

Federal Democratic Republic of Ethiopia Ministry of Health

NATIONAL MENTAL HEALTH STRATEGY 2012/13 - 2015/16



Introducing Ethiopia's National Mental Health Strategy (2012/13- 2015/16) Federal Ministry of Health

Please join with us all in celebrating the launch of the Federal Ministry of Health's (FMOH) National Mental Health Strategy (2012/13 – 2015/16). This is a critical milestone in our journey towards the development of accessible, affordable and acceptable mental health care for all Ethiopians. The Strategy was developed with extensive input from a wide range of stakeholders. As a result, this is a Strategy for action which is workable in our setting and has the support of those who will play a critical part in its implementation. Therefore, a heart-felt appreciation is in order to all who graciously gave their time and input to the development of the Strategy.

The Strategy builds on the existing momentum for improving mental health care which is already evident in Ethiopia. For example, FMOH is currently completing the construction of a state-of-the-art hospital specializing in mental health care and will be establishing a National Institute of Mental Health to oversee the co-ordination of mental health activities across the country. A number of higher learning institutions have established academic graduate degree programs to develop mental health professionals. FMOH is also collaborating with the World Health Organization (WHO) as one of the six pilot sites for the implementation of mental health Gap Action Programme (mhGAP) focused on scaling up of mental health services. Other important Ethiopia-based initiatives include the UKAID-funded Programme for Improving Mental Health care (PRIME) and EC-funded EMERALD projects which are providing valuable information on the 'how to' to scale up and deliver effective mental health care in primary health care settings.

Successful realization of the Strategy will need to harness the efforts of many different institutions, agencies and individuals. Each has an important part to play.

For example,

- **Resource mobilization:** Comparatively, in light of the substantial burden of mental illness as a disease in the world (13%) in general and Ethiopia in particular, this Strategy provides WHO costing estimates for scale-up of mental health care and a range of ways that various funders can contribute.
- **Non-governmental organisations:** Need to be fully engaged in the development of activities and have much to offer by supporting the recovery and rehabilitation of persons with mental disorders in the community and least restrictive settings.
- Academic institutions: Can provide vital support in the training of mental
 health professionals and provide evidenced based information about the most
 clinically and cost effective ways of delivering care that is culturally competent.

This strategy sets out a clear and evidence-based plan for scaling up mental health care in Ethiopia. We hope that you will join us in working to make this Strategy a reality and improving the lives of many afflicted by mental illness in Ethiopia.

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FORWARD

The Federal Ministry of Health's (FMOH) initiative to develop a National Mental Health Strategy marks an important milestone towards the delivery of a comprehensive and integrated program to address the mental health needs of Ethiopians.

The strategy is consistent with the overall health policy and plan of FMOH and the World Health Organization's (WHO) recommended guidelines for the development of a mental health policy, plan and program.

The strategy is a timely effort in light of Ethiopia's accelerated economic and social development plans. It recognizes the importance and the positive contributions of a physically and mentally healthy community in general and workforce in particular. The strategy also recognizes the strong interconnections between mental illness and poverty; mental illness can lead to poverty by limiting an individual's resource potential for productive economic engagement. Poverty is also a risk factor for mental illness and severely limits an individual's access to mental health and other health services, thereby increasing the risk of morbidity, disability and mortality.

The strategy is based on the five-tiered pyramidal structure know as Optimal Mix of Services which is recommended by WHO. Focusing on priority disorders and vulnerable groups, this pyramidal structure seeks to utilize all existing human potential such as mental health specialists, general practitioners, health officers, nurses, urban and rural health extension workers. The strategy relies heavily on the primary health care system to provide seamless, sustainable and quality integrated mental health treatment, with care provided at all levels of the health system from tertiary referral and general hospitals, down to health centers and health posts.

Mental health specialists are a critical component of integration of mental health in primary care. In light of the dearth of skilled mental health professionals in the country, the strategy calls for accelerated training and expansion of a cadre of mental health professionals. The current shortage of skilled manpower, as well as the multi-faceted nature of mental disorder which requires multi-dimensional interventions, also calls for the upgrading and utilization of an array of health professionals and paraprofessionals, including traditional healers, and those from faith-based institutions and community-based organizations.

We are indeed grateful to all our partners and donors for their assistance in the development of this strategy. Also, special thanks to Visions for Development, Inc. for undertaking, and the United Nations Children's Fund (UNICEF) for supporting, the development of this strategy.

FMOH will be looking forward to a close working and collaborative relationship with all stakeholders in implementing the strategy.

Dr. Kesetebirhan Admasu State Minister of Health

EXECUTIVE SUMMARY

A National Mental Health Strategy is critical to the development of Ethiopia's health system. Mental health is an integral component of any efficient, well-functioning structure of health care. The strategy not only for the chronically mentally ill – who often represent a small part of a population – but also for the many people who suffer from common mental disorders and substance abuse.

The goal of this strategy is therefore to address the mental health needs of all Ethiopians through quality, culturally competent, evidence-based, equitable and cost-effective care. These core components, along with accessibility, the need to protect human rights, efficiency and sustainability, and community involvement and participation, are the principles and values from which this strategy was developed.

According to the World Health Organization's (WHO) definition, "Mental health is a state of well-being in which an individual can realize his or her own abilities, interact positively with others, cope with the stressors of life and study, work productively and fruitfully, and contribute to his or her family and community." It should be noted the definition does not refer exclusively to the absence of "mental illness", but also addresses the concept of "mental wellness". According to WHO "There is no health without mental health." It should also be noted that mental health is relevant to many of the health-related Millennium Development Goals.

As per WHO's recommendation and successful experiences of many developing countries the Federal Ministry of Health's (FMOH) National Mental Health Strategy mandates that mental health be integrated into the primary health care system. In keeping with the overall health services development plan of FMOH the strategy promotes a decentralized approach in which mental health services are available at local hospitals, district and regional health centers and tertiary facilities. It also ensures that those who require services have access to treatment as close to their home as possible and in the least restrictive environment.

