





Zimbabwe WHO Special Initiative for Mental Health Situational Assessment

CONTEXT

Zimbabwe is located in Southern Africa, bordered by South Africa, Mozambique, Botswana, and Zambia. The landlocked country has a tropical climate with high plateau and mountains in the east. There are 8 rural provinces and 2 metropolitan provinces, which are further divided into 63 districts and 1200 wards. The majority of

Zimbabwe's economy comes from the service sector (65.8%), followed by industry (22.2%) and agriculture Table 1: Demographics (12%).2 Zimbabwe's informal economy is responsible for 60% of all income; the rate of formal unemployment is extremely high.²

Poverty is endemic in Zimbabwe: an estimated 70% of the population is living below the poverty line, and 34% are living in extreme poverty. Shortages in fuel, electricity, drought, and climate related events have drastically impacted the agriculture sector and inflation rates in recent years. 10 Having experienced years of austerity policies, economic decline, and the 2008 hyperinflation crisis, Zimbabwe's health system - which was once one of the most robust in the region - has suffered decreased government spending, workforce emigration, and human rights violations.¹¹ In 2017, President Robert Mugabe was forced to resign as president after nearly 40 years in power.

According to World Bank Data, Zimbabwe ranks in the middle of Sub-Saharan African countries for infant mortality (13 out of 47), maternal mortality (27 out of 47), and life expectancy (25 out of 47).12 Most pregnant women report attending antenatal clinics (93.3%). Forty-

Demographic inform	nation
Population	14,030,368 ¹
Under 14 years	44.4 % ¹
Over 65 years	3.2%1
Rural population	67.8% ²
Literacy	88.8% ³
Languages	Shona, Ndebele, English ²
Ethnicities	99.4% African ²
Religions	Protestant (74.8%), Catholic (7.3%), other Christian (5.3%) ²
GDP per capita	1,079.61 USD ⁴
Electricity	33.7% of homes ⁵
Sanitation	37% of homes ⁵
Water	78.1% of homes ⁵
Education	88.4% completed primary school ⁵
Health information	
Life expectancy	60.8 ⁶
Infant mortality	39 per 1,000 live births ⁶
Maternal mortality	462 per 100,000 live births ^{5,7}
Leading causes of death	Respiratory/TB, CVD, HIV ⁸
Healthcare Access and Quality Index	31.2 (25.8-37.0) ⁹
HIV seroprevalence	13.8%
rtnor violence (ID\/)	5 The most common substances

five percent of women report being victims of intimate partner violence (IPV).5 The most common substances used in Zimbabwe are alcohol, cannabis, heroin, glue and cough mixtures. 13

Zimbabwe has one of the highest HIV seroprevalences in the world, at 13.8%. An estimated 90% of persons living with HIV/AIDS (PLWHA) know their status, and of these an estimated 88% have been initiated on antiretroviral therapy (ART).¹⁴

Zimbabwe's mental health care system has several apparent strengths and challenges. Zimbabwe has invested substantially in its primary education system, with high literacy rates and high educational attainment. The health workforce includes a considerable number of psychiatric nurses. The Harare psychiatric unit was recently refurbished through a partnership with Médecins Sans Frontières. As a result of successes in attaining international research funding, Zimbabwe has witnessed a growth in innovative mental health services research and research capacity-building. 15,16

Ongoing socioeconomic and political instability remain a primary challenge. Psychiatric units outside of Harare need refurbishment and more robust staffing. Additionally, there is a lack of funding for medication, human resources, and mental health promotion in both psychiatric hospitals and community-based care.

Ш. **METHODS**

This rapid assessment process used a modified version of the Programme for Improvement Mental Health Care (PRIME) situational analysis tool¹⁷ to assess the strength of Zimbabwe's mental health system. We expanded







the tool to include multi-sector entry points for mental health promotion and services, a focus on vulnerable populations, and stratification of relevant sociodemographic and health indicators across the life-course. The PRIME tool assesses six thematic areas: 1) socioeconomic and health context, 2) mental health policies and plans, 3) mental disorder prevalence and treatment coverage, 4) mental health services, 5) cultural issues and non-health sector/community-based services, and 6) monitoring and evaluation/health information systems. The complete situational analysis tool for Zimbabwe is available for review in **Appendix 1**.

Desk Review

The majority of data on socioeconomic status, population health, policies/plans, and the mental health-related readiness of health and other sectors came from secondary sources, including the World Bank, Demographic and Health Surveys, published peer-reviewed and grey literature, the Global Health Observatory, and a detailed review of available mental health policies and plans and other government documentation. We also accessed the National Health Management Information System to assess treatment coverage, staffing complements, and facility numbers. Finally, national-level estimates of the prevalence and rate of priority mental health conditions, stratified across the life course, were derived from the 2017 Global Burden Disease Study (GBD).¹⁸

Key Informant Interviews

We used qualitative data to inform our description of the strength of the mental health system. Interviews followed structured guides. Participants were sampled purposively. We aimed to sample at least one participant from each group: people with lived experience, advocates for mental health, clinicians and implementers of mental health programs, and mental health system policymakers. The final sample included two representatives from a mental health advocacy group, two mental health specialists from the public health system, and one representative of people with lived experience.

Facility Checklists

We also visited health facilities to document key indicators related to readiness to provide mental health services. We used an adapted version of the WHO Service Availability and Readiness Assessment (SARA) instrument. Facilities were sampled purposively. We aimed to sample at least one facility from each group: specialist mental hospitals, psychiatric units within general hospitals, and primary care clinics. The final sample included a national specialist mental hospital, a forensic hospital, a provincial hospital with a psychiatric ward, and a primary care facility.

Analysis

We were unable to estimate treatment coverage in the Zimbabwe as national-level estimates of numbers of patients treated for each mental health condition were not available. We used simple, deductive thematic coding to align interview content with the sections of the situational analysis tool, outlined below. We also abstracted and summarized data from each facility checklist.

National Mental Health Policies and Plans PHC integration Decentralization Hospital integration Maternal Child/adolescent HIV Alcohol/st Epilepsy Dementia Alcohol/substance use Promotion/prevention Suicide Gender Age/life course Rural/urban Socio-economic status Vulnerable populations Vulnerable populations Addressed Partially addressed Not addressed -- Not assessed

Table 2: Components of

III. RESULTS

Mental Health Policies and Plans

Political Support

The government of Zimbabwe has demonstrated modest support for mental health services through the development of the National Mental Health Strategy for Zimbabwe 2016 – 2020 and the limited allocation of funds for mental health.²⁰ Of the total health budget, 0.42% is allocated to mental health. Public spending on mental health is estimated at 0.13 USD per capita each year.

Mental Health Policy, Mental Health Plan, and Legislation

The Zimbabwe National Mental Health Policy 2019 – 2023 includes plans and innovations for improving mental health services in the country.²¹ In addition to the policy, Zimbabwe has a National Mental Health Strategic Plan







2019 – 2023. Table 2 outlines the components that are specifically described in the both the policy and the plan, including areas that target equity in access to care.

Key Components of the Policy and Plan

Primary Health Care Integration

Integration of mental health services into primary health care is articulated as a goal in both the policy and the plan. The Mental Health Policy states that mental health is now included in pre-service and in-service training for general nurses and medical students also complete a mental health component in their training.

Decentralization

Decentralization of mental health services to the district level – treating patients in outpatient and community-based facilities rather than institutionalizing them in inpatient specialist facilities – is a major goal of the National Mental Health Policy, but one that has not yet been fully achieved. The policy describes decentralization as one of the key guiding principles to the sustainability of mental health, noting that it will increase access to mental health services particularly in rural areas. The National Mental Health Strategy describes plans to establish mental health units within provincial hospitals.

Legislation

The government of Zimbabwe established the Mental Health Act of 1996 and Regulations of 1999. These laws have not been revised since 1996 and 1999, respectively. Stakeholders we interviewed suggested that these need to be reviewed. The act includes protocols for managing patients who require treatment against their will. It also describes the benefit of free treatment for all people with mental disorders at public institutions. However, stakeholders suggested that as of January 2020, mental health patients at public institutions now pay for services, though no patients are turned away because of inability to pay.

