(7.9)	3(0.8)
There are accountability mechanisms in place	40(11.3)	97(27.3)	218(61.4)
I have knowledge of mental health policies	82(23.1)	193(54.4)	80(22.5)
I use guidelines for simple reference during in-service training in mental health	32(9)	214(60.3)	109(30.7)

The results, as presented in Table 4.18, indicated that the sampled facilities did not have cost-effective strategies implemented to support mental health cases. This is supported by over 77% of the respondents who disagreed and 22.3 % who neither concurred nor disapproved of the assertion “There are cost-effective strategies implemented to support mental health cases”.

The study also established that the Kenyan government lacks commitment in safeguarding mental health of its citizen. This is supported by a whopping majority (97.5%) who overwhelmingly disagreed to the statement “The government has shown commitment in safeguarding the mental health of the citizens”.

About 38% of respondents said that their management do, in fact, make sure that mental health patients are treated in the general practice, despite the fact that the majority of respondents (62%) were unaware of this fact. This showed that mental health was significantly integrated into primary care.

Further, the results showed that health practitioners lack knowledge on use of people-centered approach to mental health patient’s needs with over 70 % neither agreeing nor disagreeing to the statement “I use a people-centered approach to mental health patient’s needs”.

Although the findings indicated existence of accountability mechanisms with the majority (61.4%) agreeing to the statement “there are accountability mechanisms in place”, it is worrying to note that the facilities lack strategies to implement the incorporation of mental health care so that it can remain aligned with UHC. Worse still, majority of the respondents lacked knowledge on mental health policies as witnessed by the 23.1% who disagreed and the over 54% who neither agreed nor disagreed to the statement “I have knowledge of mental health policies.” The results mirror a research project which was carried out in Mexico on the execution process and results of the programs revealed that although programs encouraged their integration, mental health services are still largely unavailable in the nation (Miguel-Esponda et al., 2020).

4.4.10 Monitoring and Evaluation

The study's goal was to find out if mental health care services are being watched and evaluated.

Table 4.19 shows the results.

Table 4.21

Monitoring and Evaluation

Monitoring and evaluation	Disagree	Neutral	Agree
My manager ensures that there is monitoring of our service delivery	0(0)	269(75.8)	86(24.2)
Evaluation is performed yearly on our services delivered	0(0)	265(74.6)	90(25.4)
New actions are always implemented after the monitoring phase of mental health service delivery	89(25.1)	264(74.4)	2(0.6)
There is a continuous assessment of the interventions done on mental health	180(50.7)	158(44.5)	17(4.8)
We can effectively sustain offering mental health services	330(92.9)	25(7.1)	0(0)

The majority of respondents (75.8%), as seen in Table 4.19, were undecided about the statement: “My manager ensures that there is monitoring of our service delivery”. Only about 24% agreed with the same statement. This implies that, for most of the facilities, managers rarely ensure that there is monitoring of service delivery.

The results further indicated that the majority had no idea as to whether evaluation of service delivery is carried out every year, as depicted by a high (74.6) proportion who never agreed nor disagreed with the statement that “evaluation is performed yearly on our services delivered”. With only 25.5% agreeing that evaluation is performed yearly, it is evident that few facilities are incorporating mental health care into primary health care.

The results also indicated that only a few facilities (25.1%) implement new actions after the monitoring phase of mental health service delivery.

The findings showed that there is no ongoing evaluation of the mental health therapies carried out at the majority of the facilities involved in this study. This is demonstrated by over 50% disagreeing and 44.5% neither agreeing nor disagreeing with the statement “there is continuous assessment of the interventions done on mental health.” Besides, the respondents felt that the facilities cannot effectively sustain offering mental health services, as demonstrated by a whopping 92.9 % who disagreed with the statement “we effectively can sustain offering mental health services”. The results are consistent with a descriptive study that was carried out in four counties in Western Kenya. The survey showed that services are not well integrated, there are no mental health initiatives that are distinctive to each county, and mental health treatment is not well integrated into basic healthcare institutions. The study also found problems in how data is collected and reported, which makes it harder to keep an eye on and evaluate mental health services (Mwiti et al., 2021).

A cross-sectional study of the mental health literacy of primary health care workers in Kenya also found that only 8.7% had taken appropriate continuing professional development courses in the past five years and only 13% had official mental health certifications. Additionally, just slightly more than one-third (35.6%) were able to accurately identify sadness, and even fewer (15.7%) were able to diagnose schizophrenia. These results highlight the necessity of improving primary health care professionals' training and capacity building in order to increase the provision of mental health services and their subsequent assessment (Olima & Mungai, 2023).

4.4.11 Integrating Mental Health Services in Primary Care Facilities

The current state of mental health service integration in primary care settings is discussed in this section. Table 20 presents the findings.

Table 4.22:

*Integrating Mental Health Services in Primary Care Facilities Integrating Mental Health Services
in Primary Care Facilities*

Redesigned model of care			
Statement	Disagree	Neutral	Agree
There are adequate plans to offer construction spinal superior mental care services from philanthropic crises	339(95.5)	16(4.5)	0(0)
There are established pre-arranged services from scratch in primary care facilities where that haven't been mental health services	338(95.2)	17(4.8)	0(0)
There are adequate response strategies to manage mental health care	313(88.2)	37(10.4)	5(1.4)
Our facility has strategies in place to sustain mental health service delivery	314(88.5)	37(10.4)	4(1.1)
There is training to equip staff members who engage in serious mental diseases	315(88.7)	33(9.3)	7(2)
We have introduced a community-based approach to offering mental care services to communicate	210(59.2)	131(36.9)	14(3.9)
Advocacy			
Statement	Disagree	Neutral	Agree
Community health workers provide support for patients and families with clear treatment plans	32(9)	292(82.3)	31(8.7)
We are involved in mental health advocacy campaigns in the local community	32(9)	295(83.1)	28(7.9)
We empower through training community health workers and traditional healers on how to manage persons with mental disorders	248(69.9)	92(25.9)	15(4.2)
The management has put in place a program for mental health advocacy	151(42.5)	178(50.1)	26(7.3)
There is public participation in advocating for mental healthcare	39(11)	293(82.5)	23(6.5)
Mental health is included in our outreaches to the community	53(14.9)	175(49.3)	127(35.8)
Number of people seeking Mental Health Services			
Statement	Disagree	Neutral	Agree
Our facility has been offering mental health services for a long time	330(92.9)	22(6.2)	3(0.8)

There is a great improvement in treating and ensuring there is access to mental care in PHC 178(50.1) 169(47.6) 8(2.3)
State the number of people seeking mental health services

4.4.11 Redesigned Model of Care

As shown in table 4.20, mental healthcare integration in primary care facilities had 3 parameters namely; redesigned model of care, advocacy and Number of People Seeking Mental Health Services. In terms of redesigned model of care the study established that primary healthcare (PHC) facilities in the selected counties exhibit significant deficiencies in preparing for mental health service integration. A striking 95.5% of participants disagreed with the assertion that there are structured plans to develop mental health services, indicating serious infrastructural gaps. This mirrors the findings of Ransing et al. (2022), who reported widespread infrastructural weaknesses hindering mental health system development in LMICs.

Similarly, 95.2% of respondents noted the absence of newly instituted mental health services where none existed previously, suggesting that mental health remains largely excluded from PHC priorities. The World Health Organization's Mental Health Report (2023a) confirms that mental health integration in many LMICs remains superficial and inconsistent.

In relation to response mechanisms, 88.2% of respondents disagreed that adequate strategies are in place, highlighting a deficiency in managing mental health emergencies and routine care needs. Keynejad et al. (2021) noted that the absence of clearly defined care pathways continues to obstruct effective mental health responses at the PHC level across sub-Saharan Africa.

Furthermore, 88.5% of respondents reported the absence of strategies to ensure the sustainability of mental health services, a finding consistent with Hoefl et al. (2023), who argue that without

sustained funding and institutional commitment, efforts toward mental health integration are unlikely to succeed.

Staff training for serious mental health conditions was also reported as lacking, with 88.7% of respondents affirming no formal training initiatives. This supports the conclusions of Reisdorfer et al. (2022), who found that a lack of continuous professional development critically impairs the ability of PHC workers to offer quality mental healthcare.

Regarding community-based mental health care, 59.2% of participants disagreed that such approaches had been introduced. This suggests that although there may be isolated efforts, widespread implementation remains limited. De Menil et al. (2020) similarly observed that despite the recognized importance of community-based models, their adoption within PHC systems in LMICs remains inadequate due to logistical and financial constraints.

The study also explored the extent of mental health advocacy within the PHC facilities. Support from community health workers (CHWs) for patients and families was reported as neutral by 82.3% of respondents, implying that while CHWs are somewhat involved, structured and strategic engagement is lacking. Upadhaya et al. (2020) similarly found that CHWs often support mental health care informally but require systematic training to function effectively within integrated models.

Participation in mental health advocacy campaigns was also moderate, with 83.1% neutral responses. This suggests that facilities recognize the role of advocacy but have not fully operationalized it. Vigo et al. (2019) emphasized that active advocacy is essential to shift societal attitudes and enhance service utilization.

Empowering CHWs and traditional healers through structured training was notably absent, with 69.9% disagreement. Amini et al. (2023) highlighted the value of including traditional providers in mental health interventions, noting that such strategies enhance cultural acceptability and broaden access.

Leadership engagement in mental health advocacy was weak, as indicated by 42.5% disagreement and 50.1% neutrality. This aligns with the WHO (2023) findings that leadership and governance frameworks for mental health are underdeveloped in many LMICs, limiting the effectiveness of integration efforts.

Public participation in mental health advocacy yielded relatively positive responses (82.5% neutrality), indicating growing awareness. However, the passive stance reflected by neutrality suggests that more active mobilization efforts are necessary. The Lancet Commission on Global Mental Health (2022) underscores the importance of engaging communities proactively to normalize mental health discussions and stimulate demand for services.

Concerning mental health integration in community outreach activities, while 35.8% agreed that mental health was included, nearly half (49.3%) remained neutral. Barry et al. (2022) argue that embedding mental health messaging in broader health outreach activities is crucial to improving public awareness and early help-seeking behaviours.

Regarding service delivery history, an overwhelming 92.9% of respondents disagreed that their facilities had long provided mental health services. This finding is consistent with Charlson et al. (2019), who observed that historically, mental health has been marginalized within PHC systems across sub-Saharan Africa.

Additionally, perceptions regarding improvements in access and treatment were largely pessimistic, with 50.1% of participants disagreeing and 47.6% remaining neutral. Kola et al. (2021) noted that while many LMICs have developed mental health policies, the actual implementation at service delivery points has been slow and inconsistent, resulting in persistent treatment gaps.

Overall, the low number of people seeking mental health services, coupled with perceptions of minimal improvement, highlights enduring systemic challenges. Underinvestment, inadequate human resources, limited community engagement, and poor infrastructure continue to undermine progress toward equitable mental health service delivery in the primary care setting.

4.4.12 Infrastructure

The effectiveness of service delivery is largely determined by healthcare infrastructure, which is also necessary for incorporating mental health services into primary healthcare (PHC) systems. This study examined healthcare infrastructure in three key domains: physical infrastructure, health product technologies (HPTs), and information and communication technology (ICT). In table 4.21, the results are shown.

Table 4.23*Infrastructure*

SN	Physical infrastructure	Disagree	Neutral	Agree
1	Our facility has power most of the times	273(76.9)	78(22)	4(1.1)
2	We have adequate rooms for consultations Phones are available in the consultations spaces to	333(93.8)	16(4.5)	6(1.7)
3	support consultants within the facility	354(99.7)	1(0.3)	0(0)
4	We have adequate transportation vehicles	147(41.4)	194(54.6)	14(3.9)
5	We have adequate ambulances to transport patients The ambulances are well equipped to manage	354(99.7)	1(0.3)	0(0)
6	emergency cases	348(98)	7(2)	0(0)
7	We have adequate counselling rooms	355(100)	0(0)	0(0)
8	We have spacious consultation rooms	351(98.9)	4(1.1)	0(0)
	HPT	Disagree	Neutral	Agree
1	Our facility has quality medical products to treat mental care cases	355(100)	0(0)	0(0)
2	We have proper storage for our medical products There are adequate available psychotic drugs in our	355(100)	0(0)	0(0)
3	facility	344(96.9)	11(3.1)	0(0)
4	We rarely have mental health commodity stock outs We have e-health services to support mental health	352(99.2)	3(0.8)	0(0)
5	services	351(98.9)	4(1.1)	0(0)
	ICT	Disagree	Neutral	Agree
1	We have adequate ICT resources that facilitates continuous care and monitoring of patients	280(78.9)	75(21.1)	0(0)
2	We have an information system that supports seamless collaborative patient care	282(79.4)	59(16.6)	14(3.9)
3	We can offer psychiatric clinic services through video conferencing	344(96.9)	11(3.1)	0(0)

The study indicated that 76.9% of facilities had regular power interruptions, which made it hard to supply services. The results are in line with what Kakuma et al. (2011) found, which was that unreliable power is a major problem in places with few resources.

41.4% of respondents said there weren't enough good transport vehicles, and 54.6% didn't say anything, which suggests that there are big problems with transportation. This is in line with research by Kigozi et al. (2010) and Jenkins et al. (2010), which found that transportation problems make it harder for people to get mental health care, especially in rural locations. Also, the fact that

just 0.3% of ambulances were available in this study is consistent with other studies that have shown that there is typically a lack of emergency transportation in LMICs (Saraceno et al., 2007).

The results show that all of the facilities that were surveyed (100%) did not have good medical items or the right way to store mental health meds. However, 96.9% of facilities reported occasional shortages of psychotropic drugs, aligning with Saraceno et al. (2007), who found that stockouts of mental health commodities remain a common issue in LMICs. The near-complete availability of e-health services (98.9%) to support mental healthcare partially aligns with WHO (2022), which noted increasing e-health adoption but also highlighted infrastructural constraints in implementation.

A significant proportion (78.9%) of respondents disagreed that their facilities had adequate ICT resources for patient monitoring, while 79.4% reported that they lacked integrated information systems. These findings strongly align with WHO (2022) and Patel et al. (2018), who noted that ICT infrastructure remains a major challenge in mental healthcare integration, particularly in LMICs.

Further, the study found that 96.9% of facilities could not offer psychiatric services via video conferencing, which agree with previous research by Patel et al. (2018), where telepsychiatry was found to be underutilized due to infrastructure and connectivity issues. these results not only indicate existence of ICT deficiencies but also lack of innovative solutions such as video conferencing to address gaps in mental health service delivery.

4.7 Hypothesis Testing

Five hypotheses were investigated in order to ascertain whether primary healthcare institutions in a few Kenyan counties were prepared to integrate mental health services for access. Access to

mental health treatments that were classified as "accessible" or "not accessible" was the dependent variable. This was accomplished by combining all of the replies about mental health access and computing the accessibility test score. There were fifteen items on the questionnaire that assessed mental health care accessibility using a five-point Likert scale. A score of 15 to 45 on the accessibility test indicated that mental health services were not easily accessible, whereas a score of 45 or more indicated that mental health care services were easily accessible. The chi square test of significance was used for the preliminary analysis. When determining if two category variables are related, chi square is a suitable tool. This study's variables are all categorical. Cross tabulations were performed in SPSS version 25 to get the chi square values. The impact of the explanatory factors on the outcome variable was then ascertained using binary logistic regression. Cause-and-effect connections between the variables under investigation. A dichotomous outcome variable is predicted using binary logistic regression. The outcome variable in this study was binary.

4.7.1 Hypothesis 1

H₀: There is no significant relationship between healthcare financing in primary care facilities and access to mental health services in Kenya.

To achieve this, responses on health care financing and access to mental health were cross-tabulated. Health care financing was measured using risk pooling, resource mobilization, and payment mechanisms. Mental health access was categorized as "accessible" and "not accessible". Pearson's chi-square results for resource mobilization and mental health care, $\chi^2 = 20.832$, $n = 355$, $p = 0.001$. For risk pooling and mental health care access, $\chi^2 = 95.991$, $n = 355$, $p = 0.001$. For payment mechanisms and mental health care access, $\chi^2 = 25.753$, $n = 355$, $p = 0.001$. This implies that risk pooling, payment mechanisms, and resource mobilization are key predictors of mental health access in Kiambu and Makueni Counties. The results agree with those of Chisholm (2019

who established that, although there are prospects due to current national insurance system reforms and rekindled political interest in mental health, the main obstacles to sustainable mental health financing were found to be inadequate funding allocated to mental health services, widespread access disparities, and poverty (Chisholm et al., 2019). In Singapore, Mental health was never traditionally a priority in Singapore (as is the case with other Asian countries), and resources have tended Health-care financing and mental health services in Singapore been scarce, despite Singapore being a relatively wealthy country.

4.7.2 Hypothesis

Additionally, the study aimed to ascertain if human resource determinants affect mental health treatment access in basic healthcare institutions in Makueni and Kiambu counties. This hypothesis was developed in order to accomplish this goal.

H₀: Human resource factors do not significantly influence access to mental health services in Kenya.

The three dimensions of human resource considerations were staff skills mix, staff distribution, and staff training. A cross-tabulation was performed between each of these areas and mental health access. The Pearson's chi-square for staff training and mental health access is $\chi^2 = 110.603$, $n = 355$, $p = 0.001$. This suggests that in Makueni and Kiambu Counties, access to mental health treatment is strongly correlated with staff training. The Pearson's chi-square for staff distribution access to mental health is $\chi^2 = 61.837$, $n = 355$, $p = 0.001$. This suggests that in Makueni and Kiambu Counties, staff distribution is a strong predictor of access to mental health services. According to the Pearson's chi-square analysis, staff skills mix and mental health access are substantially correlated in Kiambu and Makueni counties ($\chi^2 = 55.664$, $n = 355$, $p = 0.001$). The

results are consistent with those of Ayano (2017b), who found a substantial correlation between healthcare service and staffing. He says that medical specialists are the only ones who can help with mental, neurological, and substance use problems. This is necessary for mental health to be successfully integrated into PHC. The study found that mental health training can help primary health care personnel learn more about mental, neurological, and substance use disorders and change their attitudes and behaviours towards them.

Additionally, the results align with the findings of Chu et al. (2022), who discovered that a large number of South African nurses have bad opinions about those who suffer from mental illness and lack the abilities and information required to recognize and treat mental health conditions. Consequently, typically insufficient and subpar services are rendered.

4.7.3 Hypothesis 3

The third objective of this research was to determine whether or not the factors of leadership and governance had an impact on the availability of mental health treatments in primary care institutions located in the counties of Kiambu and Makueni. In order to achieve this objective, the theory that is presented here was constructed.

H0: In Kenya, access to mental health care is not substantially impacted by leadership or governance.

There were three areas of leadership and governance: monitoring and evaluation, policy execution, and capacity building. Each domain was cross tabulated against access to mental health services. The analysis's findings were as follows: The Pearson's chi-square for capacity building and mental health care access is $\chi^2 = 160.544$, $n = 355$, $p = 0.001$. This suggests that in Kiambu and Makueni Counties, capacity building is a key predictor of access to mental health treatment. The Pearson's

chi-square for monitoring and evaluation is $\chi^2 = 144.852$, $n = 355$, $p = 0.001$, whereas the chi-square for policy implementation and access to mental health services is $\chi^2 = 61.004$, $n = 355$, $p = 0.001$. According to these findings, access to mental health care in Makueni and Kiambu Counties was substantially correlated with all areas of leadership and governance.

4.7.4 Hypothesis 4

Another goal of the study was to find out if the way primary care facilities were built affected Kenyans' ability to get mental health care. The following hypothesis was made and tested at the 5% level of significance to help reach this goal.

Ho: Healthcare infrastructure in primary care facilities does not significantly influence access to mental health services in Kenya.

ICT, HPTs, and physical infrastructure were the three areas of health infrastructure. We looked at how easy it was to get mental health care in each area. The analysis gave the following results: The chi-squared Pearson's test for mental health treatment access and physical infrastructure is $\chi^2 = 145.349$, $n = 355$, $p = 0.002$. This suggests that in Kiambu and Makueni Counties, physical infrastructure significantly predicts access to mental health services. The Pearson's chi-square for HPTs and mental health care access was $\chi^2 = 64.001$, $n = 355$, $p = 0.001$, whereas the chi-square for ICT was $\chi^2 = 137.618$, $n = 355$, $p = 0.001$. According to these findings, access to mental health treatments in Makueni and Kiambu Counties was substantially correlated with every aspect of the healthcare infrastructure. The results agree with those of Hlongwa and Sibiya, (2019) who established that Patients' privacy and confidentiality must always be upheld, and there must be enough space for both consultations and counselling. Besides, the environment of care must be accommodating and secure for patient management and counselling when multidisciplinary teams

visit the clinic. Spacious consulting rooms should be provided in particular to accommodate everyone, even the challenging patients.

4.7.5 Hypothesis 5: integration of Mental Health Services and access to mental healthcare in Primary Health Facilities

The study also wanted to find out if combining mental health care with primary care makes it easier for people in Kenya to get mental health treatment. We came up with the following hypothesis and tested it at the 5% level of significance to help us reach this goal.

Ho: Adding mental health services to primary care health facilities in Kenya doesn't make it much easier to go there.

The integration of health care was seen in three areas: advocacy, the number of patients seeking mental health treatment, and a new style of care. The accessibility of mental health treatment was one of the factors we considered. Here are the findings from the analysis: The mental health care access and advocacy Pearson's chi-square test yielded $\chi^2 = 142.249$, $n = 355$, and $p = 0.002$. As a result, it seems that advocacy significantly predicts the availability of mental health services in the counties of Kiambu and Makueni. In contrast to the new model of care and access to mental health services, the Pearson's chi-square for the number of persons seeking mental health services is 2.003 ($n = 355$, $p = 0.081$), whereas the former had a value of 2.628 ($n = 355$) and a p-value of 0.087. The results demonstrate that advocacy is the only significant factor associated with mental health treatment accessibility in Makueni and Kiambu Counties.

4.8 Diagnostic Tests

Diagnostic tests were carried out to verify the appropriateness of the dataset for statistical analysis. Specifically, tests for **normality**, **multicollinearity**, **homoscedasticity**, and **autocorrelation** were conducted to confirm that the dataset met the fundamental assumptions required for regression analysis.

4.8.1 Normality Test

To determine whether the dataset followed a normal distribution, the **Kolmogorov-Smirnov (K-S) test** was utilized. This test assesses whether the distribution of variables significantly deviates from a normal curve. The **null hypothesis (H₀)** assumes that the data is normally distributed and is retained if the **significance value (p-value) is greater than 0.05**.

Table 4.8

Kolmogorov-Smirnov Normality Test

Variable	Statistic	df	p-value
Financing Mental Health	0.132	355	0.071
Human Resource Factors	0.145	355	0.081
Leadership and Governance	0.163	355	0.077
Mental Health Infrastructure	0.158	355	0.062
Mental Health Integration	0.172	355	0.189
Access to Mental Healthcare	0.129	355	0.076

Since all variables have **p-values greater than 0.05**, the assumption of normality holds. The dataset is deemed appropriate for statistical analysis using parametric methods such as regression and correlation analysis. Given that the **null hypothesis was retained**, the dataset is confirmed to be normally distributed, allowing for robust inferential analysis.

4.8.2 Multicollinearity Test

Multicollinearity, which occurs when independent variables are highly correlated, was assessed using **Variance Inflation Factor (VIF) and Tolerance values**. The results are presented in table 4.9

Table 4.23

Variance Inflation Factor (Vif) And Tolerance Values

Variable	Tolerance	VIF
Financing Mental Health	0.232	4.310
Human Resource Factors	0.214	4.673
Leadership and Governance	0.229	4.367
Mental Health Infrastructure	0.236	4.237
Mental Health Integration	0.207	4.831

As shown in table 4.9, the **VIF values** ranged between **4.237 and 4.831**, all of which are **well below the threshold of 10**, indicating the absence of significant multicollinearity. The **Tolerance values**, which were all above 0.1, further confirm that the variables do not exhibit excessive correlation. These findings validate that **multicollinearity is not a concern**, ensuring that predictor variables maintain their individual explanatory power within the model.

4.8.3 Homoscedasticity Test

Homoscedasticity, which refers to the constant variance of residuals across levels of independent variables, was assessed using **Levene's test for equality of variances**.

Table 4.24

Levene's Test for Homoscedasticity

Dependent Variable	F-statistic	p-value
Y (Outcome Variable)	24.146	0.064

Since the **p-value (0.064 is greater than 0.05)**, the **null hypothesis (H₀) of equal variances is accepted**, confirming that the residual variances are constant. The results indicate that the dataset satisfies the **homoscedasticity assumption**, ensuring that the regression model produces efficient and unbiased parameter estimates.

4.8.4 Autocorrelation Test

The **Durbin-Watson (D-W) test** was applied to examine whether errors in the regression model were correlated over time.

Table 4.25

Durbin-Watson Autocorrelation Test

Model	R	R²	Adjusted R²	Std. Error	Durbin-Watson
1	0.841	0.707	0.839	0.221	1.64

The **Durbin-Watson statistic (1.64)** falls within the acceptable range of **1.5 to 2.5**, indicating **no significant autocorrelation** in the residuals. The findings confirm that the **assumption of independent residuals holds**, ensuring the reliability of statistical inferences.

4.9 Regression Analysis

Binary logistic regression analysis results are shown below. To determine the factors that influenced the change in the dependent and independent variables, logistic regression was used.

We only saw the existence of a relationship between each independent variable and the dependent

variable in the chi-square findings that we discussed previously. Even so, it failed to prove that the dependent variable was caused by each of the independent variables. After that, we used binary logistic regression to determine the cause-and-effect relationships between the study variables. When dealing with binary dependent variables, logistic regression is the best regression model to use. The accessibility of mental health services served as the dependent variable here. All of healthcare's upper management, employees, and funding mechanisms are regressors. Finding the relative contributions of each independent variable to the dependent variable becomes much simpler using logistic regression. The following findings were derived from the analysis:

4.10 Analysis of Bivariate Logistic Regression

The goal of bivariate logistic regression analysis was to find out how each predictor variable affected the dependent variable, taking into account how the other independent variable affected it as well. Here are the results:

4.10.1 Relationship between Healthcare Financing in Primary Care Facilities and Access to Mental Health Services in Kenya

Bivariate logistic regression was used to ascertain how healthcare finance affected the availability of mental health treatments in Kenyan primary care facilities.

Table 4.26

Omnibus Test of The Model Coefficient

	Chi-square	df	P-value
Step1	85.467	2	0.000
Block	85.467	2	0.000
Model	85.467	2	0.000

When all of the research variables are taken into account at once, the model's predictive power is indicated by the omnibus test of model coefficients. As can be seen in Table 4.21, the model's block p-value was $p < 0.01$, indicating that it was suitable for use in prediction.

Table 4.27

Model Summary

	Cox & Snell's R Square	Nagelkerke's R Square
-2 Log likelihood		
160.350a	0.214	0.428

Health care finance would explain around 42.8% of the differential in access to mental health treatment in Makueni and Kiambu Counties when all other factors are kept constant, as shown in table 4.22.

Table 4.28

The Hosmer & Lemeshow's Test

Chi-square	df	p-value
0.788	2	0.674

To further determine whether the model is suitable for binary logistic regression, the Hosmer and Lemeshow test is used. Both the alternative and the null hypothesis state that the model is excellent or bad. According to Table 4.23, the results of the chi-square test were $\chi^2 = 0.788$ and $p = 0.674$. This rendered the possibility of rejecting the null hypothesis moot. This provides strong evidence that the model fits the data and makes accurate predictions.

Table 4.29*Variables in The Equation*

Factor	Variable	B	S.E.	Wald	df	P-Value	Odds Ratio
Financing	Resource Mobilization						
	There is Resource Mobilization (RC)	-					1.000
	No Resource Mobilization	0.794	0.496	2.563	1	0.014	0.452
	Risk Pooling						
	There is Risk Pooling (RC)	-					1.000
	No Risk Pooling	1.434	0.984	2.124	1	0.000	0.238
	Payment Mechanism						
	Out of Pocket (RC)						1.000
	Insurance	0.598	0.421	2.018	1	0.014	1.818

In Makueni and Kiambu Counties, how health care is paid for was a big factor in how easy it was to get mental health care (table 4.24). Facilities that didn't have operational and clear resource mobilisation strategies for mental health access had 0.452 times less access to mental health care than those that did. The results were important at the 5% level. The results are as expected since studies elsewhere have linked access to mental healthcare to improved healthcare financing. As pointed out by Chisholm et al. (2019), many developing countries lack government endorsed policy, plan and law for mental health. For other countries, the documents have been drafted but not passed an indication of a very weak environment for attracting mental health financing (Chisholm et al., 2019).

The study found that in Makueni and Kiambu Counties, risk pooling is a major predictor of access to mental health care. When primary healthcare institutions that never used risk pooling of resources to finance mental health treatment were compared to those that did, access to mental

health care was 0.238 times lower. The results were significant at 5% level. The results are to be expected since in most of sub-Saharan Africa, according as pointed out by Kumar, et al., (2021), there has been very little progress made in integrating mental healthcare into the universal coverage objective and ultimately achieving UHC. This is due to the fact that most people in these nations are extremely poor and unable to afford high-quality healthcare, there is a sizable uninsured informal sector, and the main healthcare system's inadequate funding makes it difficult to integrate mental healthcare locally.

Besides, resource allocation in LMIC differ noticeably those in high income countries. Compared to higher income countries, LMIC devote smaller global expenditure to mental health. According to Chisholm et al. (2019, most LMIC depend on personal savings to cover costs (16.4%). There are still significant disparities between counties in terms of the percentage of the county health budget that is dutiful to mental health.

Regarding payment methods, the study found that in Makueni and Kiambu Counties, the method of payment significantly predicts access to mental health services. The primary healthcare institutions that accepted medical insurance schemes had 1.818 times more access to mental health treatment than their counterparts who did not accept medical insurance schemes. At the 5% level, the results were significant. The findings are consistent with those of Green et al. (2021), who discovered that people in nations with universal health coverage (UHC) had a threefold higher likelihood of seeking mental health care compared to those in nations without such programs. Conversely, limited insurance coverage often leads to reduced access due to high direct costs, preventing many from seeking necessary care.

4.10.2 Relationship between Human resource factors and access to mental health services in Kenya.

Bivariate logistic regression was used to ascertain how human resource characteristics affected access to mental health treatments in Kenyan primary care institutions.

Table 4.30

Omnibus Test of The Model Coefficient

	Chi-square	df	P-value
Step1	98.775	3	0.000
Block	98.775	3	0.000
Model	98.775	3	0.000

As can be seen in Table 4.21, the model's block p-value was $p < 0.01$, indicating that it was suitable for use in prediction.

Table 4.31

Model Summary

	Cox & Snell's R Square	Nagelkerke's R Square
-2 Log likelihood	0.243	0.486
147.042a		

According to Table 4.22, human resource considerations would explain around 48.6% of the disparity in mental health care availability in Makueni and Kiambu Counties when all other factors are kept constant.

Table 4. 32*The Hosmer & Lemeshow's Test*

Chi-square	df	p-value
0.432	3	0.933

The Hosmer and Lemeshow test is also used to assess the model's appropriateness in a binary logistic regression. When compared to the alternative that the model is not fit, the null hypothesis is that the model is appropriate. The chi-square values, as shown in Table 4.23, were $\chi^2 = 0.432$, $p = 0.933$. Therefore, we were unable to rule out the null hypothesis. This suggests that the model has a high degree of predictive power and is appropriate for this investigation. The model was determined to be suitable for this investigation.

Table 4.33*Variables in The Equation*

Factor	Variable	B	S.E.	Wald	P-Value	Odds Ratio
	Staff Training					
	There is Training on Mental Health (RC)	-				1.000
	No Training on Mental Health	2.476	0.541	20.973	0.000	0.084
	Staff Distribution					
Human Resources	Good (RC)	-				1.000
	Poor	0.963	0.525	3.368	0.046	0.382
	Staff Skills Mix					
	Some Mental Health Skills (RC)	-				1.000
	No Mental Health Skills	2.573	0.802	10.305	0.001	0.076

Table 4.24 shows that human resource factors significantly impact mental health treatment accessibility in Makueni and Kiambu Counties. Institutions without primary health care professionals who had received mental health training had 0.084 times worse access to mental health treatment compared to those whose present personnel had received some mental health care training. The findings were deemed significant at the 5% level.

The research concluded that staff dispersion is a strong predictor of mental health care accessibility in the counties of Makueni and Kiambu. Access to mental health treatment was 0.382 times lower in primary healthcare institutions with a poor staff distribution compared to those with a relatively great distribution of workers knowledgeable about mental health. The findings were deemed significant at the 5% level.

Staff skill mix was also shown to have a considerable correlation with access to mental health treatment in Makueni and Kiambu Counties. Compared to primary healthcare personnel with certain mental health care abilities, those without these abilities had 0.076 times less access to mental health treatment in primary healthcare facilities. The findings were deemed significant at the 5% level.

4.10.3 Relationship between leadership and governance and access to mental health services in Kenya.

Bivariate logistic regression was used to ascertain how leadership and governance affected access to mental health treatments in Kenyan primary care institutions.

Table 4.34*Omnibus Test of The Model Coefficient*

	Chi-square	df	P-value
Step1	128.457	3	0.000
Block	128.457	3	0.000
Model	128.457	3	0.000

As can be seen in Table 4.25, the model's block p-value was $p < 0.01$, indicating that it was suitable for use in prediction.

Table 4.35*Model Summary*

	Cox & Snell's R Square	Nagelkerke's R Square
-2 Log likelihood	0.304	0.608

According to table 4.26, leadership and governance are responsible for around 60.8% of the variance in access to mental health treatment in Makueni and Kiambu Counties when all other factors are kept constant.

Table 4.36*The Hosmer & Lemeshow's Test*

Chi-square	df	p-value
3.076	2	0.215

When doing a binary logistic regression, the adequacy of the model is assessed using the Hosmer and Lemeshow test. The appropriateness of the model is upheld by the null hypothesis, as opposed to the alternative that the model is not fit. The results are shown in Table 4.27, where the chi-square values were $\chi^2 = 3.076$, $p = 0.215$. As a result, we couldn't exclude the possibility of the null hypothesis. This provides strong evidence that the model is well-suited to this study and has a high level of predictive ability. We found that this inquiry was a good fit for the model.

Table 4.37

Variables in The Equation

Factor	Variable	B	S.E.	Wald	P-Value	Odds Ratio
Leadership & Governance	Capacity Building					
	There is Capacity Building					1.000
	No Capacity Building	-2.733	0.562	23.619	0.000	0.065
	Policy Implementation					
	There are Policies (RC)					1.000
	No Policies	-1.341	0.261	26.474	0.000	0.262
	Monitoring & Evaluation					
	There is monitoring and Evaluations (RC)					1.000
	No Monitoring and Evaluation	-1.540	0.428	12.947	0.000	0.214

Access to mental health care in Makueni and Kiambu Counties was shown to be significantly influenced by leadership and governance characteristics (table 4.28). Mental health care access was 0.065 times lower in institutions whose leaders did not place a priority on capacity development for primary health care providers compared to those whose leaders did. Significant results were obtained at the 5% level.

The research discovered that in Makueni and Kiambu Counties, access to mental health care is strongly predicted by policy implementation. Mental health treatment accessibility was 0.262 times poorer in those organizations compared to primary healthcare facilities that had clear policies for the provision of mental health care. Significant results were obtained at the 5% level.

The results also demonstrated a strong correlation between the evaluation and monitoring of mental health services and the availability of such services in Kiambu and Makueni Counties. Primary care clinics that put an emphasis on tracking and assessing mental health services had 0.214 times more patients with mental health issues than those that didn't. Significant results were obtained at the 5% level.

4.10.4 Relationship between Healthcare Infrastructure and access to mental health services in Kenya.

Using bivariate logistic regression, we looked at how primary care facilities in Kenya's health care system affected patients' ability to get mental health treatments.

Table 4.38

Omnibus Test of The Model Coefficient

	Chi-square	df	P-value
Step1	97.311	1	0.000
Block	97.311	1	0.000
Model	97.311	1	0.000

According to Table 4.29, the model's overall p-value was $p < 0.01$, indicating that it was suitable for use in prediction.

Table 4.39*Model Summary*

	Cox & Snell's R Square	Nagelkerke's R Square
-2 Log likelihood	0.240	0.480

According to table 4.30, health care infrastructure explains almost 48% of the differential in access to mental health treatment in Makueni and Kiambu Counties when all other characteristics are kept constant.

Table 4. 40*The Hosmer & Lemeshow's Test*

Chi-square	df	p-value
2.076	2	0.202

The chi-square values, as shown in Table 4.31, were $\chi^2 = 2.076$, $p = 0.202$. Therefore, we were unable to rule out the null hypothesis. This suggests that the model has a high degree of predictive power and is appropriate for this investigation. The model was found to be suitable for this investigation.

Table 4.41*Variables in The Equation*

Factor	Variable	B	S.E.	Wald	df	P- Value	Odds Ratio
	Physical infrastructure						
	Adequate(RC)						1.000
	Inadequate	-2.221	0.997	4.963	1	0.001	0.109
Health care Infrastructure	HPT						
	Adequate(RC)						1.000
	Inadequate	-1.021	0.601	2.886	1	0.001	0.360
	ICT						
	Adequate(RC)						1.000
	Inadequate	-1.282	0.865	2.197	1	0.002	0.277

Table 4.32 shows that in the counties of Makueni and Kiambu, the availability of mental health services was significantly predicted by health care infrastructure. Primary healthcare institutions' capacity to include mental health services is heavily influenced by healthcare infrastructure, according to the study's results. Three main areas of health care infrastructure were examined: physical infrastructure, health product technologies (HPT), and information and communication technology (ICT). According to the findings, these areas are severely lacking, which makes it very difficult for people to get the mental health care they need. Consistent with other studies, these results provide further evidence that financial and technical expenditures are crucial for successful integration of mental health services.

Preparation for the provision of mental health services was determined to be significantly impacted by physical infrastructure. Inadequately equipped facilities were found to be 0.109 times less likely to be ready to integrate mental health services than well-equipped facilities, according to the data. This is in line with findings from the World Health Organization's surveys (WHO, 2021), which highlight the need of suitable healthcare facilities, such as mental health support spaces, inpatient units, and consultation rooms, for providing high-quality mental health treatment. These results are supported by research done in Sub-Saharan Africa (Atilola, 2019; Olayemi et al., 2022), which shows that restricted mental health care provision and poor patient outcomes are frequently caused by a lack of infrastructure. Concerns about privacy and stigma become even more obstacles to getting help when mental health consultations do not have their own designated venues. The need of improving primary healthcare facilities' structural sufficiency to enable successful delivery of mental health services is underscored by these findings.

The study also found that availability of health product technologies (HPT) was a significant determinant of healthcare facilities' readiness for mental health integration. Facilities that lacked essential HPT were 0.360 times less likely to be prepared for integration than those with sufficient medical technologies. This finding is in line with the WHO Mental Health Action Plan (2013-2030), which underscores the importance of ensuring access to vital medical supplies, including psychiatric medications, diagnostic tools, and treatment equipment, for effective mental healthcare. Research in Kenya, Uganda, and Tanzania by Jain et al. (2020) found that erratic medical supply chains and frequent shortages of psychotropic medications create major obstacles to mental health service delivery. The absence of crucial drugs such as antidepressants, antipsychotics, and anxiolytics prevents primary healthcare providers from offering consistent treatment. Findings from Petersen et al. (2019) further support this view, demonstrating that

facilities in low-resource settings often struggle to maintain steady medical supplies, making it difficult to sustain mental health programs. These findings reinforce the necessity of strengthening supply chain systems and pharmaceutical distribution to ensure that essential medications and medical technologies are reliably available.

Another key finding from this study concerns information and communication technology (ICT), which was also found to be a significant factor in determining facility readiness. The results show that facilities lacking adequate ICT infrastructure were 0.277 times less probable to be prepared for mental health integration compared to those with sufficient ICT resources. These results align with global trends, which highlight the increasing importance of digital technologies in expanding access to mental health services. Research by Ben-Zeev et al. (2018) and Naslund et al. (2019) suggests that ICT solutions - such as automated health accounts (EHRs), telemedicine, and portable mental wellbeing applications - can improve patient management, support remote consultations, and promote medication adherence. However, studies in low-resource settings Ayano et al. (2022a) highlight that poor internet access, limited digital infrastructure, and a lack of trained personnel are major barriers to ICT-based mental health solutions. The findings of this study support these concerns, demonstrating that weak ICT infrastructure significantly reduces the capacity of primary healthcare facilities to integrate mental health services. Given the increasing reliance on digital health solutions, investing in ICT infrastructure and equipping healthcare providers with the necessary digital skills is critical for improving mental health service delivery.

4.11 Multiple logistic regression

Multiple logistic regression was performed to establish the combined effect of all the regressors on the dependent variable. Table 4.33 displays the outcomes of the analysis.

Table 4.42*Omnibus Test of The Model Coefficient*

	Chi-square	df	P-value
Step1	155.267	9	0.000
Block	155.267	9	0.000
Model	155.267	9	0.000

Once all the regressors were incorporated into the logistic model, as indicated in Table 4.33, the model's overall p-value was $p < 0.01$, indicating that the model was suitable for usage in estimation.

Table 4.43*Model Summary*

-2 Log likelihood	Cox & Snell's R Square	Nagelkerke's R Square
90.550a	.354	.709

As indicated in table 4.34, upon incorporation of all independent variables in the logistic model, the Nagelkerke's R square rose to 0.709. Thus, 70.9% of the variance in mental health care availability in Makueni and Kiambu Counties can be explained by these four independent factors. The implication of this is that there are other factors not included in this study that also influence access to mental health care in primary health care facilities.

Table 4.44*The Hosmer & Lemeshow's test*

Chi-square	Df	p-value
2.979	6	0.812

The chi-square values, as shown in Table 4.35, were $\chi^2 = 2.979$, $p = 0.812$. Therefore, we were unable to rule out the null hypothesis. This suggests that the model has a high degree of predictive power and is appropriate for this investigation. The model was determined to be suitable for this investigation.

Table 4.45

Variables in The Multiple Logistic Regression Model

Factor	Variable	B	S.E.	Wald	Df	P-Value	Odds Ratio	
Financing	Resource Mobilization							
	There is Resource Mobilization(RC)						1.000	
	No Resource Mobilization	0.450	0.949	0.224	1.000	0.636	1.568	
	Risk Pooling							
	There is Risk Pooling(RC)						1.000	
	No Risk Pooling	2.520	0.952	7.006	1.000	0.008	0.080	
Human Resources	Payment Mechanism							
	Out of Pocket(RC)						1.000	
	Insurance	0.462	0.413	2.018	1.000	0.001	1.587	
	Staff Training							
	There is Training on Mental Health(RC)						1.000	
	No Training on Mental Health(RC)	-	0.828	0.818	1.026	1.000	0.311	0.437
Leadership & Governance	Staff Distribution							
	Good (RC)						1.000	
	Poor	-	3.500	1.195	8.582	1.000	0.003	0.030
	Staff Skills Mix							
	Some Mental Health Skills (RC)						1.000	
	No Mental Health Skills	-	2.695	1.068	6.369	1.000	0.012	0.068
Health care Infrastructure	Capacity building							
	There is Capacity Building						1.000	
	No Capacity Building	-	2.500	0.723	11.960	1.000	0.001	0.082
	policy implementation							
	There are Policies (RC)						1.000	
	No Policies	-	1.071	0.344	9.679	1.000	0.002	0.343
Health care Infrastructure	Monitoring and evaluation(1)							
	There is monitoring and Evaluations (RC)						1.000	
	No Monitoring and Evaluation	-	1.891	0.897	4.441	1.000	0.035	0.151
Health care Infrastructure	Physical infrastructure							
	Adequate(RC)						1.000	

	-					
Inadequate	2.421	0.807	9.000	1.000	0.001	0.089
HPT						1.000
Adequate(RC)						1.000
	-					
Inadequate	1.027	0.701	2.146	1.000	0.007	0.358
ICT						
Adequate(RC)						1.000
	-					
Inadequate	1.302	0.894	2.121	1.000	0.012	0.272

In both Makueni and Kiambu Counties, access to mental health treatment is significantly impacted by health care financing, as shown in Table 4.36. Access to mental health treatment was 0.080 times worse at primary healthcare institutions that had not previously used risk pooling to pay for mental health care compared to those that had used risk pooling. Important at the 5% level were the findings. According to the research, individuals in Makueni and Kiambu Counties face significant barriers to accessing mental health care due to their payment methods. The number of patients able to get mental health treatment at primary care clinics that took insurance was 1.587 times higher than at those that did not. Important at the 5% level were the findings. Consistent with previous research, this study indicated that the prevalence of mental health treatment was three times higher in nations with universal health care (UHC) compared to those without. A multivariate logistic regression analysis, however, disproved the use of resource mobilization as a predictor of access to mental health services in the counties of Kiambu and Makueni. Conversely, due to the high direct expenditures, consumers typically have a tougher time getting the treatment they need when their insurance coverage is insufficient.

Employee traits were also shown to have a significant role in determining access to mental health services in Kiambu and Makueni Counties. When comparing organizations with excellent and

poor staff distributions of mental health experts, the difference in access to treatment was 0.030 times. Important at the 5% level were the findings. Access to mental health services was also significantly correlated with the staff's skill set in Makueni and Kiambu Counties. The availability of mental health treatment was 0.068 times lower in settings where primary healthcare providers lacked mental health expertise compared to those where such professionals were present. Important at the 5% level were the findings. On the other hand, the research failed to prove a connection between staff training and the accessibility of mental health treatment.

Once again, characteristics of leadership and governance were determined to be crucial in deciding who in Makueni and Kiambu Counties might get mental health services. In areas where leaders prioritized capacity development for primary health care providers, the number of people able to get mental health treatment was 0.082 times higher than in areas where leaders did not. In both Makueni and Kiambu Counties, access to mental health treatment has been shown to be significantly impacted by the adoption of policies. There was a 0.343-fold decrease in access to mental health treatment among primary healthcare organizations that had well-defined plans for providing such care.

The findings also showed that there is a high correlation between the availability of mental health treatment in Kiambu and Makueni Counties and the monitoring and evaluation of mental health care services. The availability of mental health services was 0.151 times lower in primary care institutions that did not prioritize the monitoring and evaluation of these services compared to those who did. Important at the 5% level were the findings.

The study shows how important it is to have enough physical infrastructure, such as consultation rooms, inpatient facilities, and separate areas for mental health services. Facilities that didn't have

enough physical infrastructure were much less ready for mental health integration, with an odds ratio of 0.089. This means that facilities with bad physical infrastructure were 0.089 times less likely to be ready for mental health integration than those with good infrastructure. This finding is in line with what the WHO (2021) says about how important it is for healthcare services and patient outcomes to have well-equipped physical infrastructure.

It turned out that being able to get important health products and technologies was a key part of providing good mental health services. Without these important resources, the chances of successfully integrating mental health services went down a lot, with an odds ratio of 0.358. This means that facilities that didn't have enough HPT were around 64% less likely to be ready to add mental health services. These results support what Mwangi et al. (2020) found, which stressed how important it is to have trustworthy medical supplies in case of an emergency. The results show that we need an uninterrupted supply chain and effective ways to get things right away to avoid shortages of important drugs and equipment for mental health treatment.

More and more people are seeing information and communication technology (ICT) infrastructure as a way to bring together mental health services. The study found that facilities that didn't have well-developed ICT systems were much less ready to combine mental health services, with an odds ratio of 0.272. This means that facilities that didn't have enough ICT infrastructure were about 72.8% less likely to be ready to integrate mental health services than those that did. This agrees with Green et al. (2021) research, which says that digital health innovations are important for making healthcare more accessible and efficient. Implementing electronic health records, telemedicine solutions, and digital mental health platforms can significantly enhance service provision, particularly in underserved and remote areas.

4.12 Moderating effect of healthcare integration on Availability of mental health services in Makueni and Kiambu Counties

Moderation was performed to establish whether healthcare integration improves access to mental healthcare in Makueni and Kiambu counties. Healthcare integration had 3 parameters, advocacy, redesigned model of care and number of people seeking mental health services. The three parameters were combined to yield the health integration variable since the software requires entry of one and only one variable. The results of the analysis were as follows:

Table 4.46

Omnibus Test of The Model Coefficient

	Chi-square	df	P-value
Step1	151.321	9	0.000
Block	151.321	9	0.000
Model	151.321	9	0.000

As shown in Table 4.37, when all the independent variables were included in the logistic model, the p – value of the model as a block was $p < 0.01$ which indicates that the model was fit for use in prediction.

Table 4.47

Model Summary

	Cox & Snell's R Square	Nagelkerke's R Square
-2 Log likelihood	50.287a	.358
		.816

As indicated in table 4.38, when the moderator was included in the logistic model, the Nagelkerke's R square rose to 0.816. This implies that healthcare integration increases mental healthcare access from 70.9% to 81.6%. The -2log likelihood statistics reduced from 90.55 to 50.287 implying that the model with moderator is better than the model without the moderator.

Table 4.48

Moderating Effect of Integration on Access to Mental Healthcare

Factor	Variable	β	S.E.	Wald	df	P-Value	Odds Ratio
Financing	Resource Mobilization						
	There is Resource Mobilization (RC)						1.000
	No Resource Mobilization	0.458	0.287	2.547	1.000	0.001	1.581
	Risk Pooling						
	There is Risk Pooling (RC)						1.000
	No Risk Pooling	2.512	1.552	2.620	1.000	0.002	0.081
	Payment Mechanism						
	Out of Pocket (RC)						1.000
	Insurance	0.470	0.293	2.573	1.000	0.001	1.600
Human Resources	Staff Training						
	There is Training on Mental Health (RC)						1.000
	No Training on Mental Health	0.820	0.479	2.931	1.000	0.001	0.440
	Staff Distribution						
	Good (RC)						1.000
	Poor	3.492	2.195	2.531	1.000	0.003	0.030
	Staff Skills Mix						
	Some Mental Health Skills (RC)						1.000
	No Mental Health Skills	2.687	1.068	6.330	1.000	0.012	0.068
Leadership & Governance	Capacity Building						
	There is Capacity Building (RC)						1.000
	No Capacity Building	2.492	1.723	2.092	1.000	0.001	0.083
	Policy Implementation						
	There are Policies (RC)						1.000
	No Policies	1.063	0.747	2.025	1.000	0.002	0.345
	Monitoring and Evaluation (1)						
	There is Monitoring and Evaluation (RC)						1.000
	No Monitoring and Evaluation	1.883	0.998	3.560	1.000	0.035	0.152
Health care Infrastructure	Physical Infrastructure						
Adequate (RC)						1.000	

	Inadequate	-	2.413	1.612	2.241	1.000	0.001	0.090
	HPT							
	Adequate (RC)							1.000
	Inadequate	-	1.019	0.701	2.113	1.000	0.007	0.361
	ICT							
	Adequate (RC)							1.000
	Inadequate	-	1.294	0.894	2.095	1.000	0.012	0.274
	Mental Health Integration							
Integration (Moderator)	Not Integrated (RC)							1.000
	Integrated		0.650	0.280	5.389	1.000	0.020	1.916

After introducing the moderator in the equation, all the variables turned out to be significant predictors of access to mental healthcare. Besides, all variables recorded an increase in odds ratio. This implies that healthcare integration increases access to mental healthcare.

4.13 Hypothesis Testing Summary

Presented in table 4.40 is a summary of hypothesis testing outcomes for H01–H05 evaluated at the 5% significance level. For each null hypothesis, the table lists the decision (rejected/not rejected) and a succinct justification grounded in the statistical evidence.

Table 4.49*Summary of hypothesis testing*

ID	Null Hypothesis (H0)	Decision	Basis from Results
H01	Healthcare financing in primary care has no relationship with access to mental health services.	Rejected	Financing dimensions (risk pooling, payment mechanisms, resource mobilization) showed significant associations ($p \leq 0.05$).
H02	Human resource factors do not significantly influence access to mental health services.	Rejected	Staff training, distribution, and skills-mix were significant predictors ($p \leq 0.05$).
H03	Leadership and governance do not significantly affect access to mental health services.	Rejected	Capacity building, policy implementation, and monitoring & evaluation demonstrated significant effects ($p \leq 0.05$).
H04	Health-care infrastructure does not significantly affect access to mental health services.	Rejected	Physical infrastructure, health products/technologies, and ICT dimensions were significant ($p \leq 0.05$).
H05	The screening procedure and integration framework do not improve early identification or access.	Rejected	With integration (moderator) in the model, variables became significant and odds increased ($p \leq 0.05$).

CHAPTER FIVE

A SUMMARY OF THE FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

This chapter brings together all the studies on integrating mental health into basic healthcare facilities in Makueni and Kiambu counties. It also suggests initiatives and policies that could help. Also, there are ideas for more research

5.2 Summary of the research findings

The goal of this study was to find out if primary healthcare facilities were ready to add mental health treatments to make them easier to get to. There were a number of hypotheses that led this investigation. These hypotheses were made and tested at a 5% significance level. The outcomes, which are listed below in order of how they fit with the study's goals, are as follows:

5.2.1 The influence of healthcare financing in primary care facilities on access to mental health services in Kenya

The impact of Kenya's primary care system's payment model on access to mental health treatments. The major objective of this research was to determine if and to what extent Kenyans' access to mental health treatments was affected by the payment models used in primary care settings. Risk sharing, payment methods, and putting resources to use were three factors that influenced health care financing. Findings showed that in both Makueni and Kiambu Counties, health care funding significantly predicts the availability of mental health services. There was a 0.452-fold decrease in access to mental health care among institutions without operational and clearly-defined programs to refer patients to treatment. Important at the 5% level were the findings.

The research also found that risk pooling has a significant role in obtaining mental health treatment in Makueni and Kiambu Counties. When looking at primary care clinics that did and did not employ risk pooling to pay for mental health treatment, the gap in access was 0.032 times less. Important at the 5% level were the findings. Mental health treatments were more or less accessible depending on the payment structure in Kiambu and Makueni Counties. Patients with mental health issues were 1.587 times more likely to be seen by primary care physicians who took their insurance.

5.2.2 The impact of primary care institutions' human resource considerations on the availability of mental health treatments in Kenya

The study's second goal was to examine how Kenyans' access to mental health treatment is impacted by primary care institutions' human resources. The distribution of staff, their training, and their skill sets are examples of human resource variables. The findings demonstrated that access to mental health treatment at basic healthcare facilities in Makueni and Kiambu counties was significantly predicted by all three human resource attributes. Access to mental health treatment was 0.084 times more limited in settings with primary healthcare professionals who lacked mental health training than in those where staff members had some mental health training. At the 5% significance level, the findings were significant. Additionally, the research found that access to mental health care is strongly predicted by the staff distribution in Makueni and Kiambu Counties. At primary healthcare facilities with a poor staffing distribution of mental health professionals, access to mental health treatment was 0.382 times lower for people in need of it than at those with a good staffing distribution. At the 5% significance level, the findings were significant. Lastly, the research discovered that the staff's diversity of skills significantly influences the accessibility of mental health treatment in Kiambu and Makueni Counties. The

access to mental health treatment at primary healthcare institutions was 0.076 times lower when primary healthcare providers lacked mental health abilities than when they did. At the 5% significance level, the findings were significant.

5.2.3 The impact of primary care institutions' administration and leadership on Kenyans' ability to get mental health treatments

The study's ultimate goal was to determine how Kenyans' access to mental health treatments was impacted by the management and leadership of primary care facilities. Among the components of leadership and governance were capacity development, policy implementation, and monitoring and evaluation. The findings demonstrated that in Makueni and Kiambu Counties, people's capacity to get mental health treatment was significantly impacted by leadership and governance qualities. Access to mental health treatment was 0.065 times less in those facilities than in those where the leaders placed a high priority on educating the personnel who offer primary health care. At the 5% significance level, the findings were significant. In Makueni and Kiambu Counties, access to mental health treatment was also significantly influenced by the implementation of policies. Access to mental health treatment was 0.262 times less in primary healthcare institutions with explicit policies for mental health care provision. At the 5% significance level, the findings were significant. Additionally, the findings demonstrated a strong correlation between receiving mental health treatment in Kiambu and Makueni Counties and monitoring and assessing mental health care services. Access to mental health treatment was 0.214 times lower in primary healthcare institutions that did not prioritize monitoring and evaluating mental health care services than in those who did. At the 5% significance level, the findings were significant.

5.2.4 The impact of primary care institutions' medical infrastructure on Kenyans' ability to seek mental health treatments

The fourth goal was to determine the impact of Kenyan primary care institutions' healthcare infrastructure on the delivery of mental health treatments. The findings of the research demonstrated that in Makueni and Kiambu Counties, access to mental health treatment was significantly predicted by the health care infrastructure. Access to mental health treatment was 0.020 times less in locations without the necessary infrastructure for treating and caring for individuals with mental illnesses than in locations having the necessary infrastructure. At the 5% significance level, the findings were significant.

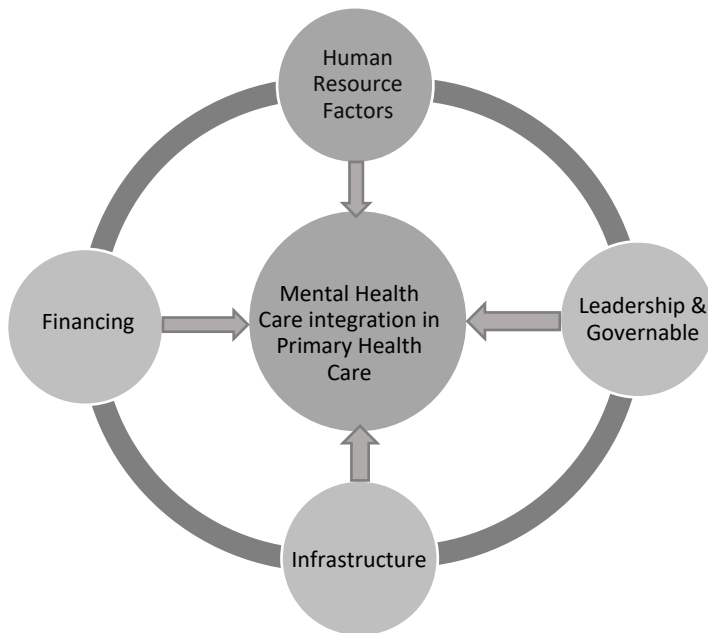
5.2.5 A mental health framework for improving access to mental health treatments in Kenya by integrating mental health services into primary care settings

The study's fifth objective was to develop a strategy for integrating mental health services with primary care settings to facilitate access to mental health treatment for Kenyans.

The following model is recommended for implementation in primary healthcare institutions to facilitate access to mental health treatment based on the study's findings.

Figure 5.1

Suggested Model for Access to Mental Health Care in Kenya's Primary Health Care Facilities



A proposed empirical model is shown in Figure 1. This approach establishes a connection between human resources, leadership and governance, health infrastructure, and the ability to pay for medical treatment in relation to the availability of mental health services in primary care settings in Kenya. The research that informed the model found that factors including infrastructure, healthcare funding, leadership and governance, and staff characteristics all have a role in determining whether or not patients in Kenya's primary health care facilities have access to mental health treatment.

5.3 Conclusions and Recommendations

5.3.1 Conclusions

Both Makueni and Kiambu Counties' access to mental health treatment was shown to be strongly correlated with health care funding. Access to mental health treatment was 0.452 times lower in areas without operational and well-defined resource mobilization strategies compared to those with

these plans. Even at the 5% level, the findings were significant. Researchers in Makueni and Kiambu Counties found that people were more likely to get access to mental health treatment if they pooled their risks. When comparing primary healthcare institutions that employed risk pooling of resources to pay for mental health treatment to those that did not, the inequality in access to treatment was 0.032 times lower. Even at the 5% level, the findings were significant.

The findings also showed that in Makueni and Kiambu counties, all three HR attributes significantly influence whether or not people can get mental health treatments at primary care clinics. In areas where primary care physicians and nurses lacked mental health care training, patients had 0.084 times less access to treatment than in areas where such training was available. Even at the 5% level, the findings were significant. Results also showed that the distribution of personnel in Kiambu and Makueni Counties strongly predicts the availability of mental health care. Primary healthcare institutions with a poor staff distribution had 0.382 times fewer access to mental health treatment compared to those with a pretty acceptable staff distribution. Even at the 5% level, the findings were significant. Finally, the research found that the availability of mental health treatment is significantly impacted by the staff's mix of skills in Kiambu and Makueni Counties. The availability of mental health treatment was 0.076 times lower in settings where primary healthcare providers lacked mental health expertise compared to those where such professionals were present. Even at the 5% level, the findings were significant.

In both Makueni and Kiambu Counties, the findings demonstrated that characteristics of leadership and governance significantly affect the availability of mental health services. Access to mental health treatment was 0.065 times lower in facilities where facility management did not prioritize capacity development for primary health care practitioners compared to those institutions where such efforts were heavily supported. Even at the 5% level, the findings were significant. Access

to mental health services in Kiambu and Makueni Counties was also significantly impacted by the adoption of policies. There was a 0.262-fold decrease in access to mental health treatment for patients whose primary care physicians did not have explicit guidelines for the provision of such services. There was a 5% level of statistical significance in the findings. Access to mental health treatment in Kiambu and Makueni Counties is substantially correlated with monitoring and assessing mental health care services, according to the data. The availability of mental health services was 0.214 times lower in primary care institutions that did not prioritize the monitoring and evaluation of these services compared to those who did. Even at the 5% level, the findings were significant.

In conclusion, the availability of mental health services in Makueni and Kiambu Counties was significantly predicted by the quality of their health care infrastructure. There was a 0.020-fold disparity in the availability of mental health treatment between facilities that possessed the necessary infrastructure and those that did not. Even at the 5% level, the findings were significant.

5.4 Recommendations

To help primary healthcare institutions in Kenya better prepare to provide mental health treatments, this research recommends the following based on real-world outcomes, driven by resource-based theoretical frameworks and systems thinking:

5.4.1 Objective 1: To determine the influence of healthcare funding in primary care facilities on access to mental health services in Kenya

Recommendation:

As part of their primary healthcare funding frameworks, county governments should engage with the federal government and development partners to provide a specific sum for mental health services. Important psychotropic drugs, mental health professional hiring and training, and infrastructure improvements should get priority with these funding. It is also recommended that all mental health therapies be included in Kenya's National Hospital Insurance Fund (NHIF) benefit package. As a result, mental health services will be more affordable and accessible to everybody. A performance-based payment approach that incentivizes primary care clinics to provide mental health services is another option to consider.

5.4.2 Objective 2: To assess the influence of human resource factors in primary care facilities on access to mental health services in Kenya

Recommendation:

The County Public Service Boards, the Council of Governors, and the Ministry of Health should work together to establish a national strategy for the equitable distribution and expansion of mental health professionals.

- I. Mental health officers and nurses currently working in the field should participate in in-service capacity-building programs centered around the mhGAP-IG guidelines.
- ii. Mental, neurological, and substance use disorder specific structured CPD programs should be established.
- iii. Mental health personnel serving underserved and marginalized areas should be

offered financial and non-financial incentives, like hardship allowances and opportunities for career advancement. Basic mental health treatments may also be provided by qualified primary care providers who are not specialists, thanks to task-sharing regulations.

5.4.3 Objective 3: To examine the influence of leadership and governance in primary care facilities on access to mental health services in Kenya

Recommendation:

For long-term integration of mental health care, it's essential to fortify leadership and governance systems. Mental health leadership should be a part of the health leadership curricula at the Kenya School of Government. Managers of mental health facilities and sub-county health management teams should undergo specialized training in service planning, financial administration, quality assurance, and supervision. Health information systems should routinely include mental health performance indicators and data-driven decision-making should be prioritized by county health departments to promote accountability and continuity in mental health integration programs.

5.4.4 Objective 4: To investigate the influence of healthcare infrastructure in primary care facilities on access to mental health services in Kenya

Recommendation:

Counties to prioritize the expansion of primary care mental health services in their development plans. Access to private consultation rooms, telemedicine capabilities for remote psychiatric consultations, and dependable supply chains for essential psychotropic medications should all be provided by PHC clinics. Infrastructure should also adhere to standards that are accessible to those with disabilities in order to make access more open to everyone. Electronic medical records designed for mental health and other digital health technologies should be piloted to aid in case management, referral systems, and outcome monitoring.

5.4.5 Objective 5: To Examine the moderating effect of integrating mental health services in primary care on the relationships between financing, human resources, leadership & governance, and infrastructure and access to mental health services in Kenya

Recommendation:

Given that integration of mental health services in primary care strengthens the effects of financing, human resources, leadership & governance, and infrastructure on access, Makueni and Kiambu should institutionalize integration as a routine function across Levels 2–4. Counties should issue a policy circular that mandates integrated screening, brief intervention, referral/back-referral, and follow-up, and create a dedicated budget line for integration enablers (training, supervision, essential psychotropics, and digital registers). Each facility should appoint a mental-health focal person to coordinate SOPs, data capture, and monthly case reviews supported by county specialist back-up (hub-and-spoke). Investments in infrastructure should prioritize private counselling space, reliable commodity supply, and teleconsult links to county or partner specialists. HMIS fields for screening results, referrals, and follow-up should be standardized and reported on a monthly integration dashboard.

To incentivize performance, counties can tie incremental facility funding to achieving clear integration benchmarks captured in an “Integration Index” (service delivery, workforce, supplies/infra, governance/data). Facilities that score higher on integration should show steeper gains in access when financing, staffing, governance, or infrastructure improve, these interaction effects should be monitored quarterly using simple slopes and visual dashboards to guide where the next shilling or staff training hour yields the biggest access gains. Community linkages should be strengthened by equipping CHPs with brief screening/referral scripts, with targeted outreach to hard-to-reach wards. County focus should be context-specific: Makueni can consolidate as a center

of excellence by expanding supportive supervision and teleconsultation to all Level 2–3 facilities; Kiambu should prioritize high-volume urban facilities to streamline triage screening, ensure private spaces, and link with brief interventions for co-occurring substance use. A phased timeline - policy and focal persons in 0–6 months; performance-linked funding, supervision scale-up, and core infrastructure/teleconsults in 6–18 months; and county-wide consolidation in 18–36 months - will embed integration and maximize its moderating effect on access.

5.4.6 Suggestions for Future Study

Kiambu and Makueni counties were the only ones considered in this research. There are 47 counties in the Republic of Kenya, thus future studies should expand their scope to include more of them. Public health facilities were the focus of the research. Private health care facilities should also be included in future investigations.

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Appendix I: Consent Form

Title: **PRIMARY HEALTHCARE FACILITIES' READINESS FOR ACCESS TO MENTAL HEALTH SERVICES IN SELECTED COUNTIES IN KENYA**

Sponsor: [SELF]

Principal Investigator: [MILCAH NDINDA MUSYOKI]

Address: [KENYA METHODIST UNIVERSITY]

1. Introduction

This Consent Form contains information about the research named above. In order to be sure that you are informed about being in this research, we are asking you to read (or have read to you) this Consent Form. You will also be asked to sign it (or make your mark in front of a witness). We will give you a copy of this form. This consent form might contain some words that are unfamiliar to you. Please ask us to explain anything you may not understand.

2. Reason for the Research

You are being asked to take part in research to

- i. To evaluate the influence of healthcare financing in primary care facilities on access to mental health in Kenya.
- ii. To examine the influence of human resource factors in primary care facilities on access to mental health in Kenya.
- iii. To determine the influence of Leadership and Governance in Primary Care facilities on access to mental health in Kenya.
- iv. To establish how healthcare infrastructure in primary care facilities influence access of mental health services in Kenya.
- v. To investigate the influence of integrating mental health services in primary care facilities on access to mental health in Kenya.

3. General Information about Research

(General information about the research methods/procedures/product(s)/drug(s) to be taken or used in the research. Identify what is experimental.)

[When applicable: If you agree to be in this research, here is how things was different from simply getting (treatment/product) without taking part in the research. The (standard treatment/product) part of the research would be available to you without agreeing to be in the research. The new (treatment/product) we are testing is still considered experimental and cannot be given except as part of a research.]

4. Your Part in the Research

If you agree to be in the research, you will *(an explanation of the tests, procedures, follow-up, etc. that was required)*. Your part in the research will last _____. About (# women/men/couples) will take part in this research *(specify at this site and/or at # of sites.)*

5. Possible Risks

(Specific language about anticipated/expected risks to participant. Include physical, social and psychological risks if anticipated.)

[When applicable: These risks would be the same whether you got (treatment/product) in the research or got it without taking part in the research. What taking part in the research adds to the risks is....]

6. Possible Benefits

(Specific language about benefits to individuals and/or society that can be reasonably expected.)

7. If You Decide Not to Be in the Research

You are free to decide if you want to be in this research. Your decision will not affect the health care you would normally receive.

8. Confidentiality

We will protect information about you and your taking part in this research to the best of our ability. You will not be named in any reports. However, the staff of [list all groups that may access

the research records] may sometimes look at your research records. Someone from the IRB might want to ask you questions about being in the research, but you do not have to answer them. A court of law could order medical records shown to other people, but that is unlikely.

[When applicable: If you miss a scheduled visit, we may contact you at home by phone, mail or in person to schedule another visit and to see if you still want to take part in the research. When this contact is made you will not be identified as being in this research.]

9. Compensation

You will not be paid, since you do not have to take part in this research. *(If payment is planned, tell volunteer the actual amount to be given, conditions for receiving this payment, and when payments are made. Payments should be made as the research progresses and not be contingent upon the volunteer completing the entire research.)*

10. Staying in the Research

When applicable: If you decide to take part in this research, we ask you to use only the research *(drug, device or treatment)* that we provide. *(Or if the research method is to be used with another method, list conditions of use. Also note any exceptions to the exclusive use requirement.)*

11. Alternatives to Participation

You do not have to participate in the research in order to receive [care/services/treatments]. Alternatives include:

- Other contraceptive methods.
- Receiving services without taking part in the research.
- Etc.

12. Leaving the Research

You may leave the research at any time. If you choose to take part, you can change your mind at any time and withdraw.

[When applicable] If so, please tell the research doctor/clinic staff why you wish to leave.

Also, you may be asked to leave the research if (list applicable points):

- the research doctor/clinic staff feels it is best for you, or
- you are not able to follow the research procedures, or
- The research is stopped.

[When applicable] We will tell you if we learn something new about (*the research product or drug*) that could affect your choice to stay in the research. When you are no longer in the research, you will still be able to use this clinic.

13. If You Have a Problem or Have Other Questions

Please call (name and number) or come back to the clinic right away, at any time during the research, if you:

- get sick, or
- think you are (*pregnant*), or
- have concerns about your health (*become infected*), or
- Have questions about the research.

If you are sick or have a health problem due to your participation in this research, you will not have to pay for visits to see the research doctor/clinic staff.

14. Your rights as a Participant

This research has been reviewed and approved by the IRB of [name of institution]. An IRB is a committee that reviews research studies in order to help protect participants. If you have any questions about your rights as a research participant you may contact [name, phone number and address of the IRB]

VOLUNTEER AGREEMENT

The above document describing the benefits, risks and procedures for the research titled (name of research) has been read and explained to me. I have been given an opportunity to have any questions about the research answered to my satisfaction. I agree to participate as a volunteer.

Date

Signature or mark of volunteer

If volunteers cannot read the form themselves, a witness must sign here:

I was present while the benefits, risks and procedures were read to the volunteer. All questions were answered and the volunteer has agreed to take part in the research.

Date

Signature of Witness

I certify that the nature and purpose, the potential benefits, and possible risks associated with participating in this research have been explained to the above individual.

Date

Signature of Person Who Obtained Consent

Appendix II: Questionnaire

PRIMARY HEALTHCARE FACILITIES' READINESS FOR INTEGRATION OF MENTAL HEALTH SERVICES FOR ACCESS IN SELECTED COUNTIES IN KENYA

Section A: Background Information

1. Gender Male [] Female []
2. Age in years []
3. Highest completed qualification
 Certificate [] Diploma [] Higher National Diploma [] Degree []
 Masters [] PHD []
4. Name of the hospital where you work.....
5. What is your designation at the hospital?.....
6. Duration Worked in the hospital in years [] Months []

Section B: Access to Mental Health

Please tick the descriptive scale based on your own experiences and opinions. This is a scale of 1-5. Where 1 is strongly disagree; 2 is disagree, 3 is neutral, 4 is Agree, and 5 is strongly agree.

Geographical access

	Mental health access					
	Geographical access	SD	D	N	A	SA
1	Our facility is one kilometer from the community around us					
2	Our health facility is in operation 24 hours					
3	Our health facility operates between 8am to 5 pm					
4	I can easily walk to our health facility by foot					
5	The roads in our area are impassable during rainy seasons					
6	Availability of mental health services					
7	Our health facility offers mental health services					

8	We have patients on a mental health service treatment plan					
9	Mental health diagnostic equipment are readily available in our facility					
10	We have easily been able to diagnose patients presenting mental health issues					
11	We refer to other facilities patients presenting mental health symptoms					
	Mental health Services affordability					
12	We have adequate staff to manage mental health services in our facility					
13	Mental health services like other services are free					
14	Mental health services are paid for in cash in our facility					
15	Our mental health services are paid for by the patients NHIF cover					
16	Mental Health financing/payment mechanisms					
17	Mental health services are covered under private health insurance					
17	NHIF covers mental health services					
18	The community has a program to manage mental health patients					
19	Our facility has donor-supporting mental health services					
20	The county government allocates an adequate budget for mental health services					
	Resource Mobilization					
21	It has been very easy to get funding for mental health services					

22	Our facility has staff specifically designated to offer mental health services					
23	Our facility has admission wards designated for mental health patients					
24	Our facility has adequate medications for mental care services					
25	There is a sufficient budget that has been allocated to cater for mental health					
26	Our mental health programs are seamlessly resourced continuously					
27	Funds for mental health are sufficient to meet treatment options.					
28	There is an equitable allocation of resources across all the primary healthcare facilities with consideration for mental health					
29	Resources are allocated based on the need-based for every facility					
	Risk Pooling					
30	Our facility implements a population-based provider payment mechanism through capitation					
31	We have restricted medical care for mental problems					

Human resources for integrated mental health services in primary care facilities

		SD	D	N	A	SA
1	I am continuously trained in mental health services					
2	I am familiar with the standard procedure for offering mental health services					
3	I have been trained in mental health care					
4	I am knowledgeable in mental health					
5	I have sufficient training in mental health knowledge					
6	I support mental patients during general practice					
7	I have equity in the distribution of skilled mental health workers					
8	The staff skill mix is well distributed as per the set standards on mental health services					
9	Staff distribution					
10	My supervisor supports the provision of mental health services					
11	I have an understanding of interventions for mental health cases					
12	I advocate mental health care in my departments					
13	We have designated interventions for mental health activities in our facility					
14	Staff skills mix					
15	Mentoring and coaching are done on junior staff by senior staff					
16	I have a good attitude towards mental health					
17	I have adequate knowledge of mental health services					
18	We have adequate acute beds for mental health patients in our facility					
19	Our facility has a specialized psychiatric care unit					
20	Task shifting is very well embraced by staff in our facility					
21	Our facility does surveys frequently to gauge customer satisfaction					
22	Our facility offers mental care campaigns frequently					

23	Our facility rehabilitates mental patients' cases					
24	Our facility has a well-established mental care unit					

Leadership and governance (these are statements to be responded by health workers about the leaders (managers/ supervisors) in their facility)

		SD	D	N	A	SA
	Capacity Building					
1	We have a functional mental health policy framework					
2	My manager supports my continuous development of mental health emerging trends					
3	Our staff have adequate competency to offer effective mental health services					
4	I am /was mentored staff by a senior staff					
5	Our anger is very supportive of the staff in the mental health unit					
	Policy implementation					
6	There are cost-effective strategies implemented to support mental health cases					
7	The government has shown commitment in safeguarding the mental health of the citizens					
8	Our manager ensures that mental health patients are treated in the general practice					
9	I use a people-centered approach to mental health patient's needs					
10	There are strategies in place to implement the incorporation of mental health care to remain aligned with UHC					
11	There are accountability mechanisms in place					
12	I have knowledge of mental health policies					

13	I use guidelines for simple reference during in-service training in mental health					
	Monitoring and evaluation					
14	My manager ensures that there is monitoring of our service delivery					
15	Evaluation is performed yearly on our services delivered					
16	New actions are always implemented after the monitoring phase of mental health service delivery					
17	There is continuous assessment of the interventions done on mental health					
18	We can effectively sustain offering mental health services					

Health infrastructure preparedness to manage mental health services in primary care facilities

		SD	D	N	A	SA
1	Health infrastructure					
2	There is adequate machinery in the facility to manage mental health services					
3	There is updated technology while offering mental health services					
4	There is adequate staff to support mental health services					
	Physical infrastructure					
5	There is always electric power in the facility					
6	The facility has adequate rooms for consultations					
7	Phones are available for use in the consultation spaces to support					
8	There is adequate hospital vehicles					
9	There is adequate functional ambulances in the facility					
10	The ambulances are well-equipped to manage emergency cases					
11	There are adequate counselling rooms					
12	The consultation rooms are spacious					
	HPT					
13	Our facility has quality medical products to treat mental care cases					
14	The facility has proper storage for our medical products					
15	There are adequate available psychotic drugs in our facility					
16	We never have mental health commodity stockouts					
17	We have e-health services to support mental health services					

	ICT					
18	There is adequate ICT resources in the facilitate					
19	There is an information system that links all departments to each other					
20	There are psychiatric clinic services through video conferencing					

Integrating mental health services in primary care facilities

		SD	D	N	A	SA
	Redesigned model of care					
1.	There are adequate plans to offer construction spinal superior mental care services from philanthropic crises					
2.	There are established pre-arranged services from scratch in primary care facilities that haven't been mental health services					
3.	There are adequate response strategies to manage mental health care					
4.	Our facility has strategies in place to sustain mental health service delivery.					
5.	There is training to equip staff members who engage in serious mental diseases					
7.	Our facility has strategies in place to sustain mental health service delivery.					
	Advocacy					
8.	Community health workers provide support for patients and families with clear treatment plans.					
9.	We have introduced a community-based approach to offering mental care services to communicate.					
10.	We are involved in mental health advocacy campaigns in the local community.					

11.	We empower through training community health workers and traditional healers on how to manage persons with mental disorders.					
12.	There is public participation in advocating for mental healthcare					
13.	Mental health is included in our outreaches to the community					
14.	The management has put in place a program for mental health advocacy					
	Number of people seeking mental health services					
15.	Our facility has been offering mental health services for a long time.					
16.	There is a great improvement in treating and ensuring there is access to mental care in PHC.					
17.	State the number of people seeking mental health services					

Appendix III: Key Informant Guide

Section A: Background Information

- 5. Gender Male [] Female []
- 6. Age in years []
- 7. Highest completed qualification
Certificate [] Diploma [] Higher National Diploma [] Degree []
Masters [] PHD []
- 8. Name of the county where you work.....
- 9. What is your designation at the county?.....
- 10. Duration Worked in the county in years [] Months []

Mental Healthcare Financing for Integration of Mental Health Services in Primary Healthcare Facilities

Mental disorders have been on the rise in Kenya. However, in the country Mental health financing for integration of mental health into primary health care has not been a priority. What are your views in reference to this facility?

.....

How do you allocate resources to cater for integrating mental health services into the general consultation?

.....

Briefly explain how you cushion the patients who are not able to pay for services and yet remain afloat in service delivery.

.....

Human Resource for Health for Integration of Mental Health Services on Primary Healthcare Facilities

Human Resources for Health (HRH) is central to health service delivery. With the scarce staff: patient ratio, how have you been able to balance staff distribution to ensure integration and delivery of mental health services

.....

What strategies has the facility put in place to ensure staff preparedness for mental health service integration?.....

Comment briefly on:

i) Support for medical training especially for mental health.....

ii) Policy for staff distribution and skill balance.....

iii) Staff have knowledge, attitude, and practice for mental health.....

Leadership and Governance for Integration of Mental Health Services in Primary Healthcare Facilities.

Everything rises and falls on Leadership. Is this true for this facility when it comes to staff support and development for mental health service delivery in the facility?

.....
.....

What would you recommend to be the remedy for Continuous staff development for mental health integration

.....

The government releases the Mental Health Policy 2014-2030. What has been the impact of its adoption (if at all) into the general healthcare practice

.....
.....

i) What will be your recommendation to improve its practicability in your facility?

.....
.....

Mental Health Infrastructure for Integration of Mental Health Services on Primary Healthcare Facilities

Health infrastructure is a key pillar for any health service delivery. What strategies has the facility put in place to ensure smooth running of the facility.....

Please give a brief comment on infrastructure for mental health service delivery: -

i) Consultation rooms.....

ii) medical supplies and diagnostic equipment.....

iii) medical products (Psychotropic medication)
.....

iv) c Patient and admissions
(Beds).....

Section F: Integration of Mental Health Services on Primary Healthcare

How has the facility operationalized medical services for the inclusion of mental health services?

.....
.....
What would be your advice on redesigning the model of care to incorporate active mental health services delivery?

.....
.....
What would you recommend to improve advocacy for mental health awareness

.....
.....
Making Mental Health services available through integration has improved the number of people seeking the services. How would you describe the level of utilization of mental health services in your facility

.....
What would you recommend to be done to improve the number of people seeking Mental Health services

.....
Section G: Access to Mental Health Services

In this facility, mental health services are affordable for integration of mental health services

.....
If YES, explain what mental health service affordability entails

What would you recommend to improve the affordability of mental health services for access?

.....
.....

Explain what mental health service availability entails in this facility and recommend how the availability of mental health services for access

.....
.....

Mental health Services are accessible. Explain what mental health service physical accessibility entails

.....

Make recommendations for improving the physical accessibility of mental health services

.....
.....

There is overall sufficient health financing for the integration of mental health into primary healthcare setting in Kenya

Yes

No

If, YES, what is the reason for being satisfied

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

If, NO, what is the reason for satisfaction

.....
.....

Which are the most popular payment methods used in your facility?

- Out of pocket
- Private Insurance
- Social insurance (NHIF)

In your opinion, why is it popular.....

.....

What other options are available to those who cannot afford the above payment methods?

.....

.....

Does your facility have a waiver system for patients who are unable to pay for services.

- Yes
- No

If YES, how does it work, and to whom is it applicable

.....

.....

If NO, explain how you cushion the patients who are not able to pay for services

.....

.....

Section C: Human Resources for Health for Integration of Mental Health Services on Primary Healthcare Facilities

There is an overall sufficient health workforce for the integration of mental health into primary healthcare settings in Kenya

- Yes
- No

If, YES, what is the reason for being satisfied

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

If, NO, what is the reason for unsatisfaction

.....
.....

Does the management organize and support continuous medical training for its staff, especially on mental health?

If YES, provide more details on these trainings

.....
.....

If NO, what do you think is the challenge hindering the technical developmental training.....

Does your facility have a policy for staff distribution and skill balance?

- Yes
- No

If YES, how does it influence staff distribution with mental health specialization?

.....

If NO, what is the challenge.....

What is your recommendation to bring about balance in staff distribution for mental health access

.....
.....

In this facility, the staff have knowledge, attitude, and practice in dealing with mental health issues

- Yes
- No

If YES, please provide more details

.....

If NO, please specify the challenges faced

.....

What will be your recommendation to improve knowledge, attitude, and practice for mental health access

.....

Section D: Leadership and Governance for Integration of Mental Health Services in Primary Healthcare Facilities

(Please tick the descriptive scale based on your own experiences and feelings)

There is continuous staff development for PHC staff to gain the necessary knowledge for providing integrated mental health care services

- Yes
- No

If YES, please provide details of what continuous staff development entails

.....
.....

If NO, Explain the challenges that hinder continuous staff development for mental health services

.....

What would you recommend to be the remedy for Continuous staff development for mental health integration

.....

In our facility, there are supportive managers in every department to supervise the staff

- Yes
- No

If YES, explain what supportive supervision entails

.....

If NO, explain the challenges and how you don't feel supported

.....

In our facility, there are mentorship programs for growing younger healthcare staff in their areas of specialization

- Yes
- No

If YES, explain some of the activities and programs involves

.....

If NO, explain the reasons for not having such activities and programs

.....

The facility has adopted mental health policy integration into the general healthcare in place and adopted

Yes

No

If YES, please how it has been used to bring mental health close to the patients

.....

If NO, please indicate the challenges for policy integration

.....

What will be your recommendation to improve its practicability in your facility?

.....

In our facility, the services are monitored and evaluated to ensure the integration of mental health into the general health services

Yes

No

If YES, explain what monitoring and evaluation for integration of mental health services entails.....

.....

If NO, explain why the challenges for not integrating monitoring and evaluating health services for mental health access

.....

What would be your recommendations to improve the access to mental health care services...?

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

Section E: Mental Health Infrastructure for Integration of Mental Health Services on Primary Healthcare Facilities

Which category does this facility belong to (tick as appropriate).

- i) Mental Health outpatient facility
- ii) Mental hospital
- iii) Mental Nursing home
- iv) Rural Health Centre
- v) Dispensary

What is the number of beds allocated to the mentally ill patients in this facility?

In my opinion, I am satisfied with the number of beds allocated for mentally ill patients at the facility.

- Yes
- No

If YES, please provide details to support your level of satisfaction.....

If NO, what would be the challenges that inform your dissatisfaction.....

The health facility has sufficient Psychotropic medicines of each therapeutic class (Anti-depressants, Anti-psychotics, Mood stabilizers, Anxiolytics, Anti-epileptics) all the time.

- Yes
- No

If YES, describe how this is made possible

.....

If NO, explain the challenges faced by the facility in ensuring sufficient psychotropic medicines availability.....

IF NO, Explain the hindrance to the availability of medical products (Psychotropic) for mental health access

.....

.....

What can you recommend to improve Psychotropic availability to support mental health services access

.....

.....

.....

Section F: Integration of Mental Health Services on Primary Healthcare Redesigned model of care

In this facility, mental health management is part of the general medical management of other diseases

- Yes
- No

If Yes, describe how this collaborative care of administered to the patients

.....

.....

If No, explain the gaps that need to be filled to ensure collaboration of care

.....
.....

What would be your advice on redesigning the model of care to incorporate active mental health services delivery

.....
.....

Mental Health Advocacy

Please tick the descriptive scale based on your own experiences and feelings

What would you recommend to be done to improve advocacy for mental health awareness?

.....
.....

Number of People Seeking Mental Health Services

Making Mental Health services available through integration has improved the number of people seeking the services

Yes

No

IF Yes, describe the level of utilization of mental health services in your facility

.....
.....

If No, please explain the challenges that you're facing for failed utilization of mental health services

.....

.....
What would you recommend to be done to improve the number of people seeking Mental Health services

.....
.....
Mental Health Affordability

In this facility mental health Services are affordable for integration of mental health services....

Yes

No

If YES, explain what mental health service affordability entails

.....
.....
If No, explain why the services are not affordable

.....
.....
What would you recommend to improve the affordability of mental health services for access?

.....
.....
Mental Health Affordability

In this facility mental health Services are available

Yes

No

If YES, explain what mental health service availability entails

.....
.....
If No, explain why the services are not available

.....
What would you recommend to improve the availability of mental health services for access

.....
Mental Health Accessibility

In this facility, mental health services are accessible

Yes

No

If YES, explain what mental health service physical accessibility entails

.....
.....
.....
If No, explain why the services are not accessible

.....
What would you recommend to improve the physical accessibility of mental health services for access

Appendix IV: Primary Health Care Mental Health Screening Tool

Patient Name: _____

Age: _____

Gender: Male Female Other: _____

Date of Screening: _____

Name of Screener: _____

Facility Name: _____

Brief Mental Health History

Has the patient ever seen a mental health provider before? Yes No

If yes, when and where? _____

Has the patient ever been admitted to a mental health facility? Yes No

Is the patient currently taking any medication for emotional or mental health? Yes No

If yes, which one(s)? _____

General Appearance and Behavior

Observe the patient's hygiene, clothing, and behavior.

Clothing: Clean Dirty Inappropriate Overdressed

Grooming: Neat Fair Poor

Behavior: Calm Anxious Agitated Withdrawn

Mood and Emotional State

Ask: 'How have you been feeling lately?' and observe emotional tone.

Mood: Normal Sad Anxious Irritable Other: _____

Mood appropriate to the situation? Yes No

Thinking and Perception

Ask: 'Have you had any strange or unusual thoughts lately?'

Thinking: Clear Confused Unrealistic beliefs

Have you experienced any reports of hearing or seeing things that others don't? Yes No

If yes, describe: _____

Awareness and Memory

Ask the patient: 'What is your name? Where are you? What day is it today?'

Orientation: Fully oriented Partially oriented Disoriented

Memory: Good Fair Poor

Daily Functioning

Ask: 'Are you able to carry out your daily tasks like cooking, cleaning, or working?'

Functioning: Fully independent Needs some help Needs full assistance

Risk Check

Ask gently: 'Have you had thoughts of hurting yourself or others?'

Any suicidal or self-harming thoughts? Yes No

If so, assess the urgency and ensure immediate action or referral.

Other risks observed (aggression, confusion, neglect): _____

Summary and Recommendation

Brief summary of concerns or notable observations:

Does this patient need to be referred for specialized mental health support?

Yes No Monitor and follow up

Disclaimer:

This tool is designed for use in primary healthcare settings. However, the assessment tool does not replace clinical decision-making. It is intended to assist in the assessment process.

Appendix V: KEMU LETTER



KENYA METHODIST UNIVERSITY

P. O. Box 267 Meru - 60200, Kenya
Tel: 254-064-30301/31229/30367/31171

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Email: deanrd@kemu.ac.ke

DIRECTORATE OF POSTGRADUATE STUDIES

September 4, 2023

Commission Secretary,
National Commission for Science, Technology and Innovations,
P.O. Box 30623-00100
NAIROBI.

Dear Sir/Madam,

RE: MILCAH NDINDA MUSYOKI – (REG. NO. HSM-4-2045-3/2017)

This is to confirm that the above named person is a bona fide student of Kenya Methodist University, in the School of Medicine and Health Sciences, Department of Health System Management undertaking a Doctoral Degree in Health System Management. She is conducting research on: "Primary Healthcare Facilities' Readiness for Integration of Mental Health Services for Access in Selected Counties in Kenya".

We confirm that her research proposal has been presented and approved by the University.

In this regard, we are requesting your office to issue a research license to enable her collect data.

Any assistance accorded to her will be appreciated.

Yours sincerely,


Dr. John M. Muchiri, (PhD)
Dean, Postgraduate Studies
Cc: Dean, SMHS
CoD, HSM
Program Coordinator -HSM
Student Supervisors

Appendix VI: NACOSTI LETTER



REPUBLIC OF KENYA

Ref No: **341182**



**NATIONAL COMMISSION FOR
SCIENCE, TECHNOLOGY & INNOVATION.**

Date of issue: **21/September/2023**

RESEARCH LICENSE



This is to Certify that Ms. Milcah Ndinda Musyoki of Kenya Methodist University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Kiambu, Makeni on the topic: PRIMARY HEALTHCARE FACILITIES' READINESS FOR INTEGRATION OF MENTAL HEALTH SERVICES FOR ACCESS IN SELECTED COUNTIES IN KENYA for the period ending : 21/September/2024.

License No: **NACOSTI/P/23/29593**

Applicant Identification Number
341182

Director General
**NATIONAL COMMISSION FOR
SCIENCE, TECHNOLOGY &
INNOVATION**

Verification QR Code



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See overleaf for conditions

THE SCIENCE, TECHNOLOGY AND INNOVATION ACT, 2013 (Rev. 2014)
Legal Notice No. 108: The Science, Technology and Innovation (Research Licensing) Regulations, 2014

The National Commission for Science, Technology and Innovation, hereafter referred to as the Commission, was established under the Science, Technology and Innovation Act 2013 (Revised 2014) herein after referred to as the Act. The objective of the Commission shall be to regulate and assure quality in the science, technology and innovation sector and advise the Government in matters related thereto.

CONDITIONS OF THE RESEARCH LICENSE

1. The License is granted subject to provisions of the Constitution of Kenya, the Science, Technology and Innovation Act, and other relevant laws, policies and regulations. Accordingly, the licensee shall adhere to such procedures, standards, code of ethics and guidelines as may be prescribed by regulations made under the Act, or prescribed by provisions of International treaties of which Kenya is a signatory to
2. The research and its related activities as well as outcomes shall be beneficial to the country and shall not in any way;
 - i. Endanger national security
 - ii. Adversely affect the lives of Kenyans
 - iii. Be in contravention of Kenya's international obligations including Biological Weapons Convention (BWC), Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO), Chemical, Biological, Radiological and Nuclear (CBRN).
 - iv. Result in exploitation of intellectual property rights of communities in Kenya
 - v. Adversely affect the environment
 - vi. Adversely affect the rights of communities
 - vii. Endanger public safety and national cohesion
 - viii. Plagiarize someone else's work
3. The License is valid for the proposed research, location and specified period.
4. The license any rights thereunder are non-transferable
5. The Commission reserves the right to cancel the research at any time during the research period if in the opinion of the Commission the research is not implemented in conformity with the provisions of the Act or any other written law.
6. The Licensee shall inform the relevant County Director of Education, County Commissioner and County Governor before commencement of the research.
7. Excavation, filming, movement, and collection of specimens are subject to further necessary clearance from relevant Government Agencies.
8. The License does not give authority to transfer research materials.
9. The Commission may monitor and evaluate the licensed research project for the purpose of assessing and evaluating compliance with the conditions of the License.
10. The Licensee shall submit one hard copy, and upload a soft copy of their final report (thesis) onto a platform designated by the Commission within one year of completion of the research.
11. The Commission reserves the right to modify the conditions of the License including cancellation without prior notice.
12. Research, findings and information regarding research systems shall be stored or disseminated, utilized or applied in such a manner as may be prescribed by the Commission from time to time.
13. The Licensee shall disclose to the Commission, the relevant Institutional Scientific and Ethical Review Committee, and the relevant national agencies any inventions and discoveries that are of National strategic importance.
14. The Commission shall have powers to acquire from any person the right in, or to, any scientific innovation, invention or patent of strategic importance to the country.
15. Relevant Institutional Scientific and Ethical Review Committee shall monitor and evaluate the research periodically, and make a report of its findings to the Commission for necessary action.

National Commission for Science, Technology and
Innovation(NACOSTI),
Off Waiyaki Way, Upper Kabete,
P. O. Box 30623 - 00100 Nairobi, KENYA
Telephone: 020 4007000, 0713788787, 0735404245
E-mail: dg@nacosti.go.ke
Website: www.nacosti.go.ke

Appendix VII: KIAMBU COUNTY LETTER



COUNTY GOVERNMENT OF KIAMBU

DEPARTMENT OF HEALTH SERVICES

P.O. Box 2244 - 00900 Kiambu, Kenya

Tel: +254 709 877 000

Email: info@kiambu.go.ke

Website: www.kiambu.go.ke

Twitter: [@KiambuCountyGov](https://twitter.com/KiambuCountyGov)

REFERENCE KIAMBU/HRDU/AUTHO/MUSYOKI. M. N

Date: 30/10/2023

TO WHOM IT MAY CONCERN,

RE: CLEARANCE TO CONDUCT RESEARCH IN KIAMBU COUNTY

Kindly note that we have received a request by **Milcah N. Musyoki** of **Kenya Methodist University** to carry out research in Kiambu County, the research topic being on **"Primary healthcare facilities' readiness for integration of mental health services for access in selected counties in Kenya"**.

We have duly inspected her documents and found that she has been cleared by **Kenya Methodist University institutional scientific ethics and review committee** until **4th September 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. JUNE MUTHIORA
COUNTY CLINICAL RESEARCH OFFICER
KIAMBU COUNTY**