The strategy also is developed to enable health professionals to gain competencies at various level of care to enable them to readily identify, monitor and manage mental health disorders. By integrating mental health services into the primary health care system it is envisioned that those with both physical and mental health related needs will be treated in a seamless and comprehensive manner.

The strategy mandates FMOH to develop a National Institute of Mental Health to provide guidance towards the implementation of this strategy and, including the establishment of Centers of Excellence in Mental Health care. The strategy also subscribes to the following mandates to assure the delivery of effective and quality services by:

- Integrating mental health into the existing primary health care delivery system and utilize existing resources and coordinate these efforts so not to establish parallel structures of care.
- Creating a monitoring and evaluation system to implement and regulate mental health care.
- Defining mental health indicators to be collected and analyzed and use the results for informed planning and decision making.
- Conducting an audit and update the essential list of psychotropic drugs.
- Organize and launch and support anti stigma campaigns to educate about the causes and treatments of mental disorders.

- Developing close inter and intra-sectoral working relationships to plan and coordinate programs.
- Developing legislation to protect the human rights of the mentally ill.
- Working with professional associations and academic institutions to promote quality training and care.

The strategy has been developed to provide a general blueprint for responding to the mental health services, training and research needs within Ethiopia, to outline the broad objectives to be achieved, and to lay a foundation for future actions. The strategy also takes into account the substantial contribution of mental illnesses to the burden of global diseases, prioritizes the mental health services and activities to be initiated, identifies principal stakeholders and designates clear roles for their engagement and responsibilities.

Mental health care will be for everybody, but with particular attention given to the special needs of particular vulnerable populations; namely, the severely mentally ill, those with substance abuse disorders, children and adolescents, persons living with HIV/AIDS, women, people in prisons, victims of violence and abuse, persons with epilepsy and the elderly.

This strategy lays out the projected expansion of the mental health workforce needed to support integration of mental health in primary health care. This scaling up of training of mental health professionals will go hand-in-hand with a large-scale program of pre- and in-service training of general health workers in mental health care. In this way, all health workers will be equipped to deliver mental health care according to their level.

The strategy has been costed using a state-of-the-art tool developed as part of the WHO's mental health Gap Action Program and will be financed by a variety of mechanisms, including the FMOH's new social health insurance initiative. Creative means will be employed to try to avoid catastrophic out-of-pocket payments for persons with severe mental illness, who are already over-represented in the poorest sectors of society.

Monitoring and evaluation processes will be developed to enable effective management and optimum mobilization, allocation and use of resources. Mental health data recording and reporting will be included in the existing health information system. Similarly, supportive supervision activities in mental health care will be integrated into existing supervision structures. There will also be periodic performance monitoring and quality improvement activities, together with periodic population surveys that will be used to evaluate implementation of the strategy.

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ACRONYMS

AIDS	Acquired immunodeficiency syndrome
ART	Antiretroviral therapy
BPHS	Basic Package of Health Services
CBOs	Community-Based Organizations
CRDP	Convention of the Rights of Persons with Disabilities
DALY	Disability Adjusted Life Year
DHS	Demographic and Health Survey
ESD	Essential List of Drugs
FBOs	Faith-based Organizations
FMOH	Federal Ministry of Health
HEW	Health Extension Workers
HIV	Human immunodeficiency virus
HMIS	Health Management Information System
HSDP-IV	Health Systems Development Plan IV
JHU -Tsehai	Johns Hopkins University
LIMC	Low and Middle Income Countries
MDGs	Millennium Development Goals
mhGAP	Mental Health Gap Action Program
MHS-E	Mental Health Society - Ethiopia
MHTWG	Mental Health Technical Working Group
FMOH	Federal Ministry of Health
NGOs	Non-Governmental Organizations
NIFMHE	National Initiative for Mental Health in Ethiopia
NIMH	National Institute of Mental Health
NMHS	National Mental Health Strategy
PHC	Primary Health Care
PLHIV	People living with HIV and AIDS
PRIME	Program for Improving Mental Health Care
RHB	Regional Health Bureau
SGBV	Sexual and Gender Based Violence
SMI	Severe Mental Illness
UNICEF	United Nations Children's Fund
VISIONS	Visions for Development, Inc.
WHO	World Health Organization
YLD	Years Lived with Disability

1. INTRODUCTION

The development of the National Mental Health Strategy for Ethiopia (to be known as "the strategy" from here on) represents the Federal Ministry of Health's (FMOH) commitment to address Ethiopia's needs for accessible, effective, sustainable, and affordable mental health services. The FMOH recognizes the significant contribution of mental health towards the well-being and functioning of an individual. Like any other health condition, persons suffering from mental illness and/or substance abuse should be able to access care that promotes their timely recovery, at the same time as promoting social inclusion and countering stigma, discrimination and human rights abuses. It is with these fundamental precepts in mind that this strategy was developed. The strategy is consistent with the FMOH's overall national health policy regarding the delivery of preventive, rehabilitative and curative care. This strategy provides a blueprint from which specific implementation plans will be developed subsequently.

1.1 Mental Health and the Millennium Development Goals

According to the World Health Organization's (WHO) definition, "Mental health is a state of well-being in which an individual can realize his or her own abilities, interact positively with others, cope with the stressors of life and study, work productively and fruitfully, and contribute to his or her family and community." It should be noted the definition does not refer exclusively to the absence of "mental illness", but also addresses the concept of "mental wellness". According to WHO[1]

"There is no health without mental health."

Indeed, not only is mental health relevant to many of the health-related Millennium Development Goals (MDGs), especially MDGs (4, 5 and 6) [2], but also to social and economic development (MDGs 1, 2 and 3) [3, 4]. Specifically, MDG 1: Eradicate Extreme Poverty and Hunger, MDG 2: Achieve Universal Primary Education, MDG 3: Promote Gender Equality and Empower Women, MDG 4: Reduce Child Mortality, MDG 5: Improve Maternal Health, Mental Health and MDG 6: Combat HIV/AIDS, Malaria and Other Diseases.

1.2 The High Burden of Mental Illness

Mental illness comprised 13% of the total global burden of disease in 2000 – a figure that is expected to rise to 15% by the year 2020. Depression is the third leading cause of disease burden worldwide, representing 4.3% of total disability adjusted life years, and predicted to become the second leading cause of the global disease burden by the year 2020. Furthermore, depression is currently the leading cause of non-fatal burden when considering all mental and physical illnesses, accounting for approximately 10% of total years lived with disability (YLD) in Low and Middle Income Countries (LMICs).

In Ethiopia, mental illness is the leading non-communicable disorder in terms of burden. Indeed, in a predominantly rural area of Ethiopia, mental illness comprised 11% of the total burden of disease, with schizophrenia and depression included in the top ten most burdensome conditions, out-ranking HIV/AIDS. These startling statistics show that mental illnesses have been overlooked as a major health priority in Ethiopia and other LMICs, and underscore the need for public health programs targeting mental illnesses.

1.3 Political Commitment

There is clear commitment for improving mental health care and increasing coverage at the highest governmental level. For the first time, a Mental Health Technical Working Group has been organized under the Health Promotion and Disease Prevention Directorate of the Federal Ministry of Health. Various fora have and will be organized to share this strategy, pulling together key stakeholders such as the Regional Health Bureaus, including policy makers, program managers from relevant areas such as FMOH's Medical Directorate and PFSA, communication experts, and experts from community and health systems. These activities are planned to ensure buy-in and commitment during the implementation phase.

Currently, in collaboration with the WHO Mental Health Gap Action Program (mhGAP), Program for Improving Mental Health Care (PRIME), FMOH is in the process of planning significant scale-up of mental health services. This plan was developed by soliciting inputs from critical stakeholders including psychiatrists, neurologists, primary care health professionals, social scientists, health economists and other key stakeholders.

1.4 Why Do We Need a National Mental Health Strategy?

Mental illnesses are common in Ethiopia, they are associated with a high burden due to disability and mortality, they constitute important but largely unrecognized barriers to achieving the MDGs, and, despite the existence of affordable and effective treatments, fewer than one in 10 of the most severely affected people ever receive the treatment they need. In order to begin to meet the mental health needs within Ethiopia, a coordinated and sustained effort is required. FMOH recognizes the significant contribution of mental health toward the well-being and functioning of an individual. It is with this fundamental precept in mind that this strategy was developed.

2. Mental Health in Ethiopia

2.1 Prevalence and Impact of Mental Illnesses in Ethiopia

Ethiopia is fortunate to have a wealth of robust information about the burden of mental illness and substance abuse within the country. Table 1 summarizes the prevalence and incidence of the major mental illness and substance abuse disorders, as well as the impact in terms of suicide attempts and completed suicide. These findings are very similar to the levels that would be expected in Western settings, underlining the point that mental illness is not just a 'luxury' of the West.

Table 1: Prevalence and Impact of Priority Illnesses in Ethiopia Source: Ethiopia mhGAP working group 2010 (FMOH)

Mental Illness	Prevalence / Incidence (%)
Schizophrenia	0.5
Bipolar disorder	0.5
Depression	5.0
Suicide (completed)	7.7/100000/year
Suicide attempt	3.2
Alcohol-problem drinking	2.2-3.7
Alcohol dependence	1.5
Cannabis abuse	1.5
Childhood mental illnesses	12-25
Epilepsy	1.0
Dementia	No data

The disability associated with mental illness in Ethiopia is high: where people are already struggling for survival, the catastrophic impact of a chronic and disabling illness on the person and their family can be well-appreciated. The lack of mental health services or any kind of financial support for families with a mentally ill member are the biggest factors causing caregiver burden in Ethiopia.

Stigma, discrimination and human rights abuses are part of the daily lived experience of the mentally ill and their families in Ethiopia. Increased availability of mental health services may be the single most important factor to improve this situation.

2.2 Culture and Mental Health in Ethiopia

Community surveys in Ethiopia have shown consistently that severe mental illness, for example resulting from schizophrenia or bipolar disorder is recognized as an illness that needs intervention. However, severe mental illness is more often attributed to supernatural causes, for example spirit possession, bewitchment or evil eye, rather than as a result of biomedical or psychosocial causes. As a consequence, affected individuals and/or their families often seek help from religious and traditional healers rather than health facilities. Furthermore, other mental illnesses such as major depression are not well-recognized within the community, and are more often explained away as due to psychosocial problems, e.g. marital problems or poverty. Help-seeking for depression is most often limited to the family or local community, and depression usually remains undetected in general health settings, which leads to inappropriate prescribing of ineffective treatments and is a missed opportunity for suicide prevention.

2.3 Important Developments in Mental Health Care in Ethiopia

The psychiatric nurse training program, started in 1983, has enabled the country to fill the void created by the lack of high-level mental health professionals. The number of psychiatric units throughout the regional states has now grown to 57, each staffed by one or more psychiatric nurses. Psychiatrists and senior psychiatric nurses from Addis Ababa visit these units annually in order to provide support, discuss any problem cases, and facilitate resolution of administrative problems with the local health managers and administrators. Amanuel Hospital also organizes workshops for sharing of experiences with professionals.

A number of research studies have been undertaken in the field of mental health in Ethiopia, and more are ongoing. These activities were or are being carried out by teams of professionals from Ethiopia and from countries like Sweden, the US, the Netherlands and the UK. Collaborative research is helping to improve the clinical and research capacity of local staff, as well as reducing the brain-drain of psychiatrists from (and within) Ethiopia.

The health policy of FMOH acknowledges the importance of mental health service for the welfare of the public. The Health Sector Development Program (HSDP) of the Ethiopian government, which is now in its fourth year of a 5-year plan, incorporates specific targets relating to the integration of mental health care at the different levels of the health care system in the country.

Addis Ababa University started training psychiatrists in-country in 2003. To date, 27 psychiatrists have graduated from the program, of whom almost all are still working within the public sector in Ethiopia. The neurology program has also produced 11 professionals.

The public is now more than ever aware of the importance of mental health. The level of awareness has grown to such an extent that a body by the name 'Mental Health Society - Ethiopia' (MHS-E) was established in 2003. Families of individuals with mental illness formed the organization and a large number of people have already requested membership. The program of MHS-E, amongst other things, includes education regarding prevention of mental illness and supporting individuals with mental illness and their families. Several psychiatrists contribute to regular radio programs and newspaper articles, aimed at raising awareness about mental health.

Under the guidance and sponsorship of the First Lady of Ethiopia, Ms. Azeb Mesfin, the National Initiative for Mental Health in Ethiopia (NIMHE) was established in 2005 to guide the overall development of national mental health in Ethiopia. In addition to providing high level advocacy and awareness regarding the stigma of mental illness, NIMHE spearheaded the initiation and the construction of the new Gefersa Psychiatric Rehabilitation Hospital which is a state-of-the-art facility. Families now are more readily seeking medical help for their family members who have mental illness.

2.3.1 Mental Health Facilities

There is one dedicated psychiatric hospital in Addis Ababa with 268 beds, namely Amanuel Hospital. A new hospital is in the process of being built around the Kotebe area with anticipated completion date of 2013. The new hospital will be a general hospital with a large number of psychiatric beds. The number of trained mental health professionals is wholly inadequate for providing services to Ethiopia's 80 million population. Currently, there are 40 practicing psychiatrists in the country, 461 psychiatric nurses (there is no accurate estimate of those still working in mental health), 14 psychologists (none of whom have training in clinical psychology), three clinical social workers, and no occupational therapists. The most recent

Table 2: Psychiatric and Substance Abuse Beds and Facilities

Psychiatric Facilities and Beds			
Resources	Total Numbers		
General Psychiatry Centers and Clinics	1 facility in Amanuel hospital providing service to all wards 1 long-stay unit in Gefersa (190 beds)		
In-patient psychiatric units	2 in Addis Ababa (Amanuel=268 beds, Armed Forces = 50 beds) 2 in regional towns (Jimma= 26 beds, Mekelle= 9 beds)		
Out-patient psychiatric clinics	4 in Addis Ababa (Tikur Anbessa, Amanuel, St Paul's & Zewditu) 6 in regional towns (Adama, Harar, Hawassa, Jijiga, Jimma, Mekele)		
Nurse-led psychiatric units	57 (in regional, zonal and district hospitals outside Addis Ababa)		
Children and Adolescent services	2 out-patient services in Addis Ababa (St Paul's, Yekatit 12)		
Police	In-patient unit in Kality Prison, Addis Ababa (35 beds)		
Prison	In-patient unit in Police Referral Hospital (5 beds)		
Centers for Substance Abuse treatment	2 out-patient facilities in Addis Ababa (Amanuel, St Paul's) 2 in-patient facilities (Amanuel = 16 beds, St Paul's = 5 beds; total 21 beds) Plan underway to open 5 additional regional centers		

Source: Ministry of Health 2010

Table 3: Human Mental Health Resources

Human Resources			
Resources	Total Numbers	Location	Rate Per Population Per 100 000
Psychiatrists	40	10 in regions 30 in Addis Ababa	0.05
Psychiatric Nurses	461	Approximately 120 in regions, remainder in Addis Ababa and private sector	0.58
Psychologists engaged in clinical services	14*	All in Addis Ababa	0.02
Social workers engaged in clinical services	3	All in Addis Ababa	0.003
Occupational Therapists	0	N/A	0

^{*}not trained as clinical psychologists Source: Ministry of Health 2010

Health Sector Development Plan (IV) projects that 304 psychiatrists will be needed by 2015, increasing to 410 psychiatrists by 2020 [60].

2.3.2 Mental Health Training

Psychiatrists are trained within Ethiopia in a three year post-graduate clinical program run by Addis Ababa University and supported by the University of Toronto (Canada). Approximately four to six psychiatrists enter the program per year.

In 2009, in collaboration with Amanuel Specialized Mental Hospital, Gondar University established a Master's in Integrated Clinical and Community Mental Health. Currently, there are 50 students enrolled in this program, and the first batch graduated in September 2011. Jimma University has also started a Master's in Integrated Clinical and Community Mental Health in 2010, with 16 students currently enrolled in the program.

In 2011, Gondar University started a clinical psychology program with 9 students currently enrolled. Mekelle University established a bachelors program in psychiatric nursing and has enrolled 33 students.

A number of postgraduate programs are currently being developed by various departments within Addis Ababa University, in the areas of mental health epidemiology (PhD), mental health social work (MSc) and applied clinical psychology (MSc). This will help to expand a multi-disciplinary workforce to support scaling up of mental health care.

The PhD program will help to expand capacity to conduct service and policy-relevant studies, including clinical trials and health service research, and thus support development of an evidence base for effective treatments in Ethiopia. Currently, the PhD program has 7 students enrolled and anticipates admitting 8 students per year.

2.3.3 General Health Worker Training in Mental Health

Clinicians, such as physicians and health officers, while permitted, do not generally have the knowledge or education to prescribe complex psychotropic drugs. Recently, in collaboration between Amanuel Specialized Mental Hospital and John Hopkins University – JHU Tsehai - a training curriculum has been developed and pilot tested to increase the competence of physicians, health officers and nurses to prescribe psychotropic medications and deliver brief psychosocial interventions.

A total of 1470 urban health extension workers in Addis Ababa have been trained in mental health care. Also, as part of their upgrading to level IV nurses, rural health extension workers are studying additional topics, including a 10 session module on mental health care. The focus of this training is on mental health promotion and mental illness prevention activities, awareness-raising and anti-stigma campaigns, early detection of mental illness, referral and the ongoing needs of persons with severe mental illness.

A mental health training program for trainers of primary health care workers in Addis Ababa, including physicians, health officers, and nurses, has started and about 100 such workers have been trained to date.

In collaboration with the WHO, FMOH will be piloting and implementing the Mental Health Gap Action Program (mhGAP) which provides evidence-based packages of care for various priority mental health conditions to be delivered in PHC [61]. The Ethiopia mhGAP working group [45] has adapted the proposed treatment guidelines to the Ethiopian setting and has started training PHC workers in 2011.

2.3.4 Psychotropic Medications

In the last five years there has been a significant increase in the number of psychotropic medicines on the FMOH's Essential List of Drugs. The National Drug List also contains additional medications to those specified on the essential list, namely: sertraline, risperidone, olanzapine, bromazepam, amantedine, orphenadrine hydrochloride, phenytoin sodium, methylphenidate and disulfiram [45]. However, there is a great need to ensure the consistent availability, accessibility and affordability of psychotropic medications throughout the country.

In order to achieve scaling up of mental health care into primary health care services, it will be necessary to extend prescribing privileges to include general nurses and health officers of degree level.

2.4 SWOT Analysis of Mental Health Services

Analysis of strengths, weaknesses, opportunities and threats was a crucial step in the development process of this strategy. Prior identification of weaknesses and threats helps to identify relevant strategies for internal improvement and for the mitigation of factors that may have adverse impacts beyond the control of the health sector. Recognition of strengths and opportunities facilitates reaping of maximum benefits from internal and external environments in order to achieve the goals and targets set in the mental health plan. The table below provides a summary of the strengths, weaknesses, opportunities and threats in the health sector with respect to provision of mental health services

Table 4: SWOT Analysis of Existing Mental Health Services

Strength

- Recent expansion of training programs
- Appropriate use of allocated budget
- Expanding centers for the treatment of substance use disorders

Weakness

- Low resource; inaccessible service
- Most of the budget used by hospital
- Lack of parity
- · Inadequate quality of care
- Limited resource for non-medication alternatives (e.g., rehabilitation; psychological treatment)
- · Lack of organized referral system
- Difficulties of staff retention
- Inadequate focus on supervision and ongoing training in PHC

Opportunities

- Political commitment
- Improving infrastructure
- Expanding health sector
- Decentralization

Threats

- Low budget and other resources
- Lack of alternative services
- Stigma and abuse of mentally ill persons
- Poor implementation or use of available research evidence
- Lack of evidence base for evaluating health service developments

From the report of the Ethiopia mhGAP working Group [45]

2.5 Stakeholder Analysis

Stakeholders are individuals, organizations or agencies that could influence or be influenced positively or negatively during implementation of the strategy. Stakeholder analysis describes the process of scrutinizing the essence, interests, behaviors, and the nature and level of impact brought about by these stakeholders. The degree of influence for mental health from stakeholders varies depending on their span of control over the generation and allocation of resources; level of political power; scope of participation in the sector; and range in the use of services provided by the sector. Achievement of the mission and objectives of the Ethiopian mental health strategy will be largely dependent on the collective efforts and roles played by the different stakeholders. Therefore, stakeholder

analysis conducted in the development of the mental health strategy helped to define the roles, responsibilities, boundaries and potential contributions of all stakeholders and areas of possible collaboration to create synergy to achieve the strategic objectives set in this program.

3. Development of the Mental Health Strategy

The strategy was developed with the support of diverse stakeholders and under the guidance of the Federal Ministry of Health Mental Health Technical Working Group (MH TWG). Under the guidance of the MH TWG, experts from Visions for Development, Inc., (Visions), a non-profit and international organization located in Washington, DC, supported the development of this strategy. A questionnaire was developed and vetted to guide the stakeholder interviews. Visions' staff contacted selected stakeholders and conducted over 85 in-depth interviews. Key local stakeholders interviewed included family and support organizations for persons with mental illness, faith-based organizations, various government ministries, clinicians, academics, health policy-makers and planners at the Federal and Regional levels, and non-governmental organizations, amongst others. International stakeholders who reviewed the draft of the strategy included representatives from Harvard Medical School, Johns Hopkins University, the Carter Center, the Stanley Medical Research Institute, the Clinton Foundation, Umeå University (Sweden), King's College London (UK), University of Toronto (Canada), University of Cape Town (South Africa), the Falk Institute (Israel) and the World Health Organization.

This strategy is the result of the information gathered during the stakeholder interviews and consultative meetings with the FMOH's TWG-MH, and a number of local and international organizations. This process of consultation and interviewing served to engage stakeholders in the process of developing the strategy and to solicit support, as it is recognized that they will be key to its effective implementation.

With guidance from the MH TWG, Visions facilitated a two-day national consultative workshop, which involved all major stakeholders, to vet, enrich, and finalize the strategy. The strategy was also sent to WHO and was scored against a checklist that WHO published for the development of national mental health strategies and was further calibrated based on feedback received from WHO.

3.1 Foundation and Direction of the National Mental Health Strategy

Integrating specialized health services - such as mental health services - into Primary Health Care (PHC) is one of WHO's most fundamental health care recommendations and a cornerstone of the FMOH's health policy and plan. This requires mental health service integration into all routine health service delivery systems, supported by expansion of the mental health workforce. Therefore, this strategy calls for integrating mental health services into PHC and general health care services, thus leveraging the existing PHC delivery system to assure access to the wider population. Primary health care is about providing 'essential health care' which is universally accessible to individuals and families in the community and provided as close as possible to where people live and work. It refers to care which is based on the needs of the population. It is also decentralized and requires the active participation of the community and family.

This strategy is consistent with the FMOH's overall health policy and delivery strategies, it is also consistent with WHO's "Optimal Mix of Services" (Figure 1) regarding the development and delivery of mental health services.

The strategy calls for a decentralized and fully integrated approach in which mental health treatment is available at local health posts, health centers, and general hospitals, and, as a last resort, referral to a tertiary mental health facility. In general, all those involved in the delivery of health care will be expected to be able to deliver quality mental health care.

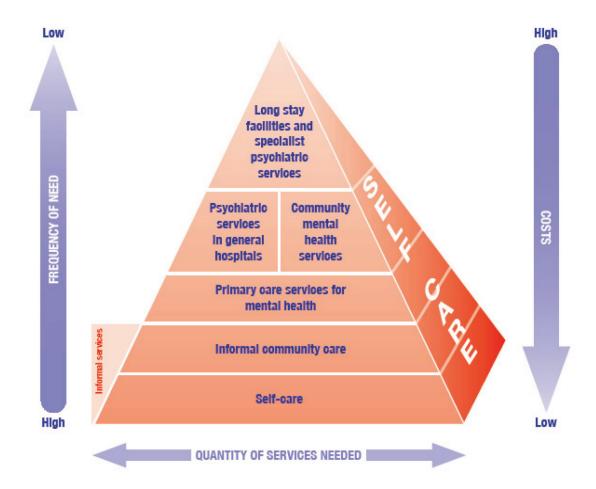


Figure 1: WHO's Optimal Mix of Mental Health Services [65]

3.2 Mission

To ensure the development and implementation of a mental health system that addresses the mental wellbeing of all Ethiopians through services that are affordable, accessible, available and of good quality. This strategy articulates the actions to be taken to promote, prevent, educate, diagnose, treat, rehabilitate and support people with mental illness. It mandates that professional health workers with adequate and appropriate levels of training will provide effective mental health services, and underscores the importance of collaboration with diverse sectors and ministries.

3.3 Vision

Mental health services in Ethiopia will be comprehensive, decentralized and integrated at the primary health care level.

3.4 Values and Principles

The following values and principles form the pillars of this strategy: patient-centered care, community oriented, family and patient participation, quality services built on evidence-based care, decentralization, deinstitutionalization, full integration of mental health care into the primary and general health care system, accessibility and equity, efficiency, continuity and sustainability, human rights, recovery and rehabilitation, and inter-sectoral collaboration. Each will now be considered in more detail.

3.4.1 Patient-Centered Care

1. Services will work to be responsive to the needs and choices of individuals with mental illness and their caregivers.

3.4.2 Community, Family and Patient Participation

- 1. Individuals with mental illness and their families will be engaged and consulted when designing programs that address their needs.
- 2. There will be education for families and individuals with mental illness about the nature, care and treatment options for mental illnesses.
- 3. Traditional healers, faith-based institutions and community leaders will be sensitized and involved in prevention, detection, rehabilitation and social inclusion of persons with mental illness, and will collaborate with the formal mental health system.

3.4.3 Quality Services Built on Evidence-Based Care

- 1. Services will be provided by appropriately trained persons and consistent with established protocols.
- 2. Scientific evidence will inform decisions for services and interventions.
- 3. "Best" practices will be utilized when scientific evidence is lacking.
- 4. Where evidence is lacking, this will be a priority area for in-country research.
- 5. Standards for delivery of care will be established and co-ordinated at the national level and monitored at all levels of care.

3.4.4 Deinstitutionalization, decentralization and integration

- 1. The development of large psychiatric hospitals will be discouraged. They are expensive to manage and encourage institutionalization, which leads to prolonged disability and dependency.
- 2. The mental health program will decentralize its management and activities.
- 3. Mental health will be fully integrated into the primary and general health system
- 4. All health care professionals will receive training to provide mental health care appropriate to their role within the health care system

- 5. Care will be provided as close to home as possible, in the least restrictive setting possible.
- 6. Community level treatment will be integral to the mental health system.
- 7. Community level treatment will be utilized and exhausted before inpatient care is sought at primary, general or specialized hospitals or tertiary facilities.

3.4.5 Accessibility and Equity

- 1. Mental health services will be either free or affordable and accessible to all.
- 2. There will be parity of mental and general health services.
- 3. Efforts to reduce the discrimination of and stigma towards people with mental illnesses and substance abuse disorders will be pursued, and will be targeted to the general population and specific groups, such as health care workers, teachers, professionals, and patients and families.
- 4. Community awareness programs on mental health will be increased to reduce stigma, using media outlets, such as the radio and other means

3.4.6 Efficiency, Continuity and Sustainability

- 1. All aspects of the mental health program will be based on approaches that are culturally and contextually relevant, have shown promise to be successful in similar environments and are cost-effective.
- 2. Services will be culturally and linguistically appropriate and will reflect the values of the community.
- Training all healthcare workers to recognize mental health problems and deliver mental health care will help to overcome the problem of high turnover of overburdened mental health professionals.
- 4. Case management principles will ensure continuity of care for the most vulnerable patients.

3.4.7 Human Rights and the Mentally III

- 1. The human rights of people with mental illness will be upheld and protected. This will include the right to essential and appropriate mental health care, and freedom from stigma, discrimination and abuses.
- 2. Persons with mental illness will have the same rights as all citizens. This includes the rights to health care, shelter, education, and employment.
- 3. Treatment will be consistent with international conventions on human rights.

3.4.8 Recovery and Rehabilitation

1. Programs that address skill development, and that lead to improved functioning and employment opportunities for individuals with mental illnesses will be established with a focus on improving the quality of life.

3.4.9 Inter-sectoral Collaboration

1. Inter-sectoral collaboration among, for example schools, prisons, housing, and development activities are necessary to deliver effective mental health care.

3.5 Strategic Objectives

3.5.1 General Objective

To provide quality mental health services to the people of Ethiopia that are accessible, free or affordable, equitable, efficient and effective, through the integration of mental health into primary health care, while focusing on priority disorders and vulnerable groups.

3.5.2 Specific Objectives

- 1. To ensure that people with mental illness have access to treatment in their communities and as close to their home as possible.
- 2. To enable all health workers to identify, monitor and manage priority mental illnesses and substance abuse disorders.
- 3. To provide special services to vulnerable groups with specific needs.
- 4. To allow those with both physical and mental health-related needs to be treated in a seamless and comprehensive manner.
- 5. To increase the proportion of persons with severe mental illness who remain in care by using case-management principles.
- 6. To provide rehabilitative services to prevent and/or minimize secondary or tertiary handicaps.
- 7. To promote collaboration with CBOs, FBOs and NGOs to maximize social functioning and reintegration into society.
- 8. To help to reduce the stigma and discrimination associated with mental disorders and substance misuse problems.

3.6 Areas of Action and Priorities

To facilitate the effective implementation of this strategy, the FMOH will ensure the following actions are taken:

- 1. **Financing:** allocate specific funding for the implementation of this strategy.
- 2. **Co-ordination and leadership:** FMOH to coordinate a National Institue of Mental Health which in turn will establish Centres of Excellence.
- 3. **Specialist mental health services:** scale-up specialized mental health services to support the sustainable integration of mental health into PHC.
- 4. **Task-sharing and integration into PHC:** scale-up training and task-sharing of mental health care to general health workers
- 5. **Medications:** revise and update the essential list of psychotropic medications, and ensure robust systems are in place to facilitate procurement and distribution of essential medications.
- 6. **Surveillance, monitoring and evaluation:** define mental health indicators, develop mental health information systems, and use the results for monitoring and evaluation in order to improve quality of mental health care and inform future programming decisions.
- 7. **Inter-sectoral collaboration:** set up inter-sectoral collaborations to address the complex needs of persons with mental disorder.
- 8. **Community partnership:** partner with community-based organizations (CBOs), especially with faith-based institutions and non-governmental organizations (NGOs) to reach out to individuals with mental disorder and / or substance abuse problems.

- 9. **Legislation and human rights:** develop mental health legislation to protect the rights of persons with mental disorders and their families.
- 10. **Advocacy, awareness-raising and anti-stigma:** launch support campaigns via the printed, audio, and video media to educate the population about the causes and treatments of mental diseases.
- 11. **Research:** foster research with an aim to improve the delivery of effective mental health services to Ethiopians.

3.7 Co-ordination of the Mental Health System within the FMOH

As indicated in Pillar IV of the WHO's Optimal Mix of Services (see page 17), the FMOH will support the development and establishment of community-based services in collaboration with stakeholders involved in mental health services. This type of service will complement the other existing services in providing support to those in need. The referral will be available at the community level up to all other levels of care. In addition, FMOH will support the development of regional tertiary facilities with in-patient beds, catering to those individuals with special needs which cannot be adequately met by lower levels of care. FMOH also recognizes the need to build up transport infra-structure to enable district mental health professionals to conduct mobile mental health clinics in the community.

FMOH has developed a Basic Package of Health Services (BPHS) thereby ensuring that a standard set of prevention, treatment and rehabilitative services are provided in a consistent and coordinated manner throughout the health service delivery system. This strategy is integrated into the BPHS, both the rural and urban Health Extension Workers (HEW) packages, thereby ensuring a comprehensive and holistic approach to health care delivery in Ethiopia. The BPHS will be expanded to be consistent with the newly adopted staff for this mental health program.

3.7.1 Intra-sectoral Collaboration

Health and international development partners play a pivotal role in provision of technical and financial support for health in general and mental health in particular. Intra-sectoral relations to be developed include:

- Maternal and child health: integration of a mental health training component in health promotion, prevention, clinical and psychosocial interventions.
- Services for persons living with HIV/AIDS: integration of mental health care into all HIV/AIDS services.
- Health education: mental health promotion and prevention, including school interventions and school counselors.
- Adolescent health: adolescent counseling centers, mental health promotion and prevention components in adolescent health interventions.

3.7.2 Establishing a National Institute of Mental Health

FMOH will develop a National Institute of Mental Health (NIMH) with the mandate to guide, direct and supervise the overall development, implementation and monitoring of the strategy.

In partnership with academic and higher learning institutions, NIMH will develop Centers of Excellence for Mental Health to serve as the major repository of cultural- and evidence-based knowledge and practices that can assist in the implementation and further development of this strategy. NIMH's focus will be to work in partnership with various national, local, and international organizations to implement this strategy.

3.8 Mental Health Service Structure and Associated Responsibilities

3.8.1 Model of Integrated Mental Health Care

The foundation of Ethiopia's health policy is a primary health care system that promotes good physical and mental health and that provides preventive and curative care. Mental health treatment will therefore be integrated into the primary and general health care system. It will extend from the local level health posts and health centers to the regional hospitals and tertiary facilities.

The following multi-tiered approach is consistent with FMOH's Health Sector Development Plan IV (2010 to 2015). It recognizes the potential for impact by appreciating individual action oriented decisions and the role of the informal sector.

3.8.1.1 **Self-care**

Services will be geared toward the provision of education to individuals about mental illness to empower them to do all they can to improve and maintain their own mental health.

- Community-based (HEWs) will play an important role in empowering
 communities in relation to prevention and promotion activities. The aims will be
 to (1) increase awareness about mental illness in order to reduce the time taken
 until a person seeks help, and (2) to seek to assist individuals in making informed
 decisions in relation to their mental health e.g. risks associated with excess
 alcohol intake and benefits of seeking help early on. This will help to minimize
 contact with situations likely to negatively impact their mental health and wellbeing.
- Services will be geared toward helping individuals identify and manage the difficult situations that they face in their lives and to make appropriate decisions about when to seek further help.
- Emphasis will be given to encouraging establishment of support groups for patients and care-givers, for example, peer support programs for persons with mental illnesses, Alcoholics Anonymous for persons with alcohol problems.

3.8.1.2 Informal Community Mental Health Care

The most important resource of health care in Ethiopia is the community, therefore this strategy is consistent with FMOH's policy of decentralized health services in close proximity to citizens. A community-based model of care is also considered to be the most appropriate, efficient, and least restrictive and humane way to serve individuals with mental health problems. Community care has proven to be more effective than institutional treatment. It is in line with recommendations from the WHO and international health experts, and evidence-based research from Low and Middle Income Countries (LMIC) that has shown this model of service delivery to improve health and social outcomes and decrease costs.

- Traditional healers and faith-based organizations, who account for a significant extent of mental health care, will be trained to improve their skills and services.
- Teachers will be educated so they can provide social skills training and basic counseling in their schools. They will also play a crucial role in recognizing developmental and mental health problems, as well as indicators of potential abuse, in children and helping the families to seek appropriate care.
- Local and international NGOs will be encouraged to provide mental health and
 psychosocial interventions in an improved, organized and standardized manner.
 In line with WHO recommendations, such organizations will be expected to
 target persons with severe and persistent mental illnesses for development of
 activities in recognition of their vulnerability and marginalization [4].

3.8.1.3 Integration of Mental Health into Primary Health Care

Primary health care will be the most important avenue thorough which mental health services will be accessed for the majority of people. This will represent the first formal portal of entry for mental health care.

Through task sharing elements of the care of persons with mental health problems to PHC workers (health development army, health extension workers, nurses, health officers and physicians), access to treatment can be increased substantially without compromising quality of care. Prevention, early identification, provision of initial treatment and management based on appropriate levels of expertise, and referrals to other levels of care, will form the basis of mental health care in PHC.

The emphasis of this strategy is on full integration of mental health care into PHC. This means that all health workers will be expected to deliver mental health care in line with their level of training. Even when specialist mental health workers, e.g. psychiatric nurses, are present in PHC, the expectation remains that the role of specialists will be primarily to support the delivery of mental health care through general health workers, for example, by supervision, review of complex cases and conducting in-service training. In this way, mental health care in PHC will not be dependent on individual practitioners and vulnerable to staff turnover. Clinical activities and specific roles of staff and facilities within the PHCU are as follows:

Rural Health Extension Workers (HEWs), will be expected to be engaged in:

- Promotion and prevention activities within their communities to increase awareness of mental health and disorder, reduce stigma and increase uptake of mental health care.
- Work with traditional healers and religious leaders to develop a collaborative model of care for persons with mental illness.
- Providing support to caregivers with psychoeducation and prompt referral when needed.
- Outreach services to persons with severe mental illness who drop out of care.
- Provide post-discharge support for persons recently admitted to in-patient mental health services.

<u>Urban Health Extension Workers</u> will have a similar role to the rural HEWs, but in addition, after appropriate training, they will:

 Administer depot medication to indicated persons who would otherwise drop out of care, according to nationally developed protocols

At the <u>health center:</u>

- General Practitioners, Health Officers and Nursing Staff will identify, screen, diagnose, treat and monitor persons with mental illness, including prescription of psychotropic medications, provision of brief psycho-education and psychosocial interventions and referral when necessary, in accordance with the WHO's mhGAP guidelines for PHC workers adapted for Ethiopia.
- <u>Case managers</u> who are already working on HIV/AIDS adherence-related issues
 will also be provided with training to support those dually diagnosed with HIV/
 AIDS and mental illness. Additional case-managers, also stationed in health
 centers, will be trained to care for persons with severe mental illnesses who are
 at high risk of dropping out of care.

In Primary Hospitals:

- Emergency, short-stay, in-patient stabilization will be provided within dedicated wards, staffed by specialist mental health workers. Duration of hospital stay and criteria for referral to specialized services will be according to a nationally developed protocol.
- General medical staff will be trained to recognize and respond to mental health issues in patients presenting with medical problems.

<u>District (Woreda) Health Office:</u> A designated mental health focal person will be located in the district health bureau and will play a crucial role in coordinating and supporting delivery of mental health care in health centers and through the health extension service. Their role will be to advocate for mental health services within local service planning, ensure regular supply of psychotropic medication, visit each health centre regularly to provide reviews of complex cases, support and provide ongoing training, conduct or support mobile clinics in the community for administering depot medication and reviewing patients who are unable or unwilling to attend the health centre, and oversee the mental health activities of the health extension workers and case-managers.

3.8.2 Specialized Mental Health Facilities in General Hospitals

Specialist mental health units stationed in general hospitals will provide crisis intervention, short-stay, in-patient psychiatric treatment, and out-patient reviews of complex cases. They will also support delivery of care in PHC through provision of supervision, in-service training and advocacy (particularly within the district health bureaus). The inpatient hospitals will liaise with tertiary psychiatric in-patient facilities.

3.8.3 Tertiary Mental Health Services in Regional Hospitals

Psychiatrist-led multidisciplinary units within regional hospitals will perform the following activities:

Provide necessary backup for general hospital short-stay units and outpatient clinic services provided by specialist mental health workers. In these
regional referral centers, a multi-disciplinary team, for example, comprised of
a psychiatrist, psychiatric nurse, psychologist, social worker and occupational
therapist, will provide care for patients requiring more than short-stay in-patient
stabilization, according to the admission and discharge protocol.

- Train specialist and general health workers in mental health care, near to where they work.
- Work with the regional health bureaus to plan and monitor service delivery.
- Develop mental health sub-specialties, for example, child and adolescent mental health, old age psychiatry, forensic psychiatry, neuropsychiatry, to minimize the number of people needing referral to tertiary facilities in Addis Ababa.

3.9 Mental Health Financing

There have been encouraging developments regarding investments towards expansion of the delivery of mental health services throughout Ethiopia. For example, the government of Ethiopia is currently building a referral general/psychiatric hospital with 280 beds capacity which will be operational within a year. In the last few years, there has also been a significant increase (from 300,000 to 10,000,000 birr) in the amount of psychotropic medications procured and dispensed annually at the main psychiatric hospital. Furthermore, various regions have started to establish emergency psychiatric beds obligating ongoing expenditures.

There will be various schemes to cover the cost of delivery of mental health services. The new MOH proposed regulation to be presented, approved and issued by the Council of Ministers in 2012 for the implementation of social health insurance covers the delivery of mental health services. The intent and scheme of funding of the proposed regulation is meant to provide affordable health services to the wider population. Furthermore, in order to ensure the affordability and accessibility of psychotropic medications, similar to antiretroviaral medications, a number of regions in Ethiopia have made psychotropic medications either free or affordable through creative subsidies. Therefore, while a significant portion of funding for the delivery of mental health services will be provided through governmental subsidies, social insurance coverage, self-pay and additional resources will be mobilized to cover any financial gaps.

As a next step, a road map will be developed which will describe specific targets for services. Costs for implementation will be calculated using the World Health Organization's mhGAP costing tool on the basis of specific targets. The mhGAP costing tool is a financial planning tool for scaling-up delivery of the mhGAP evidence-based treatment packages for priority mental, neurological and substance use (MNS) disorders. The mhGAP costing tool has been designed to enhance traditional budgeting mechanisms. These will be used to generate medium-term forecasts (over the period 2011-2025) of the necessary resources to tackle the growing burden of MNS disorders. The approach is a financial (as opposed to an economic or opportunity cost) approach; that is, the interest is in identifying the actual budgetary resources needed to develop and implement policies or strategies that have been shown to be technically efficient. To reflect incremