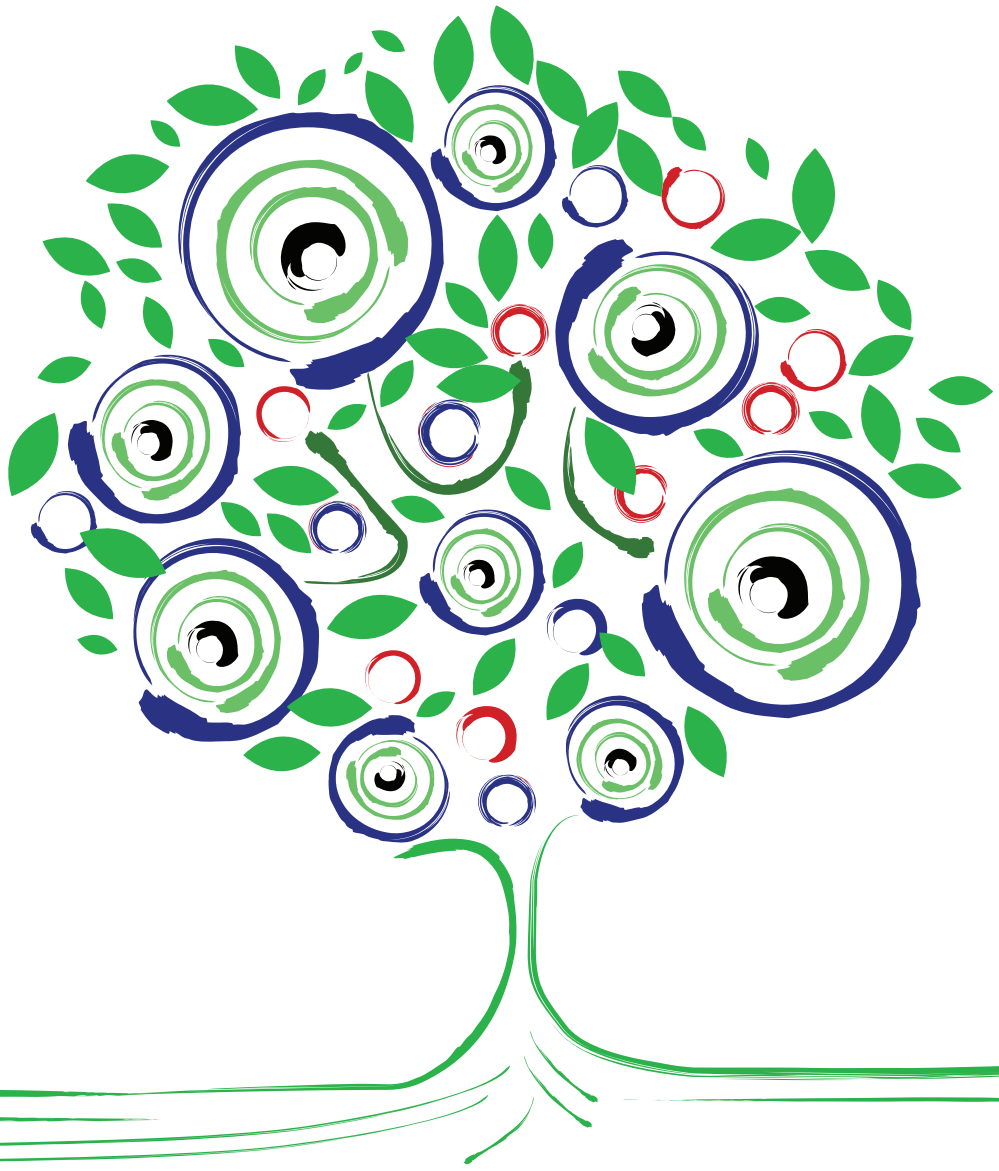
Prevention and management of
mental health conditions in

The Gambia

The case for investment



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Foreword

The Gambia Health Financing Strategy 2019–2024 outlines specific reform initiatives around financing arrangements in the health sector that are necessary for achieving goals and objectives that have been set for the health system and which are under-pinned by The Gambia National Health Policy 2021–2030 and the Health Financing Policy 2017–2030.

The Government of The Gambia recognizes mental health as a public health priority and this prompted the development of the zero draft of the mental health bill as well as the development of the National Mental Health Policy 2025–2030 and the Strategic Plan that aligns with national development goals and priorities. Mental health is considered as a critical component of overall health and well-being.

The Gambia Mental Health Investment Case supports the Government of The Gambia's efforts in strengthening the mental health-care programmes and clinical services in accessible, affordable and culturally appropriate measures that will help to drive the country towards achieving mental health-related Sustainable Development Goals. The investment case has also reported on specific mental health conditions that highly contribute to the mental health burden both in Government expenditure and in out-of-pocket expenditure.

The Government's recognition of mental health as a priority issue and engagement with partners to align its mental health policies and legislation with international recommendations lays a favourable background for improving mental health in The Gambia. The country's gradual effort to improve its human and material resources for mental health is approaching a tipping point for successful mental health interventions.

Honourable Dr Ahmadou Lamin Samateh
Minister of Health

World Health Organization, Health Promotion and Disease Prevention and Control

This report presents the findings of the investment case for mental health in The Gambia, developed through close collaboration between national stakeholders and development partners.

Mental health is a critical, yet frequently overlooked, component of public health and human development. In The Gambia, conditions such as anxiety, depression, psychosis, bipolar disorder, epilepsy, and substance use disorders represent a significant public health challenge and economic burden. Despite this, substantial treatment and service gaps persist.

In light of the growing recognition of mental health as a national priority, and building on the emerging leadership and multisectoral commitment in The Gambia, this investment case provides evidence-based projections on the health, social, and economic benefits of scaling up key mental health interventions at the national level.

The investment case is intended to support ongoing efforts to integrate mental health into broader health and development frameworks, in alignment with The Gambia's policy priorities and international commitments. It outlines concrete actions to strengthen the national response to mental health conditions, both including opportunities to leverage international aid and build strategic partnerships to complement domestic resources and offering recommendations to advocate for increased budget allocations.

Positioning mental health within the wider development agenda is essential for ensuring long-term progress. This report demonstrates that investing in a focused set of evidence-informed interventions can yield significant improvements in mental health outcomes, increase life expectancy, and reduce national economic losses.

We trust that this report will serve as a strategic tool to inform planning, guide resource allocation, and promote coordinated action across government, civil society, and development partners.
We express our sincere appreciation to all who contributed to the development of this report and reaffirm our collective commitment to advancing mental health for all.

Dr Jeremy Farrar
Assistant Director-General, Health Promotion and Disease Prevention and Control, WHO

Key messages

In 2024 the Ministry of Health of The Gambia, through its National Mental Health Programme, initiated the Mental Health Investment Case in collaboration with the United Nations Inter-Agency Task Force on the Prevention and Control of Noncommunicable Diseases. This initiative came at a critical time, when mental health needs in The Gambia are deeply concerning, evidenced by a significant gap between the number of people requiring mental health care and those accessing and receiving adequate management.

This report highlights the transformative potential of scaling up a number of selected mental health interventions. It estimates that, in total, The Gambia could gain 13 845 additional healthy life-years by implementing targeted mental health interventions from 2024 to 2030. The most significant outcomes are linked to interventions for depression, which alone could yield 5739 healthy life-years. Other impactful interventions include: universal school-based social and emotional learning, contributing 1860 healthy life-years; interventions for anxiety disorders, adding 1846 healthy life-years; and treatments for epilepsy, leading to 1705 healthy life-years gained.

This report examines the high burden of mental health conditions in The Gambia and underscores the urgent need for a comprehensive mental health system reform, which includes:

- establishing dedicated mental health infrastructure by investing in facilities such as rehabilitation centres and halfway homes;
- training health-care providers in mental health care;
- revitalising community-based mental health services to improve accessibility and cost-effective care; and
- promoting mental health education and awareness campaigns to combat stigma through community engagement.

This report emphasizes the necessity of building standardized and cost-effective mental health systems and services in The Gambia. Prioritizing mental health programmes in The Gambia will not only address the pressing burden of mental health conditions but will also create a compelling case for sustained investment in mental health that resonates with stakeholders.

It advocates for collaboration and partnerships between local and international stakeholders to adopt multisectoral and bilateral approaches that will help integrate mental health into broader health and development agendas and initiatives. To achieve optimum mental health outcomes, it should be remembered that "there is no health without mental health." By prioritizing mental health in our development initiatives, The Gambia can take a significant step towards building a healthier and more resilient society.

Jarra Marega
Programme Manager
National Mental Health Programme, Ministry of Health

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The Gambia mental health investment case was led by the Ministry of Health of The Gambia and the Secretariat of the United Nations Inter-Agency Task Force (UNIATF) on the Prevention and Control of Noncommunicable Diseases. It was jointly developed by the World Health Organization (WHO) and the United Nations Development Programme (UNDP), with the technical support of R-Health Consult (RHC).

Overall coordination and oversight of the investment case were led by Alexey Kulikov, Ilaria Corazza and Neneh Sallah (UNIATF Secretariat).

The investment case benefited from the stewardship of the Honourable Dr Ahmadou Lamin Samateh, Minister of Health of The Gambia, and Dr Mustapha Bittaye, with coordination by Fatoumata Komma, Focal Point for Partnerships at the Ministry of Health, and Jarra Marega, Programme Manager of the National Mental Health Programme of the Ministry of Health. Qualitative data collection through in-depth stakeholder interviews was led by Jarra Marega, with valuable support from Mamudou Jassey, Programme Officer of the National Mental Health Programme. Economic data collection was led by Yaya Bajo, Principal Health Economist of the Directorate of Planning and Information, and Girbril Jarju, Director of Planning and Information of the Ministry of Health. The institutional and context analysis, the economic analysis, and report production were carried out by RHC, in particular by Lambed Tatah (University of Cambridge), Yong Yi Lee (Monash University), and Caroline Manuela Hartanto. The initiative also benefited from the invaluable support of Dr Momodou T. Nyassi, Director of Health Services at the Ministry of Health.

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WHO: Daniel Hugh Chisholm (WHO Headquarters), Momodou Gassama and Ifeanyi Livinus Udenweze (WHO Country Office The Gambia) and Julius Muron (WHO Regional Office for Africa);

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Abbreviations

COVID-19	coronavirus disease
DALY	disability-adjusted life-year
GBD	Global Burden of Disease (study)
GDP	gross domestic product
HLYG	healthy life-years gained
IOM	International Organization for Migration
mhGAP	WHO Mental Health Gap Action Programme
ROI	return on investment
SDG	Sustainable Development Goal
SEL	social and emotional learning
SWOT	strengths, weaknesses, opportunities and threats (analysis)
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund

The Gambia

Key findings

Current burden of mental health conditions

768 million Gambian dalasi in 2024 (US$ 11.4 million)

0.5% of GDP (in 2024)

7 million dalasi (US$ 0.1 million)

due to health-care expenditure

760 million dalasi (US$ 11.3 million)

due to loss of workforce and reduced productivity

Investment required

360 million dalasi (US$ 5.4 million)

148 dalasi (US$ 2.2) per capita

Investment required for selected clinical packages and population-based preventive interventions over a 7-year period (from 2024 to 2030)

Anxiety disorders	Depression	Psychosis	Bipolar disorder	Epilepsy
34.9 million dalasi (US$ 0.52 million)	15.0 million dalasi (US$ 0.22 million)	48.4 million dalasi (US$ 0.72 million)	180.5 million dalasi (US$ 2.69 million)	32.7 million dalasi (US$ 0.49 million)

Alcohol use disorder	Universal school-based interventions
5.2 million dalasi (US$ 0.08 million)	43.1 million dalasi (US$ 0.64 million)

Return on investment

815 million dalasi (US$ 12.1 million)

includes productivity gains and social value of health

	Benefit–cost ratio[a]	Healthy life-years gained[a]	Total productivity gained[a]
Anxiety disorders	3.0	714	105.6 million dalasi (US$ 1.57 million)
Depression	7.3	795	108.6 million dalasi (US$ 1.62 million)
Psychosis	1.3	397	60.9 million dalasi (US$ 0.91 million)
Bipolar disorder	0.2	185	28.4 million dalasi (US$ 0.42 million)
Epilepsy	8.0	1705	261.1 million dalasi (US$ 3.89 million)
Alcohol use disorder	15.8	454	81.6 million dalasi (US$ 1.22 million)
Universal school-based SEL interventions	3.9	1860	168.5 million dalasi (US$ 2.51 million)

GDP: gross domestic product.
Figures are subject to rounding. The exact figures in dalasi are available in the report.
[a] Ratios, healthy life-years gained (HLYG) and total productivity gains pertain to the comprehensive package of care. For more details, please refer to the sensitivity analysis provided in Annex 1 of this report.

Executive summary

Mental health conditions such as depression, anxiety, schizophrenia and substance use disorders are a global public health and development priority. The burden of these conditions in The Gambia is substantial and growing, and the impact extends beyond ill health, suffering and social exclusion of people and their families. Mental health conditions have significant social and economic consequences, including increasing demand on already stretched health system resources and loss of economic productivity as people who suffer from mental health conditions are more likely to leave the labour force (due to premature death or disability), miss days of work (absenteeism) or work at reduced capacity (presenteeism). There is also a bidirectional relationship between socioeconomic status and mental health and well-being, which can drive a self-reinforcing vicious cycle of increased vulnerability, impoverishment, increased demands on the health system and adverse spillover effects to other sectors.

This report presents the findings of the case for investing in the prevention and management of mental health conditions in The Gambia by scaling up cost-effective policies, strategies and interventions. These interventions include clinical interventions, such as essential psychosocial support and medications, as well as population-based interventions such as school-based social and emotional learning programmes to prevent depression, anxiety and suicide. The report describes the economic evidence for investing, including intervention costs and health and economic benefits associated with the six priority mental health conditions (depression, anxiety, psychosis (mainly schizophrenia), bipolar disorder, epilepsy and alcohol use disorder) and suicide. It also includes recommendations and considerations towards possible steps that the Government of The Gambia can take to strengthen a whole-of-government approach to preventing and managing mental health conditions, grounded on the economic evidence and assessment of the political and institutional context.

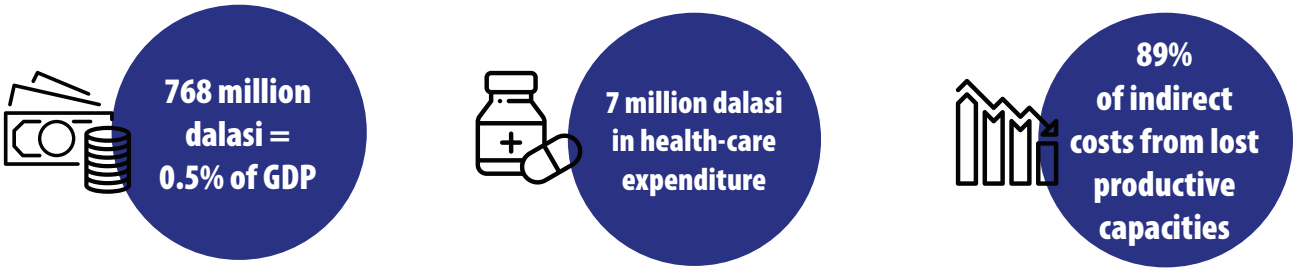
Main findings

The cost of mental health conditions

Mental health conditions affected 12% of the Gambian population and accounted for 6% of the country's overall disease burden in 2021, measured in disability-adjusted life-years.

The investment case findings indicated that mental health conditions pose a significant economic burden. In 2024 the total economic burden of the selected mental health conditions and suicide on the Gambian economy was estimated to be 768 million Gambian dalasi, which was equivalent to 0.5% of the national gross domestic product. While direct costs were 7 million dalasi (measured as Government expenditure), indirect costs due to absenteeism (missing days of work due to illness), presenteeism (being at work but with reduced capacity to do work due to illness) and premature death were more than 100 times higher at 760 million dalasi. Among these indirect costs, 55%

were linked to absenteeism and 34% to presenteeism, with anxiety disorders and depression being the costliest causes. The total cost of premature death was estimated at 75 million dalasi, and losses due to premature death were highest for bipolar disorder and alcohol use disorder.



These findings indicate that the economic burden of mental health conditions extends beyond direct health expenditure through to lower economic productivity and loss of life. A whole-of-government and multisectoral approach is needed to rectify this, and other sectors would also benefit from supporting mental health prevention and management efforts, resulting in a healthier and more productive workforce.

Despite this sizeable economic burden, treatment and service gaps remain substantial. Critical service gaps and challenges include the predominance of specialized, facility-based care models, uneven access to services in rural areas, limited public services for children and older people, and the lack of nationally representative data on mental health burden, which limits the ability to monitor and respond to evolving needs.

Why invest in interventions?

The Gambia can build on significant progress in addressing mental health challenges. The country benefits from growing leadership and multisectoral commitment towards improving mental health care. The Ministry of Health, with the support of international partners, such as WHO and the International Organization for Migration, has been working to enhance mental health services by implementing the WHO Mental Health Gap Action Programme, which aims to integrate mental health into primary health care across the country. Although mental health services remain centralized in the capital, community-based interventions are being rolled out, with the involvement of traditional healers, to improve access to care, particularly in rural areas. Additionally, the 2019 Mental Health Bill, which seeks to replace the outdated Lunatics' Detention Act of 1917, is a critical legislative reform that will, once passed, protect the rights of individuals with mental health conditions and modernize mental health care in the country. The Gambia's partnerships with international organizations and donors provide key opportunities to scale up mental health care through training, funding and capacity-building initiatives. These partnerships offer the potential to expand mental health services, improve infrastructure and reduce stigma through public awareness campaigns.

Additionally, the focus on youth engagement presents a significant opportunity, given the country's young population, to prevent and address mental health issues early, including those related to substance abuse and trauma from adverse childhood experiences, violence or other life-altering events.

The investment case findings demonstrate that scaling up mental health interventions would improve health over the next 7 years and reap significant economic benefits significantly, as follows.

Save lives and gain 6110 additional years of healthy life by 2030. All the interventions analysed significantly increase the total number of healthy life-years gained (i.e. additional years of healthy life). The most significant impacts in terms of healthy life-years gained between 2024 and 2030 were seen from interventions in universal school-based social and emotional learning (1860), epilepsy (1705), depression (795) and anxiety disorders (714).

Restore 262 million dalasi worth of productivity over 7 years, achieving economic gains that almost balance the 360 million dalasi cost of implementing the selected mental health interventions. Analysis shows that most mental health intervention packages produce a cost–benefit ratio greater than 1.0 over 7 years. This means that these interventions make a positive return on investment (ROI), with higher economic gains than the cost of implementing the interventions. The intervention package for alcohol use disorder had the highest cost–benefit ratio: for each dalasi invested in delivering the intervention, the expected ROI is 15.8 dalasi over 7 years.

Economic productivity gains, such as increased labour force participation and reduced absenteeism, are not the only considerations when assessing the benefits of investing in mental health interventions. A more holistic appraisal of benefits would incorporate the social value of health, where the intrinsic value of improving health as an end in itself would be warranted. When considering the social value of health, the estimates for cost–benefit and ROI ratios for the selected interventions are more favourable.

Bipolar disorder and psychosis are less common mental health conditions, and their interventions have higher costs and lower cost–benefit ratios compared with others. While this is the case, interventions to address these conditions must be included, given that affected individuals are at higher risk of suffering, marginalization and human rights abuses. Investing in these interventions will ensure that The Gambia provides the services needed to support individuals in need and upholds its universal access and human rights agenda.

In summary, the results of this investment case confirm the severe economic impact of mental health conditions in The Gambia. They show that investments in a selected number of evidence-informed interventions can significantly improve people's mental health and life expectancy and decrease national economic losses (Table ES.1).

Table ES.1. Summary of main findings

Every year, mental health conditions are responsible for	Over seven years, adopting new interventions and intensifying existing ones would
5.59% of the national burden of diseases (DALYs)	Gain 6110 additional healthy life-years
Overall economic costs equivalent to 0.48% of GDP (767.6 million dalasi)	Generate economic benefits of 814.7 million dalasi in productivity gains and social value of health, which outweigh the costs of intervention (359.7 million dalasi)
7.4 million dalasi in healthcare expenditure due to untreated cases	Reduce healthcare expenditure through prevention and increased treatment access
685 million dalasi in economic productivity losses due to absenteeism and presenteeism	Prevent 261.5 million dalasi in economic productivity losses (through productivity gains)

Recommendations for consideration

The following actionable steps can be taken to strengthen a multisectoral, whole-of-government, whole-of-society response to mental health conditions and their consequences.

- Prioritize the passing of the 2019 Mental Health Bill and ensure its enforcement.
- Increase Government funding allocation and explore international funding for mental health services.
- Strengthen intersectoral collaboration and partnerships.
- Expand community-based mental health services, including through enhanced collaboration with traditional healers.
- Scale up mental health workforce development and retention strategies across the board, including specialists and nonspecialists.
- Invest in modelled interventions and strengthen mental health services for vulnerable groups, including returning refugees and migrants, young people affected by substance use and women affected by gender-based violence.
- Enhance public awareness and reduce stigma through targeted education campaigns.


Introduction

1. Introduction

Mental health is a core aspect of living, health and well-being. Mental health conditions are a group of conditions that include cognitive disorders, psychosocial disabilities and mental states associated with significant distress, impairment in functioning or risk of self-harm. The most prevalent mental health conditions are anxiety disorders, depression, psychosis (based on WHO Mental Health Gap Action Programme (mhGAP) guidelines *(1)*, bipolar disorder, epilepsy and alcohol use disorder.

The global burden of mental health conditions is substantial and rising *(2)*. WHO estimated in 2019 that one in every eight people, or 970 million people around the world, were living with a mental disorder *(3–5)*. That same year, an estimated 703 000 people died by suicide *(3)*. The estimated global direct and indirect economic cost of mental health conditions was US$ 2.5 trillion in 2010 and is projected to rise to US$ 6 trillion in 2030 *(6)*. Low- and middle-income countries bear a disproportionate burden, accounting for 82% of people living with mental health conditions *(3)*. The leading mental health conditions are anxiety (accounting for 31% of all mental health conditions, affecting 301 million people, including 58 million children) and depressive disorders (accounting for 29% of mental health conditions, affecting 280 million people, including 23 million children) *(7)*. In the first year of the 2019 coronavirus disease (COVID-19) pandemic, it is estimated that the prevalence of anxiety and major depressive disorders increased by 26% over just 12 months *(8)*. One recent review article reported that, overall, about two-thirds of the disability-adjusted life-years (DALYs) from mental health conditions are caused by depression, anxiety, drug use disorders and alcohol use disorders *(9)*.

Despite this high burden of disease (7% of the entire global burden of disease, expressed in DALYs; and 19% of years lived with disability), there remain significant treatment gaps. WHO estimated in 2022 that, worldwide, approximately 71% of people living with psychosis are

untreated *(3)* and that 80% of people living with mental health conditions in low- and middle-income countries are untreated *(10)*. On average, only 2% of health budgets are spent on mental health conditions *(3)*. The Gambia faces similar challenges with a high burden of mental health conditions and gaps in treatment coverage.

The impacts of mental health conditions are far-reaching. Not only do mental health conditions cause human suffering, they also disproportionately affect disadvantaged and marginalized individuals. The effects of mental health conditions go beyond the suffering and marginalization of people and their families. Risk factors for developing a mental health condition include adverse socioeconomic circumstances such as poverty, unemployment, social exclusion, marginalization, violence and disability. Many people suffering from mental health conditions also suffer from stigma, discrimination and human rights violations. A bidirectional relationship exists between social and economic conditions and mental health and well-being *(11)*.

Further impacts include loss of economic productivity, as people who suffer from mental health conditions are more likely to work at reduced capacity (presenteeism), miss days of work (absenteeism) or leave the labour force (due to premature death or disability) *(12)*. In turn, social and economic conditions and their inequities have a substantial impact on the protection and promotion of mental health and well-being, with some experiencing greater vulnerability than others *(13)*. For example, individuals who have lost their jobs and are engaged in atypical or insecure work are at increased risk of poor mental health and well-being. When mental health conditions persist and are left untreated and when social and economic conditions decline, this bidirectional relationship can turn into a negatively reinforcing vicious cycle of increased vulnerability that increases demand on already stretched health system resources, with adverse spillover effects in other sectors.

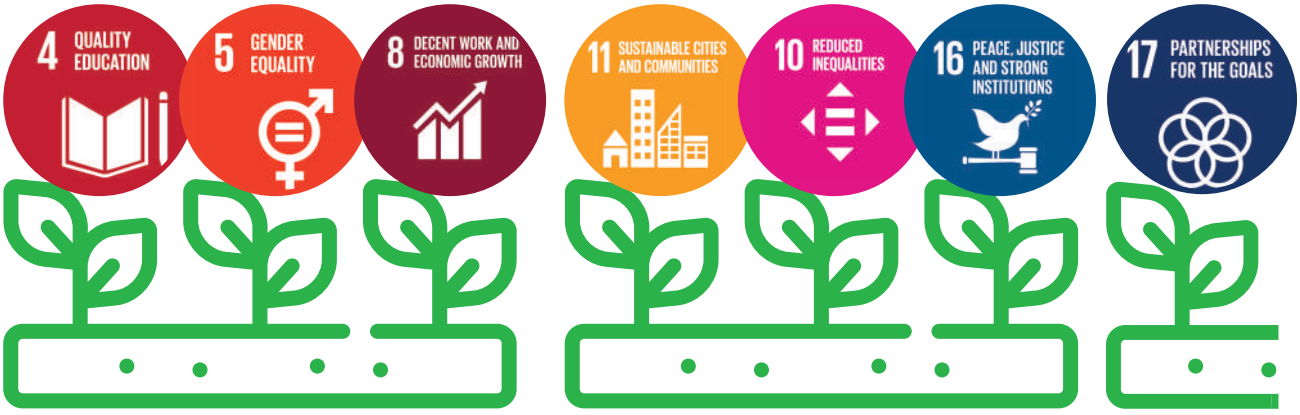
Fortunately, evidence-informed, cost-effective interventions to prevent and control mental health conditions exist. In response to a request by the Seventy-second World Health Assembly in 2019, WHO developed a menu of policy options and cost-effective interventions for mental health *(14,15)*. Yet, the adoption of these interventions and their national scale-up have been limited, particularly in low- and middle-income countries. Responding to the burden of mental health conditions is challenging because of several factors, including financial and resource limitations and competing demands for limited resources.

Strengthening policy and increasing investment in mental health benefits public health and sustainable development. Investment in evidence-informed mental health interventions could improve people's overall health and quality of life and increase life expectancy. In addition, such investments will contribute to the achievement of several Sustainable Development Goals (SDGs), including Target 3.4 (by 2030, to reduce by one third premature mortality from noncommunicable diseases through prevention and treatment and promote mental health and well-being; indicator 3.4.2 is suicide rate), SDG 4 (education), SDG 5 (gender), SDG 8 (employment and economic growth), SDG 10 (equality), SDG 11 (safe cities), SDG 16 (reducing violence) and SDG 17

(partnership, capacity-building and domestic resource mobilization). Improving mental health is critical to the SDG vision of a just, inclusive and equitable society. It also aligns with The Gambia's vision encapsulated in the National Development Plan 2023–2037 and the global commitment to leave no one behind.

This report presents the case for investing in mental health in The Gambia. Investment cases are designed to help countries to make economic and political decisions to address issues such as mental health conditions based on the costs and benefits of scaled-up action versus the costs of inaction. The report is divided into several sections: the first outlines the situation analysis for mental health conditions in The Gambia and the current and planned responses by the Government; the following section outlines the methodology for the economic analyses. The results of the analysis are given, describing the economic burden of mental health conditions and suicide, health impacts, economic gains, total costs and the cost–benefit and return on investment (ROI) for each intervention package; and finally conclusions are drawn from these findings and recommendations for consideration by the Government of The Gambia are provided that aim towards strengthening and scaling up cost-effective policies and clinical interventions which will address mental health conditions.

Strengthening policy and increasing attention to and investment in mental health are major goals for public health and sustainable development.




Situation analysis

2. Situation analysis

2.1 Country context

The Republic of the Gambia, a small West African nation bordered by Senegal and the Atlantic Ocean, covers about 11 295 km^2 and has a population of around 2.4 million (2024 estimate by the Gambian Bureau of Statistics) *(16)*. Its population, primarily Muslim, is culturally diverse with ethnic groups such as the Aku, Fula, Jola, Mandinka, Serahule, Serer and Wolof and communications are heavily in local languages alongside English. Historically, The Gambia's position along the River Gambia facilitated early trade and subsequently the trans-Atlantic slave trade, with James Island a significant trading post. Since gaining independence in 1965, the country has transitioned from two decades of authoritarian rule to a more democratic governance structure under President Adama Barrow, which has implications for current reforms, including mental health policy development. Table 1 shows relevant country characteristics.

Table 1. Development statistics for The Gambia

Category	Indicator	Values	Reference year
General	Population (million)	2.4	2024
General	GDP (US$ billion)	2.34	2023
General	GDP per capita (US$)	844.0	2023
General	Access to electricity (%)	65.4	2022
General	People using safely managed sanitation services (% population)	28.0	2022
General	Life expectancy at birth (years)	63.0	2022
General	Current health expenditure, per capita (US$)	24.6	2021
General	Out-of-pocket spending (% current health expenditure)	20.4	2021

GDP: gross domestic product.
Source: World Bank *(17)*.

Table 2 gives an overview of key indicators in The Gambia's mental health system, highlighting governance, resources, services and information. Notably, while The Gambia has a mental health policy integrated within broader health strategies (although this has been unaltered since 2012, a new policy is in development) and outdated legislation (1917, last updated in 1964), the data also reflect resource limitations, with no child and adolescent psychiatrists at all (2020) and low mental health workforce levels overall.

Table 2. Overview of The Gambia's mental health system response

Category	Indicator	The Gambia	Reference year
Governance	Mental health policy or strategy available	Yes, integrated	2012
Governance	Mental health legislation available	Yes, not integrated	1964
Resources	Mental health expenditure (%, total government health expenditure)	–	2017
Resources	Child and adolescent psychiatrists (per 100 000 population)	0.00	2020
Resources	Total mental health workforce (per 100 000 population)	3.54	2020
Services	Mental hospital beds (per 100 000 population)	6.39	2017
Services	Community residential facility beds (per 100 000 population)	0.00	2024
Services	Annual visits to hospital/community facility (per 100 000 population)	–	2020
Information	Mental health data availability and reporting	–	2020

Source: WHO *(18)*.

The Gambia's historical and cultural context significantly shapes its current mental health landscape, with challenges rooted in the underfunded health-care system, cultural beliefs and stigma. Since gaining independence in 1965, limited investment in mental health services, particularly in rural areas, has fostered a reliance on traditional healers, as many Gambians attribute mental health issues to supernatural causes *(19)*. Formal cooperation between modern medicine and traditional healers is rare, resulting in a fragmented mental health-care system. The stigma surrounding mental health remains strong, discouraging individuals from seeking help and exacerbating isolation, particularly for those with severe conditions *(20)*. The legacy of the trans-Atlantic slave trade, political instability and economic hardship under past authoritarian rule all contribute to intergenerational trauma and psychological distress, particularly in vulnerable populations *(21,22)*. These factors highlight the need for more significant investment in mental health services, stigma reduction and the integration of traditional and modern care.

2.2 Epidemiology and burden of mental health conditions

The actual burden of mental ill health in The Gambia is unknown since empirical surveys to track the prevalence and burden of mental illnesses in the country have not been carried out. Based on the prevalence rate from the 2004 WHO World Mental Health Survey *(23)*, it was estimated in 2012 that at least 118 000 adults out of 1.6 million Gambians (i.e. 13% of the adult population) were likely affected by mental disorders requiring varying degrees of treatment and care, with approximately 27 300 adults (3%) having a severe mental disorder such as schizophrenia, bipolar disorder or severe depression and 91 000 adults (10%) having moderate to mild mental disorders *(24)*.

Modelled estimates show that the most frequently diagnosed mental health conditions in the country are depression and anxiety, with these disorders contributing to 8.5% and 3.0% of the overall burden of disease in the country (measured in years lived with disability), respectively *(25)*. A WHO report estimated that over 3.9% of the Gambian individuals were diagnosed with a depressive disorder, while 2.7% were affected by an anxiety disorder in 2015 *(25)*. The 2021 Global Burden of Disease (GBD) study estimated that mental illnesses resulted in 5.59 DALYs per 100 people, and the age-standardized suicide mortality rate was 5.58 per 100 000 people *(26)*. Stigma is a challenge for mental health and has been noted to play a significant role in influencing the experiences of individuals grappling with mental health challenges within The Gambia *(27)*.

There is a large gap between the number of people affected by mental disorders and those receiving treatment: the maximum number of people receiving treatment in The Gambia in 2005 was estimated to be 3278 (i.e. 2.9% of all people with mental disorders or 12% of people with severe mental health disorders). Inpatient admissions increased from 10 to 34 per 100 000 people between 2014 and 2020 *(18)*. It has been reported that nearly 90% of people with severe mental disorders lack access to treatment *(19,20,28)*, mainly due to the limited availability of mental health services. However, many people with psychosis (schizophrenia) are attended to at health facilities. Table 3 shows that an estimated 4162 people had mental health disorders in 2021. In contrast, there were approximately 4248, 6165 and 4328 outpatient visits, respectively, in 2018, 2019 and 2022 for the treatment of schizophrenia (not discounting multiple visits). Table 3 also shows the prevalence of mental health conditions by sex and their relative contribution to the overall disease burden in the country.

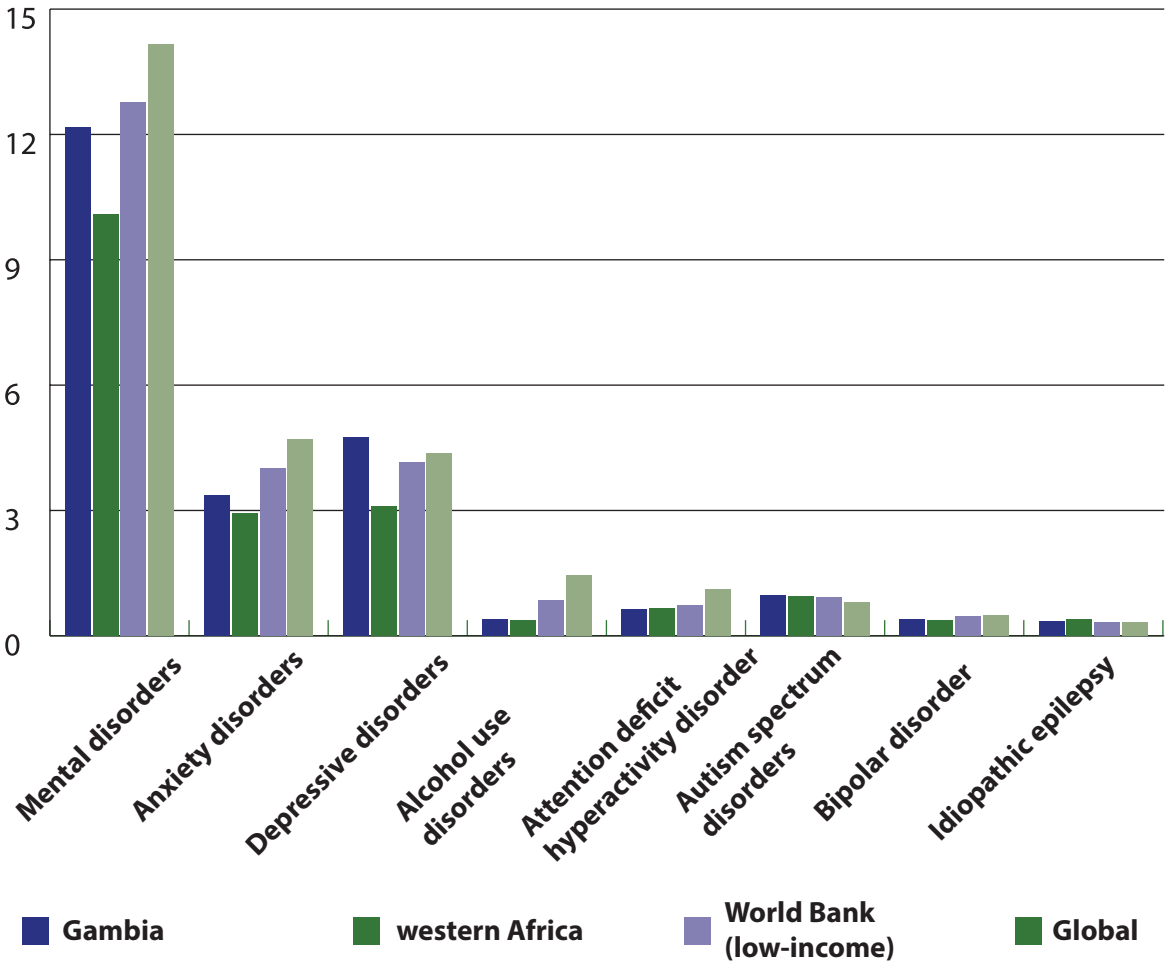
Table 3. Burden of mental health conditions in The Gambia, GBD 2021 estimates

Condition	Male (%)	Female (%)	Both (No. (%))	DALYs (%)
Mental health conditions				
Mental disorders	10.64	13.63	28 3051 (12.16)	5.59
Depressive disorders	2.62	6.77	11 0356 (4.74)	0.12
Alcohol use disorders	0.44	0.37	9414 (0.4)	0.45
Anxiety disorders	2.85	3.88	78 503 (3.37)	1.15
Attention deficit hyperactivity disorder	0.92	0.36	14 793 (0.64)	0.32
Bipolar disorder	0.38	0.40	9153 (0.39)	3.10
Idiopathic epilepsy	0.37	0.30	7802 (0.34)	0.31
Autism spectrum disorders	1.27	0.68	22 558 (0.97)	0.21
Schizophrenia	0.16	0.20	4162 (0.18)	0.01
Suicide				
Suicide rate (deaths, per 100 000 population)	8.11	3.12	5.58	–

Source: Institute For Health Metrics and Evaluation *(26)*.

The prevalence of mental and depressive disorders is highest in The Gambia compared with estimates of low-income countries, western African countries and the world (Fig. 1).

Fig. 1. Prevalence (%) of mental health conditions in The Gambia compared with low-income countries, western African and global aggregates, 2021



Source: Institute for Health Metrics and Evaluation *(26)*.

2.3 Mental health legislation and policies and strategic plans for mental health

The current mental health legislation, the Lunatics' Detention Act of 1917 (most recently amended in 1964), focuses on the detention and treatment of individuals deemed to be so-called "lunatics" *(29)*. It has been criticized for stigmatizing terminology and lacking a legal definition for a person. This extends to the absence of provisions and safeguards during diagnosis, certification and detention; overcrowding at psychiatric units; nonvoluntary consent to treatment or independent examination; denial of voting rights for detained patients; and the lack of provision for legal aid or compensation for rights violations. The African Commission on Human and People's Rights has recommended the repeal of the Act and the creation of new legislation for mental health *(30)*.

The Act remains the extant law in The Gambia, but a new Mental Health Bill has been in the drafting stage since 2019, although it has yet to reach the National Assembly. The new bill moves from the outdated Lunatics' Detention Act of 1917 towards a more modern and rights-based approach *(31)*. The draft bill aligns with international human rights standards and the WHO checklist for developing mental health legislation *(32)*. It aims to safeguard the human rights of individuals with mental disabilities, their families and caregivers, providing better protection and dignity for those affected by mental illness. The bill is expected to strengthen community-based services, capacity-building, funding and implementation and stakeholder engagement.

Since 2007 the country has made continuous efforts to develop its mental health policy, delivering the first policy in 2007 *(33)* together with an implementation plan that was selected as a finalist in the World Bank Global Development Marketplace competition 2007 (among 104 finalists out of 2868 projects in total) *(34)*. The 2007–2012 Mental Health Strategic Plan aimed to enhance mental health services and care in the country but did not achieve substantial results due to limited funding *(35)*. The current mental health policy is still in draft and has not been reviewed and validated. It focuses on increasing mental health awareness, improving access to services and using evidence-informed practices. The plan aligns with national development goals of a healthier population and economy. Its success relies on collaboration and commitment from all stakeholders to implement its strategies effectively.

There was also an Advisory Note on Mental Health Rights in The Gambia issued by the National Human Rights Commission of The Gambia in 2023 *(36)*, which provides essential guidance on mental health rights within the country. The Advisory Note outlines fundamental rights and protections for individuals with mental health conditions, emphasizing the need for dignity, respect and nondiscrimination in their treatment. It highlights the importance of upholding legal and ethical standards in mental health care and ensuring access to appropriate services and support. Additionally, the advisory note underscores the role of stakeholders, including Government agencies, health-care providers and civil society in safeguarding the rights and well-being of people with mental illness.

The Government's recognition of mental health as a priority and its engagement with partners to align its policies and legislations with international recommendations creates a favourable background for improving mental health in the country. The country's gradual effort to improve its human and material resources for mental health is approaching a tipping point for successful mental health interventions. In addition, national and international partners including the WHO Country Office in The Gambia, the International Organization for Migration (IOM) and the United Nations Children's Fund (UNICEF) are ready to support The Gambia in improving mental health services for its citizens.

2.4 Mental health resources

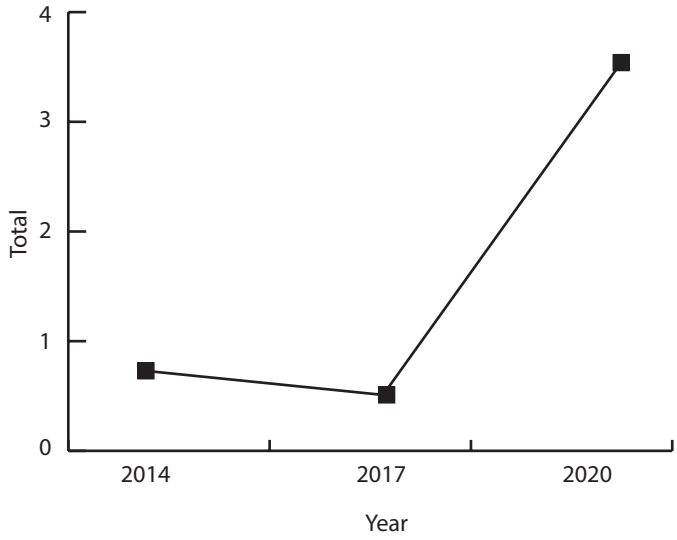
The Gambia faces challenges mobilizing adequate financial resources to support mental health initiatives. Limited Government funding allocated to the health sector and competing priorities pose a significant barrier to scaling up mental health services. The 2017 National Health Account studies estimated that total health expenditure was 5.42% of gross domestic product (GDP), of which the Government contributed only 30.7% (i.e. 1.7% of GDP), while households contributed 24.6%, private insurance 1.1% and external donors 41.4% *(37)*.

Since 2016 there has been a budget line for the Mental Health Programme (Budget Code: 211407) in the Ministry of Health's Programme-based Budgeting Structure, with 4.14 million dalasi approved for the 2024 fiscal year. However, there are often challenges for programmes to access the resources allocated to them. In addition to this, a new budget line was created for the lone psychiatric facility Tanka Tanka, as part of the Management of the Subvented Institutions Programme, launched in the 2024 budget cycle. This new budget line increases the much-needed financial resources for Tanka Tanka. As with other health expenses, the primary sources of mental health financing are grants *(19)*.

The mental health budget is primarily directed towards the upkeep of the psychiatric inpatient department of the Edward Francis Small Teaching Hospital, the most significant ongoing activity in the mental health space. The care and treatment of people with mental health conditions (including psychosis, bipolar disorder and depression) are covered in the national health scheme. People with mental health conditions do not pay a fee at the point of service and do not pay a fee for psychotropic medicines (e.g. antidepressants, antipsychotics and mood stabilizers). However, these services are not available across the country, and psychotropic medication is often out of stock; therefore, patients often purchase their prescribed medication from private pharmacies, which are very expensive for the average Gambian.

From a human resource perspective, the country faces a scarcity of mental health professionals, including psychiatrists, psychiatric nurses and psychologists, limiting the provision of specialized care and treatment (Fig. 2).

Fig. 2. Mental health workers in Gambia



Mental health workforce	Total number (gov. and nongov.)	Number per 100 000 population
Psychiatrists	4	0.17
Mental health nurses	22	0.94
Psychologists	2	0.09
Social workers	55	2.34
Other specialized mental health workers (e.g. occupational therapists)	0	0.00
Total number of mental health professionals	**83**	**3.54**

Source: WHO *(18)*.

The Gambia's mental health workforce comprises 83 professionals, including four psychiatrists (three on technical assistance) and 12 psychiatric nurses, predominantly centralized at the Tanka Tanka Psychiatric Department of Edward Francis Small Teaching Hospital. Only one psychiatric nurse currently covers the North Bank South Region, Farafenni General Hospital, one in the Central River Region and one in the Lower River Region. North Bank and Upper River Region currently have no psychiatric nurse or psychiatrist, underscoring significant accessibility challenges, particularly in rural areas *(18)*. This critical shortage of mental health staff is driven by underfunding for training and a high attrition rate, as many trained professionals leave the Government system for other sectors.

The development of a Training Curriculum on Mental Health and Psychosocial Support Services for Migrants In The Gambia, a six-month certificate programme at The Gambia College School of Nursing, aspires to integrate mental health services into primary health care for refugees and migrants *(38)*. Training health-care professionals using this curriculum contributes to building capacity within the country *(39)*. Investing in training programmes, continuing education and workforce retention strategies can bolster the capacity of the mental health workforce and expand service delivery capabilities. Additionally, promoting task-sharing and task-shifting approaches, wherein nonspecialized health-care workers and personnel from other sectors, such as law enforcement teachers, are trained to deliver basic mental health and psychosocial support within and outside of their workplace, will enhance accessibility and efficiency in support and service delivery, particularly in remote and underserved areas.

2.5 Mental health services

Health facilities, including tertiary hospitals, secondary-level health centres and primary health posts, provide various mental health services. At the national level, the Tanka Tanka Psychiatric Department of Edward Francis Small Teaching Hospital is the only specialized facility for mental health inpatient care. The facility was established in 2009 and has a 150-bed capacity of male and female units. It offers free mental health services to both Gambians and non-Gambians. Due to the limited bed capacity, accommodating other individuals needing inpatient services is often difficult, particularly from rural areas of the country. Some regional health centres provide outpatient mental health care and treatment for individuals with mild-to-moderate mental illnesses. There are ongoing efforts to integrate mental health services into the broader health services, comprising four tertiary hospitals, 38 secondary-level health centres and 492 primary health posts *(40)*.

The Community Mental Health Team is part of the National Mental Health Programme Office. The Team used to conduct home and community visits to assess people living with mental illnesses *(19)*. It also used to conduct nationwide community mental services every 3 months and daily in urban areas, but these services stopped in 2017 due to mobility issues and inadequate medication supply. According to the National Mental Health Programme, there are currently no establishments for community-based mental health centres and rehabilitation facilities with which the Community Mental Health Team can operate to render services. Therefore, infrastructure deficiencies, including inadequate facilities and equipment, pose challenges to delivering comprehensive mental health care at the community level.

Traditional healers are respected members of the Gambian communities, and they are the first points of contact for many people with mental disorders *(19)*. They provide care to patients at home and in their facilities. The Ministry of Health reported that four traditional healers in Nuimi Bakindiki village, Jarra Jappineh village and Kombo Busura village had been trained by the National Mental Health Programme by 2020 to enhance their capacity to identify people with mental health disorders and to provide treatment (psychotropic medications and care) *(38)*. The programme started with patients with epilepsy and was later extended to patients with psychosis. Follow-up treatment and support are organized through the closest health centre or regular appointments/consultations with traditional healers. By 2020 a total of 300 patients had been treated through the programme. Similar treatment programmes operate in Buiba, Japiennehi, Bullock, Numu-el and Busura villages. The Community Mental Health Team also trained 15 traditional healers and 12 were formally certified and working in collaboration with the National Traditional Medicine Programme and the National Mental Health Programme under the Ministry of Health. Additionally, six traditional healers who provide "village care" (where patients live in the traditional healer's home on a long-term basis) received allowances (financial incentives) from the Ministry of Health and Department of Social Welfare for their contribution towards mental health care, but this initiative has since stopped *(38)*.

2.6 Mental health information monitoring and awareness

The Ministry of Health's Health Management Information System is responsible for the collection of health information on diseases such as tuberculosis, HIV and malaria, gathered from the different levels of service (major and minor facilities and at the community level), but the information system provides few relevant data on mental health conditions and service available *(41)*. There is no community or health facility assessment/surveillance system to monitor and record data on common mental health issues. Data entry clerks lack the knowledge and understanding of common psychiatric diagnoses and their abbreviations or terminologies used to collect and analyse mental health cases reported to their facilities. Relevant contextual information to perceptions of mental health in the country are shown in Box 1.

Photo: © WHO

Box 1. Contextual information regarding perceptions of mental health in The Gambia

Stigma

The stigma surrounding mental health impacts individuals' ability to seek and receive appropriate care in The Gambia. Cultural beliefs often frame mental illness as a supernatural or spiritual issue, associating it with possession by jinns, curses or punishment for wrongdoing *(42)*. Such views foster discrimination and social isolation, as those affected are often regarded with fear and labelled as permanently crazy or possessed. This stigma extends into family and community life, with some families choosing to hide mentally ill members to avoid public shame, thereby limiting the affected individuals' access to both traditional and formal health-care options. The societal stigma against mental health is compounded by structural barriers that prevent effective treatment, with a significant reliance on conventional healing practices due to the lack of accessible biomedical interventions *(42)*.

Returning refugees and migrants

Refugees and migrants returning to The Gambia face numerous mental health and psychosocial challenges that complicate their reintegration. Many returnees experience distressing physical, social and emotional consequences from their migration journeys, including exposure to violence, loss of social connections and impoverished living conditions. These experiences often lead to symptoms of anxiety, depression, post-traumatic stress disorder and other mental health issues *(38)*. Additionally, the trauma endured by returnees frequently impacts their close relationships, as families and communities may struggle to understand and support them upon their return.

Additionally, stigma and discrimination are significant barriers for returning refugees and migrants, exacerbating their mental health challenges and hindering their reintegration into society. Many returnees are viewed negatively or even perceived as failures or burdens to their families and communities, particularly if they cannot secure a better life abroad. This societal stigma can lead to isolation and increase the likelihood of mental health issues among returnees *(38)*. Lack of adequate psychosocial support services further impedes the healing process, leaving many returnees without the necessary mental health care or social support structures to help them to reintegrate successfully.

Box 1. contd.

Drug use in young people

Substance use significantly affects mental health. Many individuals who use drugs may experience or exacerbate mental health issues such as anxiety, depression and other disorders. Drug use, particularly among young people, is a growing issue in The Gambia. Cannabis is the most commonly used substance, but there are also reports of increasing use of harder drugs such as heroin and methamphetamine *(27,43)*. The Drug Law Enforcement Agency of The Gambia reported numerous arrests related to drug offences *(43)*. Various factors contribute to drug use among Gambian young people, including unemployment, peer pressure, lack of parental guidance and limited education about the risks associated with drug use *(43,44)*. These social determinants can lead to a cycle of substance use and mental health challenges. The lack of specialized services for addiction treatment further complicates the situation, leaving many without the necessary support.

Photo: © WHO


Methodology

3. Methodology

The methodology employed in developing this mental health investment case is robust and interdisciplinary, leveraging expertise from multiple agencies and fields, including health economics, social development and public health. The inclusion of service users further enriches the analysis by ensuring a grounded perspective on mental health challenges. Key strengths of the methodology include its comprehensive approach to assessing both the economic burden (direct and indirect costs) and the health impacts of interventions. The emphasis on calculating ROI ensures that the findings are practical and aligned with policy priorities. This well-structured framework provides a solid foundation for evidence-informed decision-making, highlighting the economic and social benefits of addressing mental health challenges in The Gambia.

3.1 Institutional context analysis

The institutional and context analysis that accompanied the economic analysis aimed to engage relevant stakeholders, provide a narrative synthesis of how institutions and context influence mental health and identify opportunities for action to be taken by The Gambia. The analysis assessed the political space relevant to mental health policy adoption, implementation and enforcement to uncover the most promising policy pathways for the country to take (for example, areas of consensus, political appetite or barriers to adoption). The institutional context analysis was conducted from December 2023 to June 2024.

The first institutional context analysis step was a desk review to characterize the epidemiological burden of mental health, national response mechanisms (for example, policies and regulations, financing, resources, action plans, programmes and services, impacts) and information about the country context, socioeconomic profile and historical milestones. Legislative, policy and programme documents, targeted literature and public domain databases (for example, the Global Health Data Exchange) were reviewed.

The second step involved interviews with key informants and focused group discussions with people with lived experiences. The interviews were hybrid, with the country team attending in person and the international team attending online. The consultations sought to engage the stakeholders and understand their interests and capacity to influence mental health interventions and institutional and governance arrangements. The stakeholders engaged in this process were:

- the National Assembly
- United Nations Office on Drugs and Crime
- National Security Council
- National Human Rights Commission
- Ministry of Health
- Association of Health Journalists

- Ministry of Justice
- University of The Gambia
- Ministry of Finance
- Association of Nongovernmental Organizations and Civil Society Organizations (Tango)
- Ministry of Foreign Affairs
- Women in Liberation and Leadership (nongovernmental organization)
- Ministry of Young People and Sport
- Paradise Foundation (nongovernmental organization)
- Department of Labour
- Tanka Tanka Psychiatric Department of Edward Francis Small Teaching Hospital
- Ministry of Higher Education
- people with lived experience
- Ministry of Gender
- Ministry of Interior.

3.2 Estimating the economic burden of mental health conditions

A model was developed to estimate the current economic burden attributable to both the direct and indirect costs of six mental health conditions and suicide in The Gambia. Population data by age and sex for the period 2024–2030 were obtained from The Gambia Bureau of Statistics and the United Nations Department of Economic and Social Affairs World Population Prospects study. The OneHealth Tool (Box 2) was used to model prevalence and mortality rates by age and sex for six mental health conditions: depression, anxiety, psychosis, bipolar disorder, epilepsy and alcohol use disorder. The model projected prevalence and mortality for each condition between 2024 and 2030 based on the assumption that current rates remain unchanged, providing a baseline for evaluating mental health conditions' economic and health impacts.[1] These projections were summarized as the prevalence and mortality in the entire population and the working-age population (aged 15–64 years).

1 The model estimated growth in prevalence and mortality due to population growth only – not growth in disease rates.

Box 2. OneHealth Tool and its mental health module

The OneHealth Tool is software designed for national strategic health planning in low- and middle-income countries. Development of the tool is overseen by a group consisting of experts from United Nations agencies and development institutions. A mental health module was devised as part of the tool for estimating the costs and health impacts of mental health services and interventions at population level. The module allows estimation of the number of people living with mental health conditions in a country and linkage of the epidemiology of mental health conditions to national life tables for estimation of the numbers of cases averted and healthy life-years gained over time at population level.

The direct and indirect economic burdens of mental health conditions and suicide were estimated using the following approach.

The direct economic burden of mental health conditions and suicide comprises all health-care expenditure related to the management and care of people living with a mental health condition. Total mental health expenditure in The Gambia was estimated by first taking the mental health budget line from the programme-based budget reported by the Ministry of Health in 2023 (i.e. 2 million dalasi) and multiplying this by the ratio of total health expenditure to current health expenditure, calculated using data from The Gambia Health Accounts Study FY2016 and FY2017 *(37);* i.e. a ratio of 1.10. This adjustment was made to incorporate the impact of capital expenditure alongside the original budget estimate, which involved only recurrent expenditure. The total Government expenditure on mental health was then converted to total mental health expenditure inclusive of all financing sources (i.e. Government, corporations, households, nonprofit-making organizations and international funders) by multiplying the previous estimate by the ratio of total health expenditure across all financing sources relative to total health expenditure incurred by the Government alone. The resulting ratio of 3.03 was calculated using the latest National Health Accounts data presented in the WHO Gambia Annual Report 2022 *(45)*. The resulting 2023 estimate was finally converted into a 2024 equivalent using the local consumer price index. Non-health-care costs such as transport, waiting times and informal care were excluded.

The indirect economic burden of mental health conditions and suicide is due to lost productivity resulting from impaired mental health. Lost productivity can result from (i) absenteeism, when people take days from work because of a mental health condition; (ii) presenteeism, when people's job performance is impaired due to a mental health condition; and (iii) premature death, which accounts for the lost productivity of people who die due to mental health conditions or suicide. The steps involved in estimating the indirect economic burden are described below.

1 Estimation of total employed labour force

The annual value (in terms of economic output) of each full-time worker in The Gambia was calculated from the GDP per employed person, defined as the country's GDP (2.4 billion dalasi in 2023) divided by the total employed labour force. Local data on the total labour force aged over 15 years, the unemployment rate and the labour force participation rate were used to determine the total employed labour force.

2 Estimation of reduction in worker productivity due to mental health conditions

Data were obtained to quantify the reduction in worker productivity due to each mental health condition. As in a previous global ROI study *(46)*, rates from World Mental Health Surveys *(47)* were used to describe (i) the reduction in labour force participation due to each of the six mental health conditions; (ii) the reduction in full-time hours worked due to mental health-related absenteeism; and (iii) the reduction in productivity due to mental health-related presenteeism.

3 Estimation of number of workers with mental health conditions

The number of workers in The Gambia with a mental health condition during 2024 was estimated after adjustment for labour force participation, unemployment and mortality. This involved taking the total number of people aged 15–64 years with a mental health condition and then subtracting those who were not participating in the labour force (e.g. still at school or university), were unemployed, could not participate in the labour force because of a mental health condition or were no longer alive.

4 Calculating economic losses

The economic losses attributable to absenteeism, presenteeism and premature death due to a mental health condition (or suicide) were calculated by applying the reductions in productivity quantified for each mental health condition to the total number of workers in The Gambia with a mental health condition and then multiplying the result by the GDP per employed person. This calculation resulted in the total indirect economic burden of mental health conditions in The Gambia.

3.3 Calculating the costs and health effects of scaling up clinical and population-based intervention packages

Two broad categories of interventions were examined in the economic analysis: clinical interventions and a population-based intervention.

The clinical interventions comprised various evidence-informed intervention packages (i.e. collections of related interventions) for identifying and managing mental health conditions. These packages were derived from the intervention guide of the WHO mhGAP programme *(48)*. Examples of clinical interventions contained in the intervention guide include: "basic psychosocial support", which comprises psychoeducation, stress reduction, social support and promotion of functioning in daily activities and community life; "psychological treatment", which comprises evidence-informed, structured psychological treatment such as cognitive behavioural therapy and interpersonal psychotherapy; and "combined psychological and pharmacological treatment" for people experiencing severe mental health conditions.

The population-based intervention aimed to prevent the onset of mental health conditions or suicide deaths by targeting the broader population. This comprised a universal social and emotional learning (SEL) programme to increase the psychological resilience of adolescent students and, in turn, reduce the risk of mental health problems later in life.

The OneHealth Tool was used to estimate the costs of selected clinical interventions for each of the six mental health conditions. A custom-built Excel model was separately used to calculate the costs associated with the population-based mental health intervention: universal delivery of SEL programmes to adolescents in schools to prevent depression, anxiety and suicide. Each intervention is modelled in the OneHealth Tool, and the custom-built Excel model includes assumptions made by WHO experts about the number of resource items required for implementation and enforcement at a national level. In line with the methodological guidance for mental health investment cases, the main categories of cost included:

- **inpatient care** for people with a mental health condition that requires hospitalization (e.g. 5% of those with moderate-to-severe depression, for an average stay of 14 days);
- **outpatient and primary care,** among those who require regular outpatient visits (e.g. from four visits per person per year for basic psychosocial support or pharmacological management to monthly or bi-monthly visits for moderate-to-severe conditions where the person is receiving psychological treatment);
- **medications,** involving essential psychotropic medications, such as antipsychotics, antidepressants and antiepileptics; and
- **programme costs and shared health system resources,** involving the costs of programme management and administration, training and supervision.

Unit costs for each resource item were obtained from information provided by local Gambian collaborators and the WHO-CHOICE database *(49,50)*. Interventions were assumed to be provided through a mix of community- and facility-based care.

Following consultations with local experts in The Gambia, it was decided that the base case analysis would evaluate the costs and health impacts of scaling up a basic package of care for mental health. This basic package involved a streamlined set of interventions from the WHO intervention guide that could be feasibly scaled up in The Gambia, given the country's limited health-care resources (e.g. psychological interventions will be complex to scale up given constraints around the available number of psychologists or trained community health workers). For comparison, a sensitivity analysis was conducted to evaluate the costs and health impacts of scaling up a comprehensive care package for mental health.

To estimate the health impact of the interventions, a population-based model was used in the OneHealth Tool to calculate the number of healthy years of life lived in the population at current and target levels of coverage (Table 4). Table 4 lists all interventions included in the basic package of care for mental health (base case analysis) alongside interventions that were only included in the comprehensive package of care (sensitivity analysis). Healthy life-years include both expected changes in life expectancy (e.g. as a result of a decrease in the case fatality rate due to fewer cases of depression) and nonfatal health outcomes (e.g. reduced incidence or duration of depressive episodes after treatment). Default effect sizes for the modelled interventions were obtained from WHO's cost–effectiveness work programme *(51)* and are summarized in Table 4.

Table 4. Interventions considered in the mental health investment case

Intervention	Baseline coverage (2024, %)	Target coverage (2030, %)	Health impacts assessed
Anxiety disorders (service delivery setting: primary health care)			
Basic psychosocial support for mild cases *(comprehensive package only)*	55	80	Improved functioning or level of disability (7–12%) and rate of remission (36–42%) among people with anxiety disorder aged ≥ 15 years after adjustment for nonadherence (30–40%) *(46)*
Basic psychosocial support plus antidepressant medication for moderate-to-severe conditions	30	57	
Psychological treatment plus antidepressant medication for moderate-to-severe conditions *(comprehensive package only)*	15	28	

Intervention	Baseline coverage (2024, %)	Target coverage (2030, %)	Health impacts assessed
Depression (service delivery setting: primary health care)			
Basic psychosocial support for mild depression *(comprehensive package only)*	40	55	Improved functioning or level of disability (4–9%) and rate of remission (15–25%) among people aged ≥ 15 years with depression after adjustment for nonadherence (30–40%) *(52)*
Basic psychosocial support plus antidepressant medication for the first episode of moderate-to-severe depression	18	30	
Psychological treatment plus antidepressant medication for first episodes of moderate-to-severe depression *(comprehensive package only)*	18	40	
Psychological treatment plus antidepressant medication for recurrent moderate-to-severe depression episodically *(comprehensive package only)*	42	65	
Psychological treatment plus antidepressant medication for recurrent moderate-to-severe depression for maintenance *(comprehensive package only)*	42	55	As above, plus the reduced incidence of recurrent episodes (28%) after adjustment for nonadherence (30%)
Psychosis (service delivery setting: secondary health care)			
Basic psychosocial support plus antipsychotic medication	40	60	Improved functioning/level of disability (21–35%) among people aged ≥ 15 years with psychosis after adjustment for nonadherence (30–35%) *(53)* Africa and South-East Asia, and subsequently in three member states (Chile, Nigeria and Sri Lanka
Psychological treatment plus antipsychotic medication *(comprehensive package only)*	10	30	
Bipolar disorder (service delivery setting: secondary health care)			
Basic psychosocial support plus mood-stabilizing medication	40	60	Improved functioning/level of disability (22–29%) among people aged ≥ 15 years with bipolar disorder after adjustment for nonadherence (28–35%) *(54)*
Psychological treatment plus mood-stabilizing medication *(comprehensive package only)*	10	30	

Intervention	Baseline coverage (2024, %)	Target coverage (2030, %)	Health impacts assessed
Epilepsy (service delivery setting: primary health care)			
Basic psychosocial support plus antiseizure medication	50	90	Improved functioning/level of disability (47%) and rate of remission (60%) among people aged ≥ 1 year with epilepsy after adjustment for nonadherence (30%) *(55)*
Alcohol use disorder (service delivery setting: primary and secondary health care)			
Identification and assessment of new patients with alcohol use disorder	40	80	Improved rate of remission (10–15%) among people aged ≥ 15 years with alcohol use disorder after adjustment for nonadherence (50%) *(56)*
Brief interventions and follow-up for alcohol use disorder	30	70	
Management of alcohol withdrawal *(comprehensive package only)*	30	70	
Population-based mental health interventions			
Universal school-based SEL intervention to prevent depression/anxiety and suicide in adolescents aged 12–17 years	5	95	Reduced rates of incidence of depression and anxiety (16%) and reduced rate of suicide mortality (5.8%) among adolescents attending school *(57)*

The universal school-based SEL intervention is described in Box 3.

Box 3. School-based SEL interventions

The onset of depression and suicide increases rapidly during adolescence (10–19 years). Prevention of depression and suicide during these crucial developmental stages could result in substantial health gains during the life course of an individual. School-based SEL interventions to prevent depression and/or suicide typically involve a trained facilitator (e.g. a teacher, health professional or lay worker) who delivers a series of modules to teach psychotherapeutic strategies to students to improve their overall well-being and/or reduce their risk of poor mental health outcomes. Evidence has been published that school-based SEL interventions targeting adolescents are effective in reducing the incidence of depression, anxiety and/or suicide. Schools are increasingly being recognized as an essential platform for the population delivery of preventive mental health interventions to young people. Universal, school-based psychological interventions are usually delivered to all students, regardless of their underlying risk profile.

Source: Lancet *(58)*.

3.4 Analysis of ROI

An Excel model was developed by WHO to perform the analysis of ROI. The model can provide estimates of the economic gains that accrue from investing in the cost-effective mental health interventions identified by WHO. The interventions are outlined in Table 4. Estimates were made of how each intervention would improve national productivity, measured in terms of GDP. For all the interventions (except those for psychosis, bipolar disorder and epilepsy), restored productivity was estimated by a direct method for explicit calculation of the increased productivity attributable to (i) increased labour force participation through avoided mortality and illness; (ii) reduced absenteeism; and (iii) reduced presenteeism. An alternative imputation method was used to indirectly quantify productivity gains attributable to interventions for psychosis, bipolar disorder and epilepsy because of data limitations for these three conditions.

In the direct method for estimating restored productivity, the economic value of increases in the healthy labour force due to avoided mortality was calculated by adjusting the total number of deaths avoided to account for those who are currently employed and then multiplying by the net present value of foregone GDP per capita over the model time horizon (7 years for the 2024–2030 period). The economic value of increases in the healthy labour force due to *avoided cases of illness* was calculated by applying the same employment-related adjustments as above to the total number of prevalent cases averted, multiplying by the annual GDP per employed person and then further multiplying the result by 5% (the increase in labour force participation among those with a mental health condition who receive treatment). The 5% increase in labour force participation was based on the findings from a previous global ROI study, in which 5% restored productivity was applied after mental health treatment *(46)*. The economic value of reducing absenteeism and presenteeism was estimated similarly. In this case, however, multiplication by 5% represented the decrease in absenteeism and presenteeism among those with a mental health condition who received treatment. The 5% reductions in absenteeism and presenteeism were again based on findings from the previous ROI study *(46)*, in which 5% restored productivity was applied after mental health treatment.

Productivity gains resulting from each mental health intervention (excluding interventions for psychosis, bipolar disorder and epilepsy) were calculated with the direct method as the sum of the productivity gains attributable to increased labour force participation (by avoiding mortality and illness) and reduced absenteeism and presenteeism. In the case of the universal school-based SEL intervention for adolescents, only productivity gains due to increased labour force participation could be estimated, as productivity gains due to reduced absenteeism and presenteeism are not relevant to people who were not of working age. Moreover, methods for determining how impacts on educational attainment during adolescence (which can be improved by preventing mental ill health) translate into better earnings potential later in life have yet to be incorporated into the current economic model. The imputation method was used to estimate restored productivity resulting from the treatment of psychosis, bipolar disorder and epilepsy. A Lancet Commission on investing in health determined that the value of a healthy life-year gained is approximately 1.5 times GDP per capita *(59,60)*. Two thirds of this value (1.0 times GDP per capita) is attributable to

the instrumental value of improved health – increased productivity in the workplace. Conversely, one third (0.5 times GDP per capita) is attributable to the intrinsic value of health – the social value of health as an end in itself. For the current analysis, productivity gains for psychosis, bipolar disorder and epilepsy were estimated by multiplying the total healthy life-years gained by an intervention by the GDP per capita for The Gambia and further multiplying the result by a factor of 1.0 to quantify the productivity-related instrumental value of health as a multiple of GDP per capita (Box 4).

Box 4. Healthy life-years gained

Healthy life-years gained (equivalent to DALYs averted) is commonly used in the global health literature as a summary measure of population health. National life tables are used to compute healthy life-years, which reflect the combined time spent by the population in a state of health with a known degree (or absence) of disability. A disability weight ranging from 0 (denoting death) to 1 (denoting perfect health) is used to adjust the time spent in a particular health state. For example, if a person lives with disease *X* for 10 years and the disability weight for disease *X* is 0.4, the total healthy life-years gained for that person is 4 (or 10 multiplied by 0.4).

Two base case scenarios were examined for the ROI analysis. The first was the impact of including only productivity gains as the main economic benefit (i.e. the instrumental value of health). The second was the joint impact of including productivity gains and the social value of health (both the instrumental and the intrinsic value). Both the direct and imputation methods for estimating restored productivity require quantifying productivity gains (the instrumental value) attributable to improvements in health. The additional impact of the social value of health was estimated by multiplying each healthy life-year gained by 0.5 times GDP per capita and adding this to the total productivity gains estimated with either the direct or the imputation method.

The ROI for each intervention was calculated by comparing the productivity gains made with the intervention (measured as an increase in GDP) with the total costs of setting up and implementing the intervention. Projected costs and projected productivity gains were estimated using the net present value approach and a 3% annual discount rate. Future impacts on health and productivity and future intervention costs were discounted to their present value to account for the time value of money, whereby a unit of money obtained in the future is worth less than the same unit of money received in the present. The ROI resulting from each intervention was presented in terms of two alternative metrics: (i) the cost–benefit ratio, defined as the present value of total health or productivity gains divided by the present value of total intervention costs and (ii) the ROI ratio, defined as the present value of total health or productivity gains minus the present value of total intervention costs, divided by the present value of total intervention costs *(51)*. The formulae used to calculate the benefit-to-cost ratio for the two base case scenarios are presented in Equations 1a and 1b, where PV denotes present value. The formulae used to calculate the ROI ratio for the two base case scenarios are presented in Equations 2a and 2b.

Eq. 1a

$$\text{Benefit-to-cost ratio (productivity only)} = \frac{\text{PV of productivity gains}}{\text{PV of intervention costs}}$$

Eq. 1b

$$\text{Benefit-to-cost ratio (productivity + social)} = \frac{\text{PV of productivity gains + PV of social value}}{\text{PV of intervention costs}}$$

Eq. 2a

$$\text{ROI ratio (productivity only)} = \frac{\text{PV of productivity gains} - \text{PV of intervention costs}}{\text{PV of intervention costs}}$$

Eq. 2b

$$\text{ROI ratio (productivity + social)} = \frac{(\text{PV of productivity gains + PV of social value}) - \text{PV of intervention costs}}{\text{PV of intervention costs}}$$


Results

4. Results

This section describes the findings of the institutional context analysis using the SWOT terminology (strengths, weaknesses, opportunities and threats); the economic burden of mental health conditions and suicide; components of the ROI analysis (including health impacts, economic gains and total costs); and the cost–benefit ratio and ROI for each intervention package.

4.1 SWOT analysis

The SWOT analysis highlights the strengths and opportunities driving mental health reform in The Gambia (Box 5), including Government commitment, international partnerships and upcoming legislative changes. However, critical weaknesses, such as resource shortages, infrastructure limitations and threats, such as workforce attrition and financial constraints, underscore the need for targeted investment and sustainable support.

Box 5. Findings of the SWOT analysis

Strengths

- **Government commitment** by recognizing mental health as a critical issue; key stakeholders outside the health sector, such as the Ministry of Interior and the National Assembly, are interested and engaging in addressing mental health through legislation and policy efforts
- **International support** through partnerships with IOM, UNICEF and WHO has provided vital capacity-building and financial support for mental health programmes, helping to fill critical resource gaps
- **Existing mental health facilities,** such as the Tanka Tanka Psychiatric Department, offer free mental health services; although limited, this facility has experience and forms a foundation for future improvements in the mental health system
- **Community-based initiatives involving** collaboration between the Community Mental Health Team and traditional healers enhance service delivery in rural areas by integrating cultural practices into mental health care
- **Legal reform efforts**, such as drafting the mental health bill, which aims to modernize mental health legislation, demonstrate the Government's intention to shift from the outdated Lunatics' Detention Act to a rights-based approach in line with international standards

Weaknesses

- **Resource constraints** in the mental health sector, with severe shortages of trained professionals, including psychiatrists and psychiatric nurses, coupled with inadequate financial resources, limit the ability to scale up services and meet growing needs
- **Inadequate infrastructure** in terms of limited and overly centralized mental health services, with the only specialized facility located in the capital, limits access to services in rural areas and lacks gender-sensitive provisions, such as separate, safe facilities for men and women, to reduce gender-based violence and promote equitable access
- **Outdated legislation** (the Lunatics' Detention Act of 1917) still governs mental health in The Gambia; while reforms are underway, the delay in passing the new mental health bill continues to hinder progress
- **Data gaps,** with a lack of comprehensive and reliable data on mental health prevalence, outcomes and service utilization, make it challenging to allocate resources effectively and tailor interventions
- **Stigma and cultural barriers** enhanced by traditional beliefs about mental illness deter people from seeking care, worsening mental health outcomes and delaying treatment

Opportunities

- **Legislative reform** through the anticipated passage of the new mental health bill provides a critical opportunity to overhaul outdated laws, protect the rights of individuals with mental health conditions and improve access to services
- **International funding and partnerships** through continued collaborations with international bodies such as IOM, UNICEF and WHO present opportunities to secure additional funding, training and technical assistance for mental health initiatives
- **Integration into primary health care** through the ongoing training of health-care workers in the mhGAP guidelines presents an opportunity to integrate mental health services into primary care settings, expanding the reach of mental health care across the country
- **Public awareness and advocacy** could be increased through collaboration with the media, nongovernmental organizations and other stakeholders, reducing stigma and promoting a greater understanding of mental health conditions among the public
- **Engaging young people** (who make up over 70% of the population under 30 years) with targeted mental health interventions could address issues such as substance use and depression

Threats

- **Limited financial resources**, competing priorities and dependency on external funding could undermine efforts to expand mental health services and infrastructure
- **Health workforce attrition**, with high turnover rates and the migration of mental health professionals for better opportunities, threatens the sustainability of mental health services
- **Stigma and misconceptions** surrounding mental illness are deep-seated and may continue to deter people from seeking treatment, limiting the impact of public awareness campaigns and interventions
- **Political changes or instability**, as seen in 2017, could increase mental illnesses, disrupt mental health reforms and slow the passage of critical legislation, jeopardizing progress in the mental health sector
- **Economic downturns**, similar to those caused by recent epidemics or pandemics (Ebola, COVID-19, Mpox) could further strain the health system's limited resources, delaying the scaling up of mental health services and diverting attention to other health priorities

4.2 Economic burden

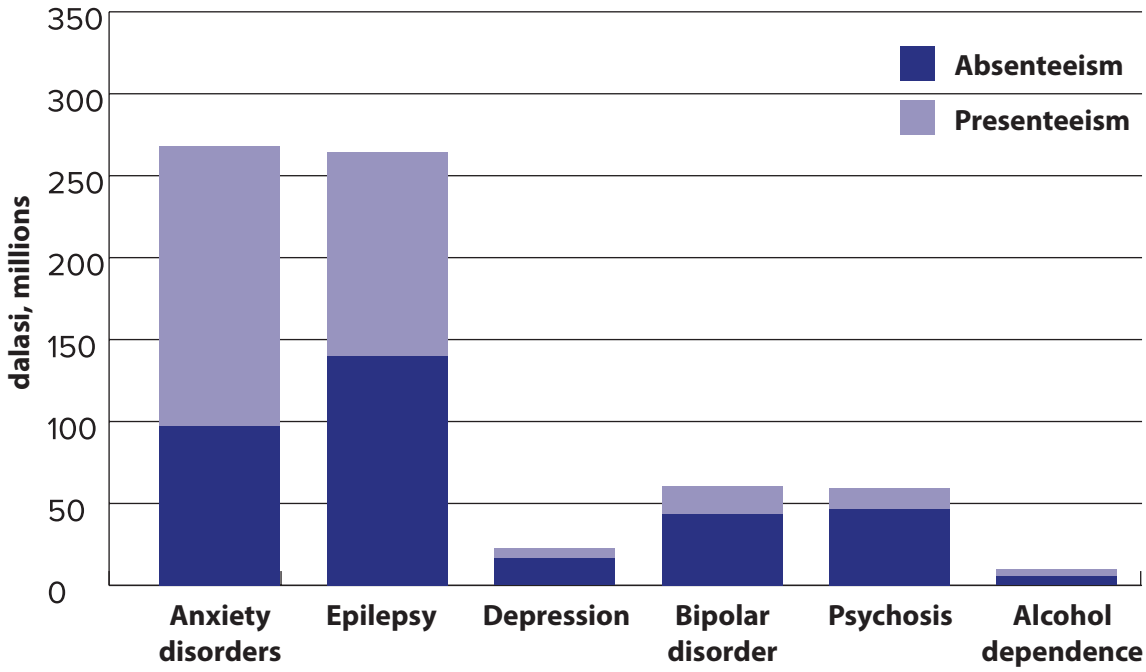
4.2.1 Direct costs

The total health expenditure for mental health in The Gambia in 2024 was estimated to be 7.4 million dalasi. This represents about 0.11% of all health expenditure in The Gambia and is below the target allocation of 5.0% recommended for low- and middle-income countries by the 2018 Lancet Commission for Global Mental Health *(60)*. This estimate using imputation was adjusted to reflect all expenditure by the Government (33%), private corporations (9%), households (21%), nongovernmental organizations (10%) and international donors (27%), based on the breakdown of total health expenditures reported by the latest national health accounts for The Gambia *(45)*. Total mental health expenditure could not be disaggregated by mental health condition.

4.2.2 Indirect costs

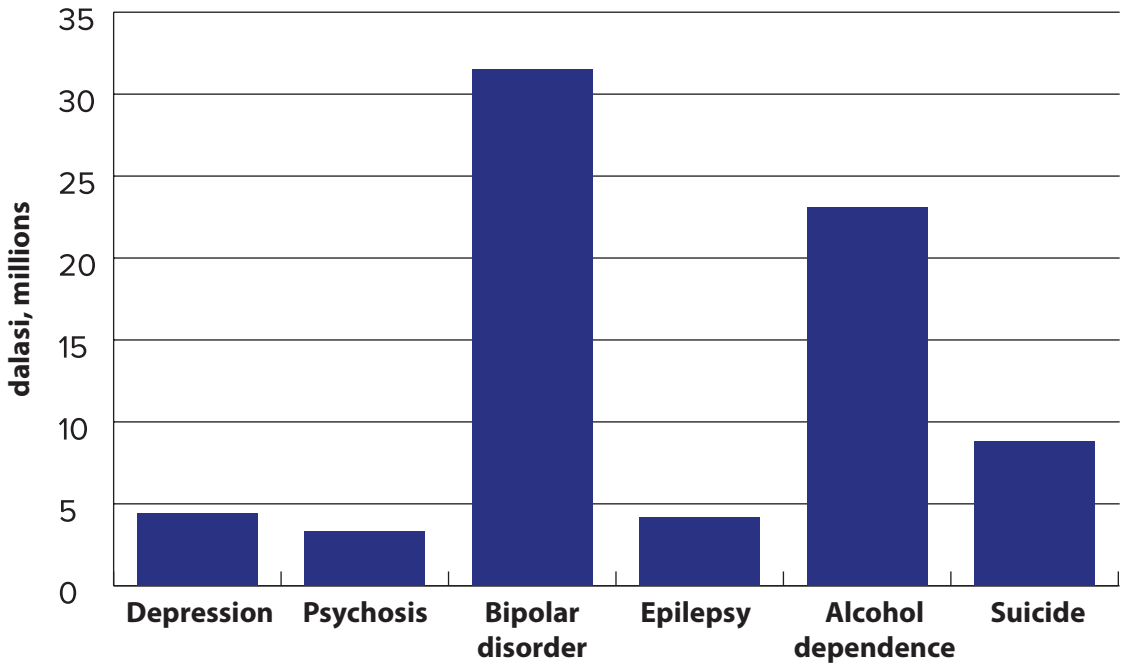
The indirect economic losses due to mental health conditions and suicide were estimated as the sum of losses due to absenteeism, presenteeism and premature death. The total combined cost of absenteeism and presenteeism in The Gambia is presented in Fig. 3. The total number of working days affected was estimated to be 354 500 for absenteeism and 219 700 for presenteeism, which resulted in a total cost of 685 million dalasi in 2024. Depression had the largest costs associated with absenteeism and presenteeism due to its high prevalence relative to other mental health conditions.

Fig. 3. Costs of absenteeism and presenteeism for mental health conditions (2024 dalasi, millions)



The total cost of premature death due to mental health conditions was estimated to be 75.2 million dalasi in 2024 (Fig. 4).

Fig. 4. Costs of premature death for mental health conditions (2024 dalasi, millions)



Bipolar disorder and alcohol use disorder are the costliest mental health conditions in terms of premature death because of the high mortality estimated for these two conditions in the Global Burden of Disease study *(61)*, which is the source of epidemiological data used in OneHealth Tool (at least six times more deaths in the population due to bipolar disorder and alcohol use disorder than those due to depression and psychosis). High mortality among people with alcohol use disorder resulted from causes of death ranging from cancers to injuries (e.g. traffic deaths and falls). Considerably fewer deaths result from anxiety disorders when compared with other mental health conditions (and they were subsequently excluded from the analysis). It should be noted that the data do not account for known comorbid conditions with alcohol use disorder, such as depression, bipolar disorder and anxiety disorders *(62)*, which are likely to influence mortality results.

4.2.3 Total economic costs

The indirect economic costs of mental health conditions and suicide are much higher than the direct costs. The direct cost of mental health conditions and suicide in The Gambia was 7.4 million dalasi in 2024. By contrast, the indirect costs (in millions of 2024 dalasi) comprised 422.9 for absenteeism, 262.1 for presenteeism and 75.2 for premature death. This resulted in a total indirect cost of 760.2 million dalasi in 2024.

Overall, the total economic burden of selected mental health conditions and suicide on the Gambian economy was estimated to be 767.6 million dalasi in 2024. This is equivalent to 0.48% of national GDP in 2024. Despite this sizeable economic burden, the treatment gap remains substantial. Total mental health-care expenditure represented 1% of all mental health-related costs. In comparison, the cost of absenteeism was 55%, the cost of presenteeism was 34%, and the cost due to premature deaths was 10%.

4.3 Costs of interventions

The costs of the interventions for the basic package of care were estimated for 2024–2030. Table 5 shows the absolute costs during the first 5 years of 2024–2030, plus the net present value of total costs between 2024 and 2030. Table 6 shows the corresponding per capita costs. The costs of the interventions for the comprehensive package of care are presented in Annex 1 (e.g. a net present value of total costs between 2024 and 2030 equating to 739.3 million dalasi in total or 305.2 dalasi per capita).

Table 5. Estimated absolute costs of interventions (dalasi, millions), 2024–2030

Mental health intervention package[a]	2024	2025	2026	2027	2028	Total for 2024–2030[b]
Clinical interventions						
Anxiety disorders	3.9	4.5	5.1	5.7	6.3	34.9
Depression	1.6	1.9	2.2	2.4	2.7	15.0
Psychosis	6.8	7.2	7.6	7.9	8.2	48.4
Bipolar disorder	22.6	24.8	27.0	29.2	31.5	180.5
Epilepsy	3.7	4.2	4.8	5.3	5.9	32.7
Alcohol use disorder	0.7	0.8	0.9	0.9	0.9	5.2
Population-based interventions						
Universal school-based SEL intervention	7.8	6.2	4.8	4.8	4.8	43.1
Total	**47.2**	**49.6**	**52.4**	**56.3**	**60.2**	**359.7**

[a] The packages of clinical interventions include several interventions (e.g. psychological treatment and medications) delivered at the primary and secondary levels of health care.
[b] Totals are presented as a net present value, discounted at a 3% annual rate.

