

## REVIEW



# Mental Health Burden in Eswatini and the Need for the Integration of Digital Technologies: An Explanatory Review

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**Abstract:** Mental health is a basic component of health and wellness. The outbreak of COVID-19 uncovered the unpreparedness of Africa healthcare system. Eswatini healthcare system is battling shortage of skilled mental healthcare professionals and inadequate infrastructure. The existing approach of organizing a face-to-face session or physical therapy without urgent introduction of digital technologies could cause more havoc to Eswatini fragile mental healthcare sector in case of another pandemic or restriction of movement. This study aimed to examine mental health burden in Eswatini and the ways in which services can be improved using digital technologies despite the low resources. This explanatory study reviews the importance of the integration of digital technologies in Eswatini mental healthcare system. Literatures searched from relevant databases, Google Scholar, Sabinet, Ministry of Health Report, WHO, policy, and the challenges of accessing services in Eswatini. The study identified mental health problems encountered in providing mental health services. Eswatini healthcare system is plagued with shortages of mental health professional and infrastructural challenges, low knowledge of mental health, financial constraints, and inability to access mental health services. The study highlights ways of improving mental health services, and recommendations were provided to Government, stakeholders, and policymakers on the need to reform the mental healthcare system.

**Keywords:** mental health, Eswatini, digital technologies, healthcare

## 1. Introduction

Mental illness is the deteriorating condition such as affective, relational, and socioeconomic position of a person, which may predispose a person to sickness [1]. These problems correlate with anguish or deficiencies in relationships, profession, and other important aspects of a person's functionality. These disturbances are usually associated with distress or impairment in personal, family, social, educational, occupational, or other important areas of functioning. Over 400 million individual are impacted by mental illness globally, and this figure was responsible for about 19% of ill health globally [2]. Mental illness accounts for some mental health disorders, and, unfortunately, 1 out of 5 people are affected by the disorder. Additionally, around 200 million people in Africa are predisposed to experiencing mental health challenges at one point or the other [3]. Serious mental health disorder impacts more older people in the population and could result in intellectual, relational, and behavioral instabilities [2]. Mental health services are offered via face-to-face consultation. The restriction of movement and lockdown forced most African countries to integrate digital

technologies into mental healthcare so as to reach as many people as possible. Digital technology is defined as the use of personal computers, digital television, radio, mobile phones, and robots to facilitate services by electronic means to create, store, process, transmit, and display information [4]. Studies showed that digital tool integration is redefining healthcare system especially conventional methods and, likewise, mitigating human and infrastructural challenges in healthcare service delivery [5].

Mental health is gradually been recognized as a health concern in Eswatini. Findings have indicated that COVID-19 pandemic exacerbates mental health problems such as depression and anxiety disorder [6]. The number of Emaswati thinking, attempting, and committing suicide has increased since COVID-19 pandemic; unfortunately, there is shortage of mental health professionals to provide mental health services [7]. The country has only one psychiatric hospital, which caters for the whole country, and the ratio of mental healthcare professionals to the population is 5.23 to 100,000 and no record of child and adolescent psychiatrist in government facility [8]. To increase access to services, the Eswatini Ministry of Health decentralized mental health services to primary health care to allow easy, prompt, and timely accessibility to mental health services. There is infrastructure challenge and lack of skilled professionals to handle severe mental health cases, and

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unfortunately, the few skilled professionals are overworked due to high influx of mental health patient [9, 10].

The introduction of digital technologies can ease the burden on the limited mental healthcare professional and enable remote monitoring. One of the key reasons why there is a need to build resilience in mental health urgently is due to the shortages of mental health service providers and hospital beds in most developing countries, which is crucial and necessary in providing prompt and required mental services to the people. Further, mental health cases were high prior to the onset of COVID-19 but saw an upsurge of cases after COVID-19 hit. Again, the inadequacy of health facilities, supporting infrastructure, including offices, wards, and therapy rooms coupled with inadequate personnel further, supports the narrative of mental health not being prioritized [8].

Prior studies indicate that different types of telemedicine (tele-cardiology, tele-radiography, tele-oncology, tele-laboratory, tele-psychiatry, tele-pharmacy, etc.) have been deployed in Sub-Saharan Africa healthcare service delivery. HealthNet telemedicine project was instituted in Ethiopia, Nigeria, Ghana, and Gambia in 1980. Tele-education was established in Uganda and Kenya in 1997, while Ethiopia deployed National telemedicine initiative focusing on tele-education, tele-pathology, and tele-radiography [11]. South Africa launched telemedicine in 1990s, and it was extended to so many parts of the country in 2002, including rural areas; additionally, in some other African countries, telemedicine has been successfully utilized for ophthalmology, using videoconferencing, tele-dermatology, pathology, and for continuous learning [12]. Telepsychiatry was used in Nigeria in disseminating correct, concise information during the pandemic and also to enhance continuous mental health service delivery despite the lockdown [13].

Teleconsulting was employed in Uganda to provide mental health support during the pandemic; additionally, virtual online programs were used in Kenya to reach people with mental health needs during COVID-19 [11]. In Africa, several pilot studies have been conducted on the integration of digital technologies in healthcare service delivery. Probabilistic decision-making system helped Gambian rural healthcare professionals in the detection of serious medical conditions in patients [14]. In Tanzania's healthcare system employed the use of telemedicine in healthcare service delivery, similarly, The Delft Institute's CAD4TB software (digital tool) is utilized in the detection of pulmonary tuberculosis in The Gambia, Zambia, and Tanzania, further, countries like Ghana, Tanzania, and Kenya incorporated rapid diagnostic tests into m-Health systems while smartphone-enabled cloud computing electrocardiographs are in use in Malawi and Uganda [15].

Digital technologies are crucial in the attainment of sustainable healthcare service delivery. One of the Sustainable Development Goals (SDGs) of the United Nations Member States (SDGs) hinges on equality, promotion of healthy living, provision of affordable, accessible healthcare services, and well-being across all ages. The attainment of this goal is through the use of digital technologies which can enhance the detection and prompt response in healthcare service delivery [12]. Advancement in ICT is increasing the scope and coverage of digital technologies in mental health.

In enhancing healthcare service delivery, South Africa utilized robust information and communication technologies during COVID-19, for instance telemedicine and the smart health app [5]. The Delft Institute's CAD4TB software (digital tool) is also employed in detecting pulmonary tuberculosis in South Africa [13]. Telemedicine remotely monitors patients and provides mental health services. A WhatsApp platform was utilized in communicating precautionary measures and to provide information on COVID-19 as well as for prompt detection and contact tracing during the peak

of the pandemic and mobile phones are capable of providing therapeutic benefits among South Africans due to the high level of use in seeking and contacting medical professionals and searching for health-related information [16]. This explanatory review seeks to explore the need for the integration of digital technologies into mental healthcare to enhance effective and efficient services in Eswatini. Furthermore, this study delves into the burden and challenges in Eswatini healthcare system.

## 2. Materials and Methods

This study employed literature search of articles published in English from electronic sources such as Scencedirect, World Wide Web, Google Scholar, Sabinet, Taylor and Francis and Springer Link. Keywords used for the search were "mental health", OR "healthcare", OR "mental health challenges", OR "mental health burden", OR "mental health service", "Mental health policy", OR "mental health guidelines", "Telemedicine", OR "ehealth", OR "mhealth", OR "telehealth", "Digital technologies", OR "digital technology", OR "digital tools" "CIVIC health", and "Eswatini". The literature source was between 2019 and 2025. Unverified data sources and studies that does not include mental health or healthcare in Eswatini were excluded. The data search generates few peer-reviewed articles and conference proceedings. There was no study on digital technologies, digital health, mhealth, telemedicine, or telehealth in Eswatini. The generated articles were reviewed and discussed below.

## 3. Result

### 3.1. Healthcare system in Eswatini

The healthcare sector is geared towards ensuring health and also advancing economic and social growth. According to Ministry of Health [17] report, the health sector has improved with the integration of Essential Health Care Package, initiating new vaccines, supporting the research unit, and instituting national public health agenda such as emergency preparedness response. Eswatini National Health Policy (2016–2016) aimed at enhancing the universal health coverage (UHC) and to implement basic health services to the populace. The National health policy has gone through some reviews due to regional and national goals and obligations. The SDGs were formulated to tackle national health issues through the UHC. The health sector is prioritized in Eswatini with an allocation of 11.5% of the total budget. The UHC aimed at reaching the marginalized population with health services to promote inclusivity. Eswatini including 13 other countries have attained the 90-90-90 fast tract UNAIDS target; also, the country has surprisingly accomplished the 95-95-95 target stipulated for year 2030 [17]. Despite the strides in healthcare sector, mental health sector remains neglected [18]. Relapse and readmission are high among mental health patients in Eswatini due to high influx of patient, premature discharge, lack of adequate bed spaces, infrastructural challenges, financial burden on patient, stigmatization after discharge, and lack of continuity in treatment [8]. Several studies highlight lack of framework, support, awareness, education, and financial challenge with people living with autism spectrum disorder [10, 19–21]. Nkoyane et al. (2021) study further strengthen that unavailability of specialized care, unfavorable disposition, absence of awareness are challenges identified with Eswatini healthcare system. Findings from literatures are highlighted in Table 1 below.

Table 1. Mental health studies in Eswatini

Author	Title	Study design/sample size	Results
Dlamini et al. [22]	<i>"Prevalence and factors associated with postpartum depression at a primary healthcare facility in Eswatini"</i>	Cross-sectional study ( $n = 114$ )	The study found high incidence of post-trauma-related illness and regular mental health screening during postpartum period to aid timely detection and care.
Kebede et al. [10]	<i>"The Role of Social Work in Advancing Capacity in Autism Spectrum Disorder in the Kingdom of Eswatini"</i>	Reflection article	The study identified the need for awareness and education on Autism spectrum disorder and the need for policy improvement.
Ntuli et al. [20]	<i>"Epidemiological Profile of People Living with Mental Health Disorders Admitted at a Referral Hospital in eSwatini"</i>	retrospective epidemiological analysis ( $n = 307$ )	The study highlights prompt action, collaboration with providers, and integration of empirical based intervention are crucial in tackling the mental health disorders.
Setswe and Zungu [23]	<i>"COVID-19 and Mental Health: Perspectives of Nursing and Healthcare Researchers"</i>	Review ( $n = 15$ )	Mental health cases were escalated during the recent health emergencies and increased stress level of contacting the virus.
Zwane et al. [24]	<i>"Challenges faced by mental health nurses working with people living with mental illness in Eswatini: A qualitative study"</i>	Qualitative study ( $n = 9$ )	There is need for the government to prioritize mental health of nurses providing mental health services.
Pengpid and Peltzer [7]	<i>"The Prevalence and Correlates of Suicidal Ideation, Plans and Suicide Attempts among 15- to 69-Year-Old Persons in Eswatini."</i>	Cross-sectional nationally representative data ( $n = 3281$ )	Sexual behavior of female, family problems, suicidal attempt within the family, sexual abuse, alcohol abuse are factors associated with suicidal ideation.
Mathunjwa-Dlamini et al. [9]	<i>"The relationship between social adjustment and depression among students in one of the tertiary institutions in Eswatini"</i>	descriptive correlational design ( $N = 71$ )	The findings indicated the necessity of integrated psychological services into institutional services for prompt detection and treatment of mental health disorder.
Quarshie et al. [25]	<i>"Suicidal behavior in a nationally representative sample of school-going adolescents aged 12-17 in Eswatini"</i>	Cross-sectional survey design ( $n = 2,513$ )	Parental supervision, support within and outside the home correlates with reduction of suicide ideation. The study further highlights the need for policy implementation.
Grosso et al. [26]	<i>"The relationship between underage initiation of selling sex and depression among female sex workers in Eswatini"</i>	Quantitative ( $n = 1050$ )	The study found the need and importance of non-stigmatization of sex workers in the delivery of mental health service.
Anabwani-Richter et al. [21]	<i>"The silent pandemic: the impact of COVID-19 on mental health of adolescents living with HIV"</i>	Review	Findings highlighted prioritizing the mental health of adolescents.
Dlamini and Shongwe [8]	<i>"Exploring mental health nurses' perceptions on factors contributing to psychiatric readmission in Eswatini: A qualitative study"</i>	A qualitative, exploratory and descriptive design ( $n = 11$ )	Mental health nurses viewed negative habits, attitudes, social relationships, and organizational dynamics influences relapse in people living with mental illness.
Motsa [18]	<i>"Navigating the mental health for vulnerable children aged 6-18 with educational and economic hardships in Eswatini: Post COVID-19"</i>	Review.	The study recommends framework that reduces the negative impact of the recent pandemic on mental health and learning of vulnerable children.
Ngwenya et al. [19]	<i>"Urban-Rural difference in depression literacy among high school teachers in the kingdom of Eswatini"</i>	Cross-sectional survey ( $N = 983$ )	Urgent need to increase awareness and knowledge on depression among rural and urban educators to improve mental health incidences
Motsa et al. [27]	<i>"Association of chronic diseases and lifestyle factors with suicidal ideation among adults aged 18-69 years in Eswatini: Evidence from a population-based survey"</i>	Multistage cluster sampling design ( $n = 3020$ )	The study identified associated risk factors to mental health problems such as alcoholism, redundant lifestyles and the need to develop a resilient system for early suicide detection.

### 3.2. Mental health burden in Eswatini

Eswatini has four regions, and it is nestled between Mozambique and South Africa. Eswatini boasts around 1.2 million people and has one psychiatric hospital serving the whole population [28]. The country has only one national psychiatric hospital that caters for the entire population, and the ratio of mental healthcare professionals to the population is 5.23 per 100,000, with no child or adolescent psychiatrist in public healthcare settings [8]. Findings highlighted the occurrence of bipolar, schizophrenia, depressive episode, and epilepsy in Emaswati [8, 20]. The number of healthcare workers in Eswatini cannot adequately cater for the number of mental health cases. The shortfall in the number of healthcare workers impacts on the level of services which unfortunately burdens the few healthcare workers available.

About 70% of Emaswati are in their 30s; consequently, about 40% of those who visited the mental health facility ranges between 15 and 35 years. Eswatini Health Management Information System found that about 8,000 individuals were impacted with mental illness between the years 2017 and 2019, although unreported mental illness due to lack of access to care is not captured; additionally, the burden of mental health is found to be high among persons in their mid-20s and 40 years old [28]. Mental illness does not only affect those living with it but everyone around them. Gcinile [29] highlighted challenges faced in accessing mental health services in Eswatini, which include lack of mental health policy, inadequate mental health facilities, unaffordability of private mental healthcare providers, stigmatization, and lack of access to care. Setswe and Zungu's [23] study identified gaps in the provision of mental health services due to restriction of movement over the course of COVID-19 outbreak. Further, there is inability to access care and the lack of digital technologies to utilize in accessing treatment, which unfortunately placed a burden on the population. The introduction of digital technology to mental health services presents unprecedented opportunities to provide mental healthcare services remotely to the affected populace.

### 3.3. Digital technologies that could be utilized in Eswatini: Way forward

Countries in the low-medium-income country can utilize digital tools such as the instant messaging and Internet-enabled phones to reduce health problems and enhance service delivery [3]. Instant messaging was used to enhance patient's knowledge, increase drug compliance, notify hospital dates, increase information sharing, and aid data generation and storage [30]. Figure 1 indicates the total active cellular mobile connection in Eswatini is 1.31 million in 2024 and 1.28million in 2023 as compared to 1.14 million in 2020. Similarly, Internet penetration declined in 2024 (58.3%) when compared to 58.9% in 2023; however, it is an improvement in comparison to 47% in 2020. The number of Internet users in

Eswatini in 2020 was 540,000 which has increased considerably to 710,000 users as of January 2023 and a slight decrease to 708,000 in 2024. Data from 2020 indicated the number of online platform subscribers to be 260,000 in Eswatini and increased to about 330,000 as of January 2023 and 410,000 in 2024 [31]. The implication of high Internet penetration includes wider coverage of Internet; more people can be reached on digital platform, wider accessibility, increased communication, and hindrances to dissemination of information is decreased. This indicates that the digital technologies could be adopted and utilized in Eswatini healthcare system.

The implementation of the Client Management Information System (CMIS), a digital health platform designed to improve data management across healthcare facilities, is at the infancy state. The CMIS facilitates data capturing and archiving and retrieval of patient health information, enabling healthcare workers to deliver efficient and coordinated services, especially in remote and underserved areas. The CMIS framework enhanced the capacity to conduct virtual consultations, monitor chronic illnesses, and booking of appointments more effectively. This system proved beneficial throughout the pandemic, where physical distancing and reduced facility access necessitated alternative care delivery methods (World Health Organization, 2021). Despite infrastructural and connectivity challenges, CMIS has laid the foundation for scalable digital health interventions, positioning Eswatini to address its healthcare workforce shortages and expand access to quality care. In Eswatini, mental healthcare has historically been underfunded, with limited access to specialized services outside urban centers.

The digital shift in mental healthcare is crucial and of great necessity in providing prompt and needed mental health services to the populace. Bringing human knowledge and emerging technologies together is a great way to build resilience in mental health. Healthcare professionals seek to assist individuals with mental health issues, whether young or old, residing either in rural or urban communities. In-person and face-to-face intervention is heavily relied on in providing these therapeutic interventions; however, digital tools can be integrated or made as a stand-alone in providing these services [32].

Digital technologies can advance and transform Eswatini mental healthcare system by assisting scarce mental healthcare professionals to do more with ease. Digital tools such as WhatsApp, Zoom, telephone, Google Meet, Short message service, and media platforms could be utilized in reaching people in the population with mental health services which can advance service delivery.

### 3.4. Digital rights and mental health technologies

Civic technology is the utilization of technology to enhance public participation and improve public provisions. Civic technology is important in fostering inclusivity and ensuring that marginalized populations have a voice in healthcare decision-making processes (Harrison & Sayogo, 2014). In Eswatini, civic technology initiatives can support healthcare access by facilitating better communication between healthcare providers and patients, improving transparency in healthcare delivery, and enabling data-driven decision-making. One example is the use of community health platforms that allow citizens to report health issues, provide feedback on healthcare services, and access information about available health resources. These platforms can help identify and address barriers to healthcare access, such as stigma associated with mental health issues, by promoting community engagement and education. Moreover, the integration of civic technology can enhance the accountability of healthcare providers and ensure that health services are responsive to the community's necessities.

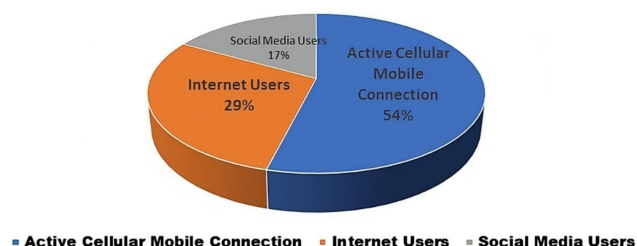


Figure 1. Digital technology use in Eswatini [31].



Digital rights encompass the rights to access, use, create, and publish digital media, as well as the right to privacy and freedom of expression online (Harrison & Sayogo, 2014). In the context of mental health in Eswatini, these rights support the deployment of digital health solutions that can bridge gaps in traditional healthcare systems. Telepsychiatry, mobile mental health apps, and online support groups are some of the technologies being integrated into mental health services to address mental health issues. These technologies are particularly vital in rural areas where access to mental health professionals is limited. Mobile health apps provide self-help resources, psychoeducation, and immediate crisis intervention, making mental health support more accessible.

#### 4. Discussion

The issue of mental health was a key issue in Africa even before the recent pandemic. There is a serious challenge with the number of healthcare professionals in mental health facilities as noted in this study, which hampers the provision of adequate and efficient services at mental healthcare facilities. The number of psychiatrists, clinical psychologists, occupational therapists, and psychiatrist nurses are too small in relation to the number of patients that need mental health services daily. The healthcare sector is battling with human resources challenges, consequently performing below the WHO's recommendation on the ratio of healthcare workers to patients for developing countries [3, 8]. This is noted in Essien et al. (2024) study, which showed that healthcare professionals, such as nurses, midwives, and doctors, are in short supply in South Africa due to high migration rate from developing to a developed world. During the global health summit, the people adopt WHO holistic mental health strategy for 2013–2030, and the plan focus is to incorporate comprehensive, integrated mental health services and develop policies for the advancement, preclusion, and reinforced the health care resources [23].

These healthcare professionals are crucial in emergency response in public healthcare system, and shortages affect the preparedness for health emergencies and outbreak. There is need for direct intervention from the government in retaining healthcare professionals to prevent possible collapse in the healthcare sector. The trend is having a detrimental effect on the functionality of the healthcare system. The inability to access physical care is a call to urgently build resilience in the healthcare system by integrating an effective and efficient digital technologies, which enable easy accessibility [23]. Annan et al. [33]'s findings that HCPs in the Ashanti community in Ghana relied on the radio as the only source of credible information during the Ebola outbreak. Mobile phones and social media are very popular and readily accessible. There are about 2.4 billion social media (Facebook, WhatsApp, Instagram, Snapchat) users all over the world [34], indicating how robust the platforms are. The level of coverage and reach it can attain when harnessed for treatment is enormous. The developed world has integrated digital technologies into the mental healthcare system, such as "113 Suicide prevention" Netherlands, which is 24 hours 7 days a week helpline to assist over 900 000 individuals with suicide ideation. Social media was found to assist in disseminating mental health information, while supporting and providing interventions for youth. Similarly, digital wearables were used to monitor, measure, and manage symptoms of depression in adolescents [35].

There appears to be numerous advantage of using online tools for the provision of healthcare services. The integration of digital technologies will enhance access to healthcare and enhance service delivery. Mobile phones, smartphones, Internet use, telemedicine, software applications, online help, and information resources have

proven the effectiveness of digital movement [23] and prioritizing mental healthcare [9]. These interventions allow seamless reach to services with limited constraints. The utilization of digital platform eliminates the challenge of location in getting care. Regardless of the remoteness of patients or HCWs, online tools can easily link both. The need to commute long intervals is eradicated while endless queue, prolonged wait only to be turned away due to unavailability of doctors and many others will not come to play here [13]. Aside this, having remote access to mental health professionals, online platform enables patients to make inquiry about situations they could be too embarrass to share face-to-face or the ones that slip off their mind. Online platform facilitates continuity in service delivery beyond the healthcare facility. It exceeds geographical setting and time zone which makes convenient and effortless for patients. The physical presence of patients in mental health facilities is no longer key in reaching mental health services.

Misconceptions about mental illness unfortunately lead to stigmatizations, which sadly precede missed appointments or in some extreme situations, termination of treatment. The use of digital technologies will eliminate stigmatization of the mental health patient. Digital technologies will enable patients to ask questions and discuss their mental health challenges anonymously without fear of being labeled. Patients and their relatives can connect to care without going to the mental health facility, hence reducing stigma attached to psychiatric hospitals. Similarly, healthcare professionals can communicate or offer therapy not only at healthcare facility on also via digital platform, thereby cutting down on their travel cost and easing inconveniences, likewise, HCWs may provide treatment comfortably. This, however, does not apply to patients who have been hospitalized for emergencies or for patients who have chronic conditions [3]. Furthermore, utilizing virtual tools would help in supporting treatment in certain situation, this applies to mild cases especially when patient are in remote location. The effortlessness at which health professionals are at reach facilitates care, thereby reducing frequencies of missed appointments as compared to the situation where the patient needs to go for face-to-face consultation. This could lead to missed appointments and eventually relapse. The introduction of digital technologies would ease travel costs for patients, when patients are expected to come for physical consultation. The use of digital tools such as Zoom and WhatsApp places less financial burden on the patients. Monies which would have been used to travel to the healthcare facility are saved. Furthermore, an individual's well-being is important in healthcare; unfortunately, people with mental health illness are stigmatized but online platform can enhance their mental strength [11]. This is because patients (and their families or caretakers) do not need to be physically present to have access to mental health services. Digital platform could also be beneficial to people living with anxiety.

Highlighted benefits of integrating digital technologies into mental healthcare include the following:

- 1) Reduced stigma associated with mental health facilities
- 2) Easy reach to mental health services
- 3) Low disruption of therapy or treatment plan due to relocation or financial challenge
- 4) Ease the burden of traveling from one end of the country to another. Despite decentralizing mental health services, severe and more disturbing situation need professionals.
- 5) First aid and immediate intervention can be achieved at anytime of the day.
- 6) Suicidal patients sometimes want to talk to someone as a cry for help. With digital technologies, help will just be at the tip of the finger.

- 7) Patient does not need to queue at the facility to refill medication or to complain about negative side effects.
- 8) Mental health professionals can easily discuss cases and do follow up seamlessly.
- 9) More people can be reached with up-to-date information through constant awareness and education

There are challenges associated with the integration of digital technologies. Problems associated with using digital technologies can come from human or system errors, in the form of wrong input or poor Internet connectivity among others. Issues of frequent Internet pop-up notifications, strict navigation of difficult menus, and complex user interface can not only be time-consuming and frustrating but may also delay important medical and therapeutic decisions. Internet disruptions may disturb the schedule of mental health providers and that of other patients (Owoyemi et al., 2022), [34]. This will unfortunately increase time spent online by patient and healthcare providers, truncate therapy sessions, increases data usage, and interrupt the online appointment of other patients. Information can easily get lost, and therapy sessions become unproductive when network connections are unstable and unreliable. Studies have highlighted challenges Internet These challenges can be mediated by installing software that prevent undesirable pop-ups, likewise, the Government, stakeholders, funders and Ministry of Information Communication and Technology in collaboration with Eswatini Communications Commission (ESCCOM) can provide sustainable and stable Internet services for mental health services.

In addition, some researchers were also concerned about quality of care and safety of patients' health information (Harrison & Sayogo, 2014), [11, 32]. Since Eswatini is moving towards the implementation of CMIS, patient's information should in codes and password enable to prevent unauthorized access. Hackers may want to hack into the mental health system to extract data which could be used to as threat and extort money or valuables from some individuals. The Government and Ministry of ICT need to work together in developing a robust system that cannot be easily hacked. The integration of digital technologies can increase access to care, because location of patients or healthcare workers does not impede treatment plan. Furthermore, training and awareness on the types and benefit of digital technologies will improve acceptability and attitude towards digital technologies. The Government needs to increase mental health sector allocation to foster the improvement of infrastructure and continuous training of mental health professionals.

Skilled physicians are scarce, with many hospitals having to cancel or delay procedures due to lack of professionals, impacting the sector negatively with devastating consequences. The lack of policy and framework exacerbate the challenges of integrating digital technologies into mental health service delivery [5, 12, 14, 16]. Policies and framework provide health professionals guidance on the do's and don'ts in utilizing digital technologies with their patients. Weak and non-existences of healthcare policies and poor framework implementation is an impediment. Archaic mental health laws ought to be amended to improve mental health service delivery and protect those with mental health need. The government of Eswatini needs to formulate policies that guide the adoption and usage of digital technologies for service delivery.

## 5. Conclusion

Digital technology has brought about revolution in healthcare service delivery. Mobile phones, smartphones, Internet use, telemedicine, software applications, online help, and information resources have proven the effectiveness of digital movement.

Eswatini needs to harness the benefit of integrating digital technologies into mental healthcare system to improve and enhance services. COVID-19 pandemic came up unexpectedly and brought about mental health challenges. There is need to build resilience in case of any health emergencies, outbreak, or pandemic.

## Recommendations

To enhance the adoption and utilization of online platforms into mental health services in Eswatini, the Government needs to develop a workable policy targeted at improving care and data protection and budgetary stipulations. Non-governmental organizations, stakeholders, funders, privately own healthcare facilities need to harness the benefit of digital technologies in reaching as many people as possible in providing mental health services beyond the pandemic. Short message service, Mobile phones, smartphones app such as WhatsApp, Facebook, social media platforms, and telemedicine can be integrated into mental healthcare system.

There is need to improve current infrastructure and establish more psychiatric hospital to cater for the growing need and allow accessibility to those in the rural areas. Skill development, awareness, and education are important for the successful incorporation of digital technologies. This can be done through the radio, television, and on social media platforms. The digital technologies initiative should be a collaborative effort between Government, funders, and stakeholders. Internet service regulators such as ESCCOM need to be involved in navigating ways to provide subsidized and affordable Internet services.

The mental health of the population is significant to the well-being of the nation. The current health emergencies and economic situation in the country exacerbate mental health of the populace. The government of Eswatini needs to embrace the adoption of digital tools into mental health service delivery. Awareness needs to be created among healthcare workers and the populace to facilitate the effectiveness. Further, there is a need to tailor policy to guide the utilization of digital technologies for mental health services. Policies on data security, storage and dissemination of such data. Training of healthcare workers on the utilization of digital technologies for service delivery is important. Constant and continuous training on evolving digital technologies is necessary to increase ease of use among healthcare workers. The world is fast becoming a global village, and digital technologies present opportunity for transformative shift in mental health service delivery.

## Ethical Statement

This study utilized secondary data and did not distribute any research instrument or interview participants for this study. This study does not contain any studies with human or animal subjects performed by any of the authors.

## Conflicts of Interest

The authors declare that they have no conflicts of interest to this work.

## Data Availability Statement

Data sharing is not applicable to this article as no new data were created or analyzed in this study.

## Author Contribution Statement

**Olubunmi Yemisi Fashoto:** Conceptualization, Methodology, Investigation, Resources, Writing – original draft, Writing – review

& editing, Visualization, Supervision, Project administration.  
**Nomalanga Dlamini:** Methodology, Investigation, Resources, Writing – original draft, Writing – review & editing, Visualization.  
**Mbuso Simelane:** Writing – original draft. **Dumsani Ndzinisa:** Methodology, Visualization.

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