The mental health advocates, particularly the youths and families, are the driving force behind where we are now. – Political Leader

Prevalence and Treatment Coverage of Priority Mental Disorders

Table 3: Prevalence and Treatment Coverage of Selected Mental Disorders

	e 3. Prevalence and Treatment		Prevalence (UI)		Total (UI)	Treated
	Overall	0.1%	(0.1%-0.1%)	17,454	(15,124-20,028)	n/s
-01 -02 -03	Female Male	0.1%	(0.1%-0.1%)	9,326	(8,048-10,835)	n/s
Schizo- phrenia	Male	0.1%	(0.1%-0.1%)	8,128	(7,036-9,314)	n/s
S d	Young adults (20-29)	0.2%	(0.1%-0.2%)	4,034	(2,962-5,356)	n/s
	Older age (70+)	0.1%	(0.1%-0.2%)	350	(300-404)	n/s
	Overall	0.5%	(0.5%-0.7%)	77,449	(65,701-92,630)	n/s
<u>a</u>	Female Male	0.6%	(0.5%-0.7%)	42,353	(35,728-50,543)	n/s
Bipolar Jisorde	Male	0.5%	(0.4%-0.6%)	35,096	(29,414-42,189)	n/s
Bi _F	Young adults (20-29)	0.9%	(0.7%-1.1%)	20,946	(16,077-27,075)	n/s
	Older age (70+)	0.5%	(0.4%-0.6%)	1,362	(1,129-1,631)	n/s
	Overall	1.5%	(1.4%-1.7%)	218,167	(194,379-245,030)	n/s
Δ	Female	1.8%	(1.5%-2.0%)	129,558	(114,593-146,286)	n/s
MDD	Male	1.3%	(1.2%-1.5%)	88,610	(78,598-99,973)	n/s
2	Young adults (20-29)	1.8%	(1.4%-2.4%)	44,973	(33,455-59,576)	n/s
	Older age (70+)	5.5%	(4.6%-6.6%)	14,516	(12,099-17,176)	n/s
	Overall	0.3%	(0.1%-0.6%)	48,355	(11,927-86,493)	n/s
)S)	Female	0.3%	(0.1%-0.6%)	24,620	(6,129-44,110)	n/s
Epilepsy	Male	0.4%	(0.1%-0.6%)	23,735	(5,789-42,607)	n/s
E G	Young adults (20-29)	0.4%	(0.1%-0.6%)	8,739	(2,179-15,680)	n/s
	Older age (70+)	0.6%	(0.1%-1.1%)	1,496	(380-2,799)	n/s
se	Overall	1.3%	(1.1%-1.6%)	189,731	(161,950-223,328)	n/s
<u> </u>	Female	1.0%	(0.8%-1.1%)	71,556	(60,405-84,855)	n/s
þ	Male	1.8%	(1.5%-2.1%)	118,175	(99,982-137,534)	n/s
Alcohol use	Young adults (20-29)	3.0%	(2.2%-4.0%)	73,794	(54,343-97,527)	n/s
<u> </u>	Older age (70+)	0.9%	(0.7%-1.1%)	2,264	(1,840-2,781)	n/s







4	Overall	0.7%	(0.6% - 0.9%)	105,296	(89,641-123,703)	n/s
NS6	Female	0.6%	(0.5% - 0.8%)	48,096	(39,259-58,996)	n/s
9	Male	0.9%	(0.7%-1.0%)	57,200	(48,304-67,141)	n/s
2	Young adults (20-29)	1.9%	(1.5%-2.4%)	46,927	(37,376-58,802)	n/s
	Older age (70+)	0.2%	(0.2%-0.3%)	645	(495-808)	n/s
	Overall	18.0	(14.7-21.4)	2,647	(2,160-3,142)	n/s
g*	Female	9.7	(7.6-12.5	742	(578-958)	n/s
ᇙᅘ	Male	26.9	(19.7-33.9)	1,905	(1,394-2,398)	n/s
Su		21.9	(15.4-30.2)	544	(383-751)	n/s
	Older age (70+)	84.4	(57.9-104.2)	221	(152-273)	n/s
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*suicide rate is reported as number of suicides per 100,000 population

GBD 2017 estimates a population prevalence of 0.1% for schizophrenia, 0.5% for bipolar disorder, 1.5% for major depressive disorder (MDD), 0.3% for epilepsy, 1.3% for alcohol use disorders, and 0.7% for drug use disorders. Suicide accounts for 1.8% of all deaths.

Compared to the southern sub-Saharan Africa region, Zimbabwe has a similar prevalence of each disorder except MDD, which is estimated to be slightly more prevalent (2.4%) across the region. This difference is greater among females (2.7% regionally vs. 1.8% In Zimbabwe).

Within Zimbabwe, certain demographic groups display a higher prevalence of some conditions. Young adults (age 20-29) have a higher prevalence of bipolar disorder (0.9%), MDD (1.8%), alcohol use (3.0%), and drug use (1.9%), compared to older adults. The prevalence of MDD is much higher among adults over the age of 70.

The rate of suicide in Zimbabwe is higher among men (26.9 per 100,000) than women (9.7 per 100,000), and is very high among older people (84.4 per 100,000).

Mental Health Services

Governance

Within the Ministry of Health and Child Care (MoH), the Department of Mental Health provides general oversight of mental health care in Zimbabwe. The head office has three staff members, including a Deputy Director, a Program Manager, and an Executive Assistant for the Mental Health Review Tribunal; this is the board that oversees aspects of forensic mental health services. At the Provincial level, there are eight Provincial Mental

Health Coordinators. These oversee mental health activities in each province and coordinate implementation of mental health programs. They are also supposed to work with district mental health focal persons in each District; these are meant to be mental health nurses, supervised by the District Nursing Officer. Though these positions have technically been appointed, none are currently funded or operational.

Table 4: Healthcare Facilities for Mental Health

		Total Facilities	Facilities/ 100,000	Total Beds	Beds/ 100,000
	Mental hospital ²²	2	0.01	1,614	11.5
Ħ	General hospital	2	0.01	142	1.01
Inpatient	psychiatric unit				
pa	Forensic unit	2	0.01	195	1.4
므	Residential care facility ²³	10	0.07	72	0.5
	Child/adolescent facility	n/s	n/s	n/s	n/s
	Hospital mental health	7	0.05	n/a	n/a
<u>.</u>	Community-based	n/s	n/s	n/a	n/a
pat	/non-hospital mental health				
Outpatient	Alcohol/drug/other facility	1	n/s	n/a	n/a
0	Child/adolescent	2	n/s	n/a	n/a
	Other facilities	n/s	n/s	n/a	n/a

Table 3: Human Resources for Mental Health

10	101 Michital Ficaltii					
			Rate per			
		#	100,000			
ist	Doctor*	2,245	16			
Generalist	Nurse*	10,102	72			
Gen	Pharmacist	n/s	n/s			
	Neurologist	4	0.03			
<u>list</u>	Psychiatrist	18	0.1			
ecia	Psychologist	6	0.04			
Sp	Psychiatrist Psychologist Psychiatric nurse	917	6.5			
	MH social worker		0.09			

I'm optimistic about the future of mental health in Zimbabwe since there has been on-going conversations and dialogue on mental health in the recent years. - Advocacy Group Spokesperson







Human Resources

Zimbabwe has a severe shortage of human resources for mental health, with an estimated 18 psychiatrists (17 of them in Harare) or approximately 0.1 per 100,000 population. There are 917 psychiatric nurses (6.5 per 100,000) and 6 psychologists (0.04 per 100,000). Economic instability has led to a substantial brain drain, with trained specialists leaving the country or practicing in other areas of medicine. Though there is a relatively large number of psychiatric nurses in Zimbabwe, many have diverted to HIV-related care given increased funding, primarily from international donors, for these areas of health services.

The cadres who look after mental patients are few but they are highly dedicated and work under difficult conditions to provide care. - Psychiatrist

Healthcare Facilities for Mental Health

There are only two psychiatric hospitals, two psychiatric inpatient units, and seven outpatient mental health facilities functioning in all of Zimbabwe. Most are in the public sector. Some facilities have been closed or are low-functioning due to inadequate resources for maintenance and repair²⁶ though the Harare Psychiatric Unit has recently been refurbished through a partnership with Médecins Sans Frontières. Most of the country's rural population is unserved by mental health services.

Four facilities were visited during the assessment process. These are described below. Both specialist mental hospitals noted a lack of trained, qualified staff to provide psychosocial interventions. Forensic facilities are responsible for a large proportion of mental health services in Zimbabwe; most patients at the forensic hospital sleep on the floor, and prison guards have been asked to care for patients. The primary care facility was implementing the Friendship Bench problem-solving therapy intervention with the support of lay counsellors.

Table 5: Facility Checklist Results (n=4)

		<u> </u>				
Description	Psychiatrists	Psychiatric Nurses	Psychologists	Mental Health Beds	Psychiatric Medications	Psychosocial Interventions
National mental hospital. MoH. Urban.	4	19	1	100	Comprehensive but low supply ¹	PST, BAT, supportive counselling, CBT, IPT, brief alcohol interventions, MET, family support
National forensic hospital providing compulsory services. Urban. MoH.	1	8	0	50 beds; many sleep on floor	Comprehensive, available ¹	PST, supportive counselling, CBT, IPT, brief alcohol interventions, MET
Provincial hospital with inpatient psychiatric ward. MoH. Urban.	1 ^{PT}	0	3	14	Comprehensive but low supply ¹	None
Primary health care center implementing Friendship Bench. MoH. Urban.	0	0	1	0	Comprehensive but low supply ¹	PST, supportive counselling, brief alcohol intervention, family support

¹Meets or exceeds criteria defined by World Health Organization Model List of Essential Medicines, 2019

Abbreviations. MoH: Ministry of Health. NGO: Non-governmental organization. PT: Part-time. BAT: behavioral activation therapy. CBT: cognitive behavioral therapy. PST: problem solving therapy. MET: motivation enhancement therapy. IPT: interpersonal therapy.

Primary Care Integration

The Friendship Bench (described below) is aiming to scale up evidence-based psychosocial treatment for depressive symptoms in primary care settings in Zimbabwe.

Scale-up of mhGAP started in 2019 with MoH-funded training of key staff at the provincial level. mhGAP trainings are now being rolled out at the district level. To date, staff at primary care facilities in seven towns and two cities have been exposed to training.

The mhGAP can be cascaded to the wider population of health workers and also into curriculum of general nurses and medical students to boost service provision - Psychiatrist







Psychiatric Medications

Essential antipsychotic, antidepressant, anxiolytic, mood-stabilizing, and antiepileptic medications are sometimes present at specialist mental health facilities and even at primary care facilities in Zimbabwe, though chronic shortages and unreliable supply chains severely limit patient access to these medicines. Paying users may access these drugs through the private sector.

Psychosocial Interventions

Some evidence-based psychosocial interventions are offered at the few public specialist mental health facilities in Zimbabwe, though shortages in trained human resources and appropriate supervision structures limit service availability. The Friendship Bench, which is lay counselor-delivered problem-solving therapy for patients in primary care with depressive symptoms, has demonstrated effectiveness and is currently being scaled across primary health care facilities in Harare and other urban and rural areas in Zimbabwe.²⁷

Health Information System

Facilities routinely report on numbers of different types of diagnoses related to mental health. These indicators are stratified by age, sex, new/returning patients, and in/out referral. Data related to service delivery are not comprehensive and may be of low quality.

Community

Sociocultural Factors

Sociocultural factors play a role in the help-seeking behaviors of people in Zimbabwe. Some people in Zimbabwe attribute supernatural explanations for mental illness, such as spiritual possession, witchcraft, or avenging spirits. ^{26,28–33} In one study, approximately 75% of people seeking mental health care in Harare consulted both traditional and biomedical care providers. ³⁴ The Zimbabwe National Traditional Healers Association plays a significant role in coordinating traditional healers who frequently manage psychosomatic and anxiety disorders. ³⁵ There are many places throughout the country where faith healers practice and deliver services for patients. ^{31,32} Studies show that people consult African traditional medicine healers, Christian-faith healers, and Islamic faith healers. ^{26,29,31,32} Traditional healers use herbs, spiritual power, informal counseling, and rituals for healing. ²⁹ Several studies have documented the physical, psychological, emotional, social, and financial burdens of caring for family members with mental health issues. ^{36–41}

Civil Society and Non-Health Sector Activities

Several non-governmental organizations have provided services related to mental health, including Médecins Sans Frontières (MSF) Holland, Hands of Hope, and Tree of Life Trust Zimbabwe. Tree of Life Trust Zimbabwe provides community-based mental health and psychosocial support to people living with trauma in order to reconnect people with themselves, nature, family, and community. Tariro Halfway House in Harare and Tirivanhu Farm in Ruwa both provide housing for people with mental illness. The Friendship Bench program provides support for recovery and reintegration for people with mental illness, as described above.

These non-health sector efforts aim to address a lack of mental health practitioners in the country and inadequate resources for people with mental health concerns. 26,35,44–46

Education: The Ministry of Education policy stipulates that in every school there should be a guidance and counselling teacher. In addition, the Schools Psychological Services are available to offer support and guidance within the Education Ministry.

There is still more work to be done but it is not an impossible feat to conquer. Mental health should be viewed as a continuum or cycle, from prevention, to pre-clinical, clinical, to rehabilitative or reintegration, from womb to tomb. In addition, explore opportunities and maximize non-health sectors and professionals to help improve mental health, i.e., uniformed personnel, teachers, and service crews. - Advocate

Promotion, Prevention, Advocacy and Awareness-raising

The Health Promotion Unit and the Mental Health Department within the MoH coordinate mental health promotion activities like World Mental Health Day. These are often done with support from WHO, academic institutions, and non-governmental organizations.⁴⁷ They promote messages related to stigma reduction, seeking treatment for mental health conditions, pre- and post-natal care, and substance use reduction. Other agencies that lead innovative mental health promotion activities include the Friendship Bench program and the Society for







Pre and Post Natal Services (SPANS). SPANS was established in 2010, and is a private voluntary organization that provides education, ongoing supportive family therapy, and psychological support services to the entire community. SPANS promotes good mental health across the life cycle.⁴⁸ There are also advocacy organizations such as the Zimbabwe National Association of Mental Health, which focuses on deinstitutionalization of mental health, community integration, and empowerment.⁴⁹

IV. CONCLUSION

Zimbabwe is a lower-middle income country whose health system is challenged with human resource constraints, maintaining a robust response to the HIV epidemic, in addition to meeting other public health needs. Despite these conditions, compared to other countries in the region, Zimbabwe ranks in the middle in regards to infant mortality, maternal mortality, and life expectancy.

The country faces some complexities in treating people with mental illnesses. Legislation that supports mental health needs revising, as it has not been revised since 1999. There is a shortage of human resources for mental health in Zimbabwe, in part a result of the emigration of locally trained professionals due to economic instability. Due to the high prevalence of HIV, however, there is are large numbers of psychiatric nurses who are focused on HIV-related care and funded by international donors. They are a potential resource for delivering mental health services in the context of HIV care.

Zimbabwe's mental health system and strategies also have several strengths. First, the country has invested in mental health training for general nurses and doctors in order to decentralize mental health services. Second, the prevalence estimates of priority mental disorders in Zimbabwe do not differ significantly from other countries in the southern sub-Saharan region. Third, Zimbabwe is home to an innovative program called the Friendship Bench, which receives international funding and attention, and has demonstrated effectiveness at treating people with depressive symptoms through lay counselors. The program also functions out of primary health care facilities.

Zimbabwean researchers in the field of psychiatry are leading contributors to some of the central questions in mental health implementation research, and Zimbabwe continues to build research capacity for African mental health investigators. At the same time, implementation of existing mental health policies and strategies may facilitate greater treatment coverage of priority mental disorders and suicide prevention.







V. REFERENCES

- 1. World Bank staff estimates using the World Bank's total population and age/sex distributions of the United Nations Population Division's World Population Prospects: 2019 Revision.
- 2. Africa:: Zimbabwe The World Factbook Central Intelligence Agency. https://www.cia.gov/library/publications/the-world-factbook/geos/zi.html.
- 3. UNESCO UIS. http://uis.unesco.org/.
- World Bank. World Bank Country and Lending Groups. The World Bank https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups (2016).
- 5. DHS, ICF International & Zimbabwe National Statistics Agency. *Zimbabwe Demographic and Health Survey 2015: Final Report.* (2016).
- 6. United Nations, Department of Economic and Social Affairs, Population Division (2019). World Population Prospects 2019. https://population.un.org/wpp/.
- 7. Surveys UNICEF MICS. https://mics.unicef.org/surveys.
- 8. Zimbabwe. Institute for Health Metrics and Evaluation http://www.healthdata.org/zimbabwe (2015).
- Fullman, N. et al. Measuring performance on the Healthcare Access and Quality Index for 195 countries and territories and selected subnational locations: a systematic analysis from the Global Burden of Disease Study 2016. The Lancet 391, 2236–2271 (2018).
- 10. The World Bank in Zimbabwe. World Bank https://www.worldbank.org/en/country/zimbabwe/overview.
- 11. Kidia, K. K. The future of health in Zimbabwe. Glob Health Action 11, (2018).
- 12. Europe & Central Asia (excluding high income) | Data. https://data.worldbank.org/region/europe-and-central-asia-excluding-high-income?most_recent_value_desc=true.
- 13. Country Snapshot: Drugs in Zimbabwe | Global Drug Policy Observatory. http://gdpo.swan.ac.uk/?p=245.
- 14. Zimbabwe | UNAIDS. https://www.unaids.org/en/regionscountries/countries/zimbabwe.
- 15. Hakim, J. G. *et al.* Medical Education Partnership Initiative (MEPI) in Zimbabwe: Outcomes and Challenges. *Glob Health Sci Pract* **6**, 82–92 (2018).
- 16. Abas, M. A. *et al.* Building mental health workforce capacity through training and retention of psychiatrists in Zimbabwe. *Int Rev Psychiatry* **26**, 453–459 (2014).
- 17. PRIME's Situational Analysis Tool | Programme For Improving Mental Health Care. http://www.prime.uct.ac.za/situational-analysis-tool.
- 18. Global, regional, and national age-sex-specific mortality for 282 causes of death in 195 countries and territories, 1980-2017: a systematic analysis for the Global Burden of Disease Study 2017. *Lancet* **392**, 1736–1788 (2018).
- 19. WHO | Service availability and readiness assessment (SARA). https://www.who.int/healthinfo/systems/sara_introduction/en/.
- 20. Ministry of Health and Child Care Latest Activities. http://www.mohcc.gov.zw/.
- 21. Rwafa, C. National Strategic Plan for Mental Health Services 2019 2023.
- 22. WHO | Mental Health ATLAS 2017. WHO http://www.who.int/mental_health/evidence/atlas/mental_health_atlas_2017/en/.
- 23. Liang, M. et al. Mental Health in Zimbabwe. (2016).
- 24. Isaac, M. et al. Postgraduate training in psychiatry in Asia. Curr Opin Psychiatry 31, 396–402 (2018).
- 25. Villaverde, M. C., Beltran, M. & David, L. National Objectives for Health | Philippines 2005-2010. (2005).
- 26. Kidia, K. et al. Mental health in Zimbabwe: a health systems analysis. Lancet Psychiatry 4, 876–886 (2017).
- 27. Community Mental Health | www.friendshipbenchzimbabwe.org | Harare. https://www.friendshipbenchzimbabwe.org/.
- 28. Patel, V., Gwanzura, F., Simunyu, E., Lloyd, K. & Mann, A. The phenomenology and explanatory models of common mental disorder: a study in primary care in Harare, Zimbabwe. *Psychological medicine* **25**, 1191–1199 (1995).
- 29. Kajawu, L., Chingarande, S. D., Jack, H., Ward, C. & Taylor, T. What do African traditional medical practitioners do in the treatment of mental disorders in Zimbabwe? *International Journal of Culture and Mental Health* **9**, 44–55 (2016).