Table 6. Estimated per capita costs of interventions (dalasi), 2024–2030

Mental health intervention package[a]	2024	2025	2026	2027	2028	Total for 2024–2030[b]
Clinical interventions						
Anxiety disorders	1.6	1.9	2.1	2.4	2.6	14.4
Depression	0.7	0.8	0.9	1.0	1.1	6.2
Psychosis	2.8	3.0	3.1	3.3	3.4	20.0
Bipolar disorder	9.3	10.2	11.1	12.1	13.0	74.5
Epilepsy	1.5	1.7	2.0	2.2	2.4	13.5
Alcohol use disorder	0.3	0.3	0.4	0.4	0.4	2.1
Population-based interventions						
Universal school-based SEL intervention	3.2	2.5	2.0	2.0	2.0	17.8
Total	**19.5**	**20.5**	**21.6**	**23.3**	**24.9**	**148.5**

[a] The packages of clinical interventions include several interventions (e.g. psychological treatment and medications) delivered at the primary and secondary levels of health care.
[b] Totals are presented as a net present value, discounted at a 3% annual rate.

The clinical intervention for bipolar disorder incurred the highest estimated costs because of the care and support requirements. Implementing the basic package of clinical interventions (excluding the population-based intervention) would cost 316.7 million dalasi (or 130.7 dalasi per capita) over the 2024–2030 scaling-up period.

The clinical interventions for alcohol use disorder and depression incurred the lowest estimated costs, which would be 5.2 million dalasi and 15.0 million dalasi, respectively, over the 2024–2030 scaling-up period. The total cost of the population-based mental health interventions (universal school-based SEL intervention) was comparable to the other clinical intervention packages. It would cost 43.1 million dalasi (or 17.8 dalasi per capita) in 2024–2030.

4.4 Health impacts

All the interventions in the basic package of care significantly increase the total number of healthy life-years gained (absolute results presented in Table 7). As defined in Box 4, healthy life-years gained is a measure of the additional years of healthy life due to an intervention after adjustment for disease-related states by application of disability weights. The greatest impacts were observed with interventions for universal school-based SEL (1860 healthy life-years gained between 2024 and 2030), epilepsy (1705), depression (795) and anxiety disorders (714). Corresponding health impacts arising from the comprehensive package of care are presented in Annex 1 (e.g. a total of 6110 healthy life-years gained between 2024 and 2030).

Table 7. Estimated absolute health impacts, 2024–2030

Mental health intervention package[a]	Total HLYGs (2024–2030)	Prev cases averted (2024–2030)	Total deaths avoided (2024–2030)
Clinical interventions			
Anxiety disorders	714	2809	Not applicable[b]
Depression	795	2413	2
Psychosis	397	Not applicable[b]	Not applicable[b]
Bipolar disorder	185	Not applicable[b]	Not applicable[b]
Epilepsy	1705	813	3
Alcohol use disorder	454	1388	38
Population-based interventions			
Universal school-based SEL intervention	1860	8187[c]	5[d]
Total	**6110**	**15 610**	**48**

NA: not applicable as mental health outcomes involving deaths due to this condition cannot be estimated with the OneHealth Tool, as intervention effect sizes for this outcome are not included in the tool.
HLYG: healthy life-years gained.
[a] The packages of clinical interventions include several interventions (e.g. essential psychosocial support, psychological treatment and medications) delivered at the primary and secondary levels of health care.
[b] Mental health outcomes involving deaths due to this condition cannot be estimated with OneHealth Tool as intervention effect sizes for this outcome are not included in the tool.
[c] Prevalent cases of depression or anxiety.
[d] Deaths due to suicides attributable to depression.

Several interventions also reduce mortality by decreasing the prevalence of mental health conditions that lead to excess mortality (e.g. depression, epilepsy and alcohol use disorder). Bipolar disorder and psychosis are less common than depression and anxiety; however, they are

severe mental health conditions that usually persist throughout life and often result in substantial suffering and human rights abuses. In the case of psychosis and bipolar disorder, the primary impact on healthy life-years gained is a reduction in the severity of symptoms and improved daily functioning (quantified by reductions in disability weight) and not reductions in the number of prevalent cases or deaths. It should be further noted that effective management and community support for individuals living with a severe mental health condition (such as psychosis or bipolar disorder) can reduce hospital admissions and related health-care costs.

4.5 Productivity gains

The total net present value of productivity gains due to the basic mental health intervention packages is presented in Table 8. When the direct method was used to estimate restored productivity, reduced mortality had an impact on productivity due to increased labour force participation (with productivity gains worth 21.8 million dalasi between 2024 and 2030), alongside increased labour force participation due to avoided cases of illness, reduced presenteeism and reduced absenteeism (97.0 million dalasi, altogether). When the imputation method was used, productivity gains were seen due to treatment of psychosis (24.8 million dalasi), bipolar disorder (11.6 million dalasi) and epilepsy (106.4 million dalasi). The packages resulted in a net present value of 261.5 million dalasi in productivity gains between 2024 and 2030. Annex 1 presents corresponding productivity gains from the comprehensive care package (634.2 million dalasi in total).

Table 8. Estimated productivity gains due to the mental health intervention packages (dalasi, millions), 2024–2030

Method used to estimate restored productivity	Total productivity gains[a]
Direct method[b]	
Increased labour force participation due to avoided mortality	21.8
Increased labour force participation due to avoided cases of illness	32.3
Reduction in absenteeism	32.3
Reduction in presenteeism	32.3
Imputation method[c]	
Productivity gains for psychosis	24.8
Productivity gains for bipolar disorder	11.6
Productivity gains for epilepsy	106.4
Total	**261.5**

[a] Totals are presented as a net present value, discounted at a 3% annual rate.
[b] The direct method for estimating restored productivity was applied to the mental health intervention packages for anxiety disorders, depression, alcohol use disorders and the universal school-based SEL intervention. Restored productivity is presented here by the type of productivity gain. Restored productivity is presented by the mental health intervention package in Table 6.
[c] The imputation method for estimating restored productivity was applied to the mental health packages for psychosis, bipolar disorder and epilepsy.

4.6 ROI

Table 9 demonstrates that most basic mental health intervention packages have a cost–benefit ratio greater than 1.0 over the scaling-up period between 2024 and 2030.

This signifies that these intervention packages produce a positive ROI, such that total productivity gains exceed total costs. For some interventions, the ratio is lower primarily due to either comparatively high intervention costs (e.g. psychosis, bipolar disorder) or methodological limitations in quantifying changes in long-term productivity (i.e. the universal school-based SEL intervention). Corresponding cost–benefit ratios for the comprehensive package of care are presented in Annex 1.

Table 9. Costs, benefits (productivity gains only) and cost–benefit ratios for the scaling-up periods 2024–2030 by intervention package (2024: dalasi, million)

Mental health intervention package[a]	Total costs[b]	Total productivity gains[b]	Benefit–cost ratio (productivity gains only)	ROI ratio (productivity gains only)
Anxiety disorders	34.9	41.1	1.20	0.2
Depression	15.0	36.5	2.40	1.4
Psychosis[c]	48.4	24.8	0.50	–0.5
Bipolar disorder[c]	180.5	11.6	0.10	–0.9
Epilepsy	32.7	106.4	3.20	2.2
Alcohol use disorder	5.2	40.7	7.90	6.9
Universal school-based SEL intervention[d]	43.1	0.5	0.01	–1.0

[a] The packages of clinical interventions include several interventions (e.g. basic psychosocial support, psychological treatment and medications) delivered at primary and secondary levels of health care.
[b] Totals are presented as a net present value, discounted at a 3% annual rate.
[c] The ROI for the psychosis and bipolar disorder intervention packages was lower than that for other intervention packages because the cost of treatment for these conditions is higher than the monetized health impacts. There may be strong noneconomic reasons for choosing to invest in an intervention package with a low ROI, such as protecting human rights or respecting the rule of rescue.
[d] These results exclude productivity gains for students because of methodological limitations to estimating future productivity gains for students with improved mental health.

The highest cost–benefit ratio was for the alcohol use disorder intervention package: for 1 dalasi invested in these interventions, the expected return is 7.9 dalasi between 2024 and 2030. The next highest was for the epilepsy intervention package, with a cost–benefit ratio of 3.2 between 2024 and 2030. During the scaling-up period (2024–2030), the intervention packages for psychosis, bipolar disorder and the universal school-based SEL intervention were found to have negative ROI ratios (cost–benefit ratios less than 1.0). This indicates that total costs for these intervention packages exceeded total productivity gains. The implications of these negative ROI ratios are discussed in Box 6.

Box 6. Economic value of mental health care beyond productivity gains

The economic analysis has focused on quantifying the productivity gains due to reductions in absenteeism, presenteeism and premature mortality. Therefore, the economic value evaluation in this analysis is strongly directed towards quantifying changes in GDP or job earnings due to increasing coverage of mental health care. Numerous other benefits can result from increasing investment in mental health-care provision beyond increasing GDP or job earnings. This is an essential consideration when evaluating the economic value of mental health intervention packages with a negative ROI ratio, such as psychosis, bipolar disorder and the universal school-based SEL intervention. For example, increased investment in the provision of care for people with psychosis or bipolar disorder may be required to achieve ethical objectives such as the protection of human rights, meeting immediate health needs according to the rule of rescue and improving social cohesion through the provision of compassionate care to the most vulnerable members of society. Additionally, the universal school-based SEL intervention may lead to productivity gains in the future after students have graduated from secondary school (these were not quantified in the present study due to methodological limitations). Improvement of mental health literacy among young people in a society can also encourage de-stigmatizing attitudes and behaviour towards people with mental health conditions and encourage others to seek appropriate mental health care at an early stage.

Table 10 shows the impact of including the social value of health with productivity gains when calculating cost–benefit ratios. The social value of health is the intrinsic value of improving health as an end in itself, estimated to be 1 healthy life-year gained multiplied by 0.5 times GDP per capita. The cost–benefit ratios for all the intervention packages increased substantially, with the greatest gains being observed for the intervention packages involving depression, anxiety disorders, psychosis and the universal school-based SEL intervention. The highest cost–benefit ratios were found for alcohol use disorders, epilepsy, depression and universal school-based SEL. These interventions can produce 15.8 dalasi (alcohol use disorders), 8.0 dalasi (epilepsy), 7.3 dalasi (depression) and 3.9 dalasi (universal school-based SEL) of economic benefit for every 1 dalasi spent between 2024 and 2030. Corresponding cost–benefit ratios for the comprehensive package of care are presented in Annex 1.

Table 10. Costs, benefits (productivity gains plus social value of health) and cost–benefit ratios for the scaling-up periods 2024–2030 by intervention package (2024 dalasi, million)

Mental health intervention package[a]	Total costs[b]	Total productivity gains plus social value of health[b]	Benefit–cost ratio (productivity gains plus social value of health)	ROI (productivity gains plus social value of health)
Anxiety disorders	34.9	105.6	3.0	2.0
Depression	15.0	108.6	7.3	6.3
Psychosis[c]	48.4	60.9	1.3	0.3
Bipolar disorder[c]	180.5	28.4	0.2	–0.8
Epilepsy	32.7	261.1	8.0	7.0
Alcohol use disorder	5.2	81.6	15.8	14.8
Universal school-based SEL intervention[d]	43.1	168.5	3.9	2.9

[a] The packages of clinical interventions include several interventions (e.g. basic psychosocial support, psychological treatment and medications) delivered at primary and secondary levels of health care.
[b] Totals are presented as net present values, discounted at a 3% annual rate.
[c] The ROI for the psychosis and bipolar disorder intervention packages was lower than that for other intervention packages because the cost of treating these conditions is higher than the monetized health impacts. There may be strong noneconomic reasons for choosing to invest in an intervention package with a low ROI (e.g. to protect human rights or respect the rule of rescue).
[d] These results exclude productivity gains among students due to methodological limitations for estimating future productivity gains among students with improved mental health.

Inclusion of the social value of health with productivity gains led to positive ROI ratios (cost–benefit ratios greater than 1.0) for the psychosis and universal school-based SEL interventions over the 2024–2030 scaling-up period. Including the social value of health strengthens the case for investing in interventions that include psychosis and universal school-based SEL.

The clinical intervention packages for alcohol use disorders and epilepsy demonstrated the best value for money in maximizing productivity gains, with the highest ROI values over the 2024–2030 scaling-up period. By comparison, the ROI for the universal school-based SEL intervention underestimates the potential economic gains occurring among adolescents with improved mental health. Methods for calculating the net present value of future increases in productivity or employment due to improved educational outcomes of adolescents after they reach adulthood have been developed only recently. They are yet to be included in the economic model used to estimate ROIs. This methodological limitation restricted productivity gains to premature mortality reduction in the short term.

The ROI values for the intervention packages involving psychosis and bipolar disorder were lower than those for other mental health interventions because the cost of treatment was high relative to the monetized health impacts. Despite their low ROI values, these intervention packages are critical to ensure that The Gambia has the services necessary to support its human rights objectives and universal access to person-centred health care. These conditions are often highly distressing and disruptive to both the individuals experiencing them and their families and communities.


Conclusions and
recommendations

5. Conclusions and recommendations for consideration

The results of this investment case confirm the large economic impact of mental health conditions in The Gambia, underscoring the critical need for substantial investment in mental health prevention and treatment in the country. The data illustrate that mental health conditions, such as depression, anxiety and epilepsy, significantly impact both individuals and the national economy, with mental health disorders accounting for a considerable portion of the nation's health burden. The Gambia can address mental health challenges affecting productivity, economic growth and public health by strengthening mental health services and reducing treatment gaps. Integrating mental health within broader health and social development policies aligns with The Gambia's vision for an inclusive and equitable society, as outlined in its National Development Plan.

As detailed in this report, investment in evidence-informed interventions provides an opportunity for substantial returns, including improved quality of life, reduced mortality rates and healthier workforce productivity. The economic analysis demonstrates that interventions for conditions such as alcohol use disorder and epilepsy yield high ROI, benefiting both individuals and the nation. By leveraging partnerships with international organizations, The Gambia can mobilize the necessary resources, adopt cost-effective models and implement targeted interventions that meet both immediate and long-term mental health needs. Additionally, reinforcing mental health through education, stigma reduction and the integration of traditional healers can enhance community trust and extend the reach of mental health services, particularly in rural areas.

The anticipated social value of these health improvements, combined with productivity gains, underscores the transformative potential of mental health investment for sustainable development in The Gambia. By addressing the barriers identified in this report – such as workforce shortages, funding gaps and cultural stigma – The Gambia can build a resilient and inclusive mental health system that supports the well-being of its population.

5.1 Recommendations for consideration

To maximize impact, The Gambia can prioritize the following actionable steps to strengthen further a multisectoral, whole-of-government, whole-of-society response to mental health conditions and their consequences.

Prioritize the passing of the 2019 Mental Health Bill and ensure its implementation

The 2019 Mental Health Bill, which seeks to replace the outdated Lunatics' Detention Act of 1917, should be prioritized for passage through Parliament. This bill provides a critical opportunity to modernize the legislative framework, embed human rights protections and promote community-based mental health care. However, it has fallen short in addressing some emerging societal issues, such as suicide and substance use; therefore, there is a need to revise the Bill before passing it to Cabinet for endorsement to the National Assembly. Implementing the Bill will strengthen mental health governance, improve patient protections, create safe spaces and drive investment into mental health services, addressing the health, social and economic burden of mental illness in the country.

Increase Government funding allocation and explore international funding for mental health services

Given the chronic underfunding of mental health services in The Gambia, increasing the domestic budget allocation for mental health as well as access to allocated funds is essential. This can be achieved through advocacy efforts to prioritize mental health within the national health agenda. In addition, leveraging international partnerships with IOM, UNICEF, WHO, World Bank and other development partners could provide critical funding for scaling up mental health services, training health-care professionals and improving infrastructure.

Strengthen intersectoral collaboration and partnerships

Improving coordination between key ministries such as Health, Finance, Education, Social Welfare and Justice will help to address shared challenges in mental health, substance use and trauma. Enhanced interministerial collaboration through a joint action plan and a dedicated task force comprising representatives from key ministries to facilitate regular meetings, discuss progress,

share resources and align strategies would enable more efficient use of resources and a more integrated approach to mental health care. Engaging nongovernmental organizations, community groups and civil society organizations would foster community-based support systems and advocacy. Public–private partnerships could be explored to improve service delivery and promote mental health awareness across sectors.

Expand community-based mental health services by integrating traditional healers

Given that many Gambians initially seek help from traditional healers, it is crucial to expand and strengthen the integration of these healers into the formal mental health-care system. Establishing a structured referral system between traditional healers and formal health facilities will be essential to ensure timely and effective treatment. Continuous training programmes for traditional healers to identify and refer individuals with mental health conditions to professional care could bridge the gap between cultural beliefs and clinical services. Expanding the Community Mental Health Team and supporting community-based interventions will increase the reach and accessibility of mental health services, particularly in rural areas where access to formal health facilities is limited.

Scale up mental health workforce development and retention strategies

The Gambia faces a severe shortage of mental health professionals, including psychiatrists, psychiatric nurses and psychologists. There is an urgent need to train more health-care workers in mental health through targeted educational programmes and specialized training. The Government should collaborate with international partners to fund training programmes and create retention strategies to address the high turnover of mental health professionals. Incorporating mental health into the nursing and medical school curriculum can ensure sustainability by equipping future health-care workers with foundational knowledge and skills to address mental health issues effectively. Providing better working conditions, continuous professional development and competitive salaries will be essential for sustaining the mental health workforce.

Strengthen mental health services for vulnerable groups, including returning refugees and migrants, young people affected by substance use and women affected by gender-based violence

Tailored interventions should be developed for vulnerable groups who face unique mental health challenges.

- Many returnees face trauma from their migration experiences, requiring focused mental health and psychosocial support services.
- The rising prevalence of substance use, particularly among young people, needs urgent attention through preventive and rehabilitative mental health services.
- Trauma-informed mental health care should be made more accessible to women dealing with long-term trauma related to female genital mutilation and other forms of gender-based violence. Establishing safe spaces and counselling services for these women will be key in addressing their mental health needs.
- Individuals who suffered trauma from political persecution following the previous regime change should be reintegrated into their communities.

Enhance public awareness and reduce stigma through targeted education campaigns

Stigma remains a significant barrier to accessing mental health services in The Gambia. Nationwide public awareness campaigns should be launched to educate the population about mental health, reduce stigma and promote early help-seeking behaviour. Collaboration with media, schools, community leaders and religious institutions will help to normalize discussions about mental health and shift cultural attitudes. Campaigns should highlight that mental health issues are common and treatable, encouraging more people to seek professional care without fear of judgement.

Improve mental health data collection and monitoring systems

There is a pressing need to establish a comprehensive data collection system for mental health in The Gambia. Strengthening the health management information system to include mental health indicators, with the training of data entry clerks and other relevant staff in mental health terminology, will improve monitoring, evaluation and planning for mental health services. Reliable data on mental health prevalence, service utilization and treatment outcomes are essential for informed decision-making and effective resource allocation. Investment in digital health tools can further support data collection, patient follow-up and service delivery.

Leverage technological innovations

Leveraging technological innovations, such as telemedicine and mobile health applications, can overcome geographical barriers and enhance outreach and support for individuals with mental health needs. Integrating digital health solutions into mental health programmes can facilitate remote consultations, monitoring and psychoeducation; augment service delivery; and improve patient outcomes. The American International University of West Africa incorporated telemedicine into its educational framework, which includes lectures and training sessions on telemedicine practices; however, this initiative is unavailable at the Ministry of Health. Developing telemedicine and mobile mental health applications will enhance infrastructural development for service delivery at the facility and community-based mental health services.

5.2 Summary

In summary, given the high resource inputs from external partners, opportunities exist to leverage international aid, grants and partnerships to continue to supplement domestic funding and support mental health initiatives. Leveraging strategic partnerships has enhanced the potential for mobilizing additional resources *(63)*. Exploring innovative financing mechanisms, such as health insurance schemes and public–private partnerships, can diversify funding sources and enhance sustainability in resource allocation for mental health *(64)*. Moreover, advocating for increased budgetary allocations and mainstreaming mental health into broader development agendas can prioritize mental health within national policy frameworks.

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Annex 1. Sensitivity analysis for the comprehensive package of care

Overview

This supplementary annex presents the results of the sensitivity analysis involving the scale-up of the comprehensive package of care for mental health in The Gambia (see Methodology). This package of care comprises a wider range of interventions than the basic package of care that was modelled as part of the base case analysis presented in the main report.

Cost of interventions

The costs of interventions for the comprehensive package of care were estimated for the period 2024–2030. Table A1.1 shows the absolute costs during the first 5 years of the period 2024–2030, plus the net present value of total costs between 2024 and 2030. Table A1.2 shows the corresponding per capita costs.

Table A1.1. Estimated absolute costs of interventions (dalasi, millions), 2024–2030

Mental health intervention package[a]	2024	2025	2026	2027	2028	Total for 2024–2030[b]
Clinical interventions						
Anxiety disorders	9.7	10.8	11.9	12.8	13.7	78.0
Depression	34.1	36.3	38.2	40.0	41.6	245.7
Psychosis	8.5	9.5	10.4	11.2	11.9	68.0
Bipolar disorder	28.8	33.1	37.6	42.1	46.7	259.5
Epilepsy	3.7	4.2	4.8	5.3	5.9	32.7
Alcohol use disorder	1.5	1.7	1.9	2.1	2.2	12.2
Population-based interventions						
Universal school-based SEL intervention	7.8	6.2	4.8	4.8	4.8	43.1
Total	94.1	101.9	109.6	118.4	126.7	739.3

[a] The packages of clinical interventions include several interventions (e.g. basic psychosocial support, psychological treatment and medications) delivered at primary and secondary levels of health care.
[b] Totals are presented as a net present value, discounted at a 3% annual rate.

Table A1.2. Estimated per capita costs of interventions (dalasi), 2024–2030

Mental health intervention package[a]	2024	2025	2026	2027	2028	Total for 2024–2030[b]
Clinical interventions						
Anxiety disorders	4.0	4.5	4.9	5.3	5.6	32.2
Depression	14.1	15.0	15.8	16.5	17.2	101.4
Psychosis	3.5	3.9	4.3	4.6	4.9	28.1
Bipolar disorder	11.9	13.7	15.5	17.4	19.3	107.1
Epilepsy	1.5	1.7	2.0	2.2	2.4	13.5
Alcohol use disorder	0.6	0.7	0.8	0.9	0.9	5.0
Population-based interventions						
Universal school-based SEL intervention	3.2	2.5	2.0	2.0	2.0	17.8
Total	38.9	42.0	45.2	48.9	52.3	305.2

[a] The packages of clinical interventions include several interventions (e.g. basic psychosocial support, psychological treatment and medications) delivered at primary and secondary levels of health.

Health impacts

The health impacts (absolute results) of the comprehensive package of care are presented in Table A1.3.

Table A1.3. Estimated absolute health impacts, 2024–2030

Mental health intervention package [a]	Total healthy life-years gained	No. prevalent cases averted	Total no. deaths avoided
Clinical interventions			
Anxiety disorders	1846	7481	NA
Depression	5739	17 444	15
Psychosis	956	NA	NA
Bipolar disorder	645	387	160
Epilepsy	1705	813	3
Alcohol use disorder	606	1853	50
Population-based interventions			
Universal school-based SEL intervention	1860	8187	5
Total	13 845	36 165	261

NA: not applicable as mental health outcomes involving deaths due to this condition cannot be estimated with the OneHealth Tool, as intervention effect sizes for this outcome are not included in the tool.
[a] The packages of clinical interventions include several interventions (e.g. essential psychosocial support, psychological treatment and medications) delivered at the primary and secondary levels of health care.

Productivity gains

The total net present value of productivity gains due to the comprehensive mental health intervention packages is presented in Table A1.4.

Table A1.4. Estimated productivity gains due to the mental health intervention packages (dalasi, millions), 2024–2030

Method used to estimate restored productivity	Total productivity gains[a]
Direct method[b]	
Increased labour force participation due to avoided mortality	34.1
Increased labour force participation due to avoided cases of illness	131.3
Reduction in absenteeism	131.3
Reduction in presenteeism	131.3
Imputation method[c]	
Productivity gains for psychosis	59.7
Productivity gains for bipolar disorder	40.1
Productivity gains for epilepsy	106.4
Total	634.2

[a] Totals are presented as a net present value, discounted at a 3% annual rate.
[b] The direct method for estimating restored productivity was applied to the mental health intervention packages for anxiety disorders, depression, alcohol use disorders and the universal school-based SEL intervention. Restored productivity is presented here by the type of productivity gain. Restored productivity is presented by the mental health intervention package in Table A1.6.
[c] The imputation method for estimating restored productivity was applied to the mental health packages for psychosis, bipolar disorder and epilepsy.

ROI

The cost–benefit ratios for the comprehensive package of care that occur when considering the net present value of productivity gains alone are presented in Table A1.5.

Table A1.5. Costs, benefits (productivity gains only) and cost–benefit ratios for the scaling-up periods 2024–2030 by intervention package (2024, dalasi, million)

Mental health intervention package[a]	Total costs[b]	Total productivity gains[b]	Benefit–cost ratio (productivity gains only)	ROI ratio (productivity gains only)
Anxiety disorders	78.0	109.5	1.40	0.4
Depression	245.7	264.2	1.10	0.1
Psychosis[c]	68.0	59.7	0.90	–0.1
Bipolar disorder[c]	259.5	40.1	0.2	–0.8
Epilepsy	32.7	106.4	3.20	2.2
Alcohol use disorder	12.2	53.9	4.40	3.4
Universal school-based SEL intervention[d]	43.1	0.5	0.01	–1.0

[a] The packages of clinical interventions include several interventions (e.g. basic psychosocial support, psychological treatment and medications) delivered at primary and secondary levels of health care.
[b] Totals are presented as a net present value, discounted at a 3% annual rate.
[c] The ROI for the psychosis and bipolar disorder intervention packages was lower than those for other intervention packages because the cost of treatment for these conditions is higher than the monetized health impacts. There may be strong noneconomic reasons for choosing to invest in an intervention package with a low ROI, such as to protect human rights or to respect the rule of rescue.
[d] These results exclude productivity gains for students because of methodological limitations to estimating future productivity gains for students with improved mental health.

The cost–benefit ratios for the comprehensive package of care that occur when considering the net present value of productivity gains alongside the social value of health are presented in Table A1.6.

Table A1.6. Costs, benefits (productivity gains plus social value of health) and cost–benefit ratios for the scaling-up periods 2024–2030 by intervention package (2024 dalasi, million)

Mental health intervention package[a]	Total costs[b]	Total productivity gains plus social value of health[b]	Benefit–cost ratio (productivity gains plus social value of health)	ROI (productivity gains plus social value of health)
Anxiety disorders	78.0	276.4	3.5	2.5
Depression	245.7	785.1	3.2	2.2
Psychosis[c]	68.0	146.6	2.2	1.2
Bipolar disorder[c]	259.5	98.4	0.4	-0.6
Epilepsy	32.7	108.5	8.0	7.0
Alcohol use disorder	12.2	168.5	8.9	7.9
Universal school- based SEL intervention[d]	43.1		3.9	2.9

[a] The packages of clinical interventions include several interventions (e.g. basic psychosocial support, psychological treatment and medications) delivered at primary and secondary levels of health care.
[b] Totals are presented as net present values, discounted at a 3% annual rate.
[c] The ROI for the psychosis and bipolar disorder intervention packages was lower than those for other intervention packages because the cost of treatment of these conditions is higher than the monetized health impacts. There may be strong noneconomic reasons for choosing to invest in an intervention package with a low ROI (e.g. to protect human rights or respect the rule of rescue).
[d] These results exclude productivity gains among students due to methodological limitations for estimating future productivity gains among students with improved mental health.