- 30. Kajawu, L., Chingarande, S. D., Jack, H., Ward, C. & Taylor, T. Why Do People Use Traditional Healers in Mental Health Care in Zimbabwe? *International Journal of Psychiatry* **1**, 1–6 (2016).
- 31. January, J. & Sodi, T. The practices of Apostolic faith healers in mental health care in Zimbabwe. *Journal of psychology in Africa* **16**, 315–319 (2006).
- 32. Booysen, M., Chikwanha, T. M., Chikwasha, V. & January, J. Knowledge and conceptualisation of mental illness among the Muslim population in Harare, Zimbabwe. *Mental Health, Religion & Culture* **19**, 1086–1093 (2016).
- 33. Mutambara, J. & Sodi, T. Exploring the role of spirituality in coping with war trauma among war veterans in Zimbabwe. *Sage open* **8**, 2158244017750433 (2018).
- 34. Patel, V., Simunyu, E. & Gwanzura, F. The pathways to primary mental health care in high-density suburbs in Harare, Zimbabwe. *Social Psychiatry and Psychiatric Epidemiology* **32**, 97–103 (1997).
- 35. Mangezi, W. & Chibanda, D. Mental health in Zimbabwe. International Psychiatry 7, 93–94 (2010).
- 36. Marimbe, B. D., Cowan, F., Kajawu, L., Muchirahondo, F. & Lund, C. Perceived burden of care and reported coping strategies and needs for family caregivers of people with mental disorders in Zimbabwe. *African journal of disability* **5**, (2016).
- 37. Nyati, Z. & Sebit, M. Burden of mental illness on family members, caregivers and the community. *East African medical journal* **79**, 206–209 (2002).
- 38. Dambi, J. M., Jelsma, J. & Mlambo, T. Caring for a child with Cerebral Palsy: The experience of Zimbabwean mothers. *African journal of disability* **4**, (2015).
- 39. Dube-Marimbe, B., Mangezi, W., Kaul, P., Kaseke, F. & Madhombiro, M. Needs Assessment for Development of a Mental Health Curriculum for Village/Lay Health Workers to Manage Caregiver Burden in Zimbabwe. *J Ment Disord Treat* **2**, 2 (2016).
- 40. Chikwanha, T. M. Exploring factors shaping family involvement in promoting the participation of adults with substance use disorders in meaningful occupations. (2019).
- 41. Wintersteen, R., Wintersteen, L. & Mupedziswa, R. Zimbabwean Families of the Mentally 111: Experiences and Support Needs. *J Soc Dev Afr* **10**, 89–106 (1995).
- 42. WHO | Collaboration one answer to strengthening mental health services in Zimbabwe. *WHO* http://www.who.int/mental_health/mhqap/zimbabwe/en/.
- 43. Home | Tree of Life. http://www.treeoflifezimbabwe.org/.
- 44. Ncube-Sibanda, S. P. & Dube-Mawerewere, V. Community Resources for Forensic Mental Health Aftercare in Zimbabwe. *Open Journal of Nursing* **9**, 24–30 (2019).
- 45. Madhombiro, M., Dube, M., Dube-Marimbe, B. & Mutsvuke, W. The challenges in implementing task shifting in mental health service in Zimbabwe. *Ann Psychiatry Ment Health* **5**, 1–3 (2017).
- 46. January, J. & Chimbari, M. J. Opportunities and obstacles to screening for perinatal depression among women in Zimbabwe: A narrative review of literature. *South African Journal of Psychiatry* **24**, (2018).
- 47. Zimbabwe commemorates World Mental Health Day. *WHO | Regional Office for Africa* https://www.afro.who.int/news/zimbabwe-commemorates-world-mental-health-day-0.
- 48. Brides, G. N. Society for Pre and Post Natal Services (SPANS). *Girls Not Brides* https://www.girlsnotbrides.org/members/society-for-pre-and-post-natal-services-spans/.
- 49. Mlambo, T., Munambah, N., Nhunzvi, C. & Murambidzi, I. Mental Health Services in Zimbabwe–a case of Zimbabwe National Association of Mental Health. *World Federation of Occupational Therapists Bulletin* **70**, 18–21 (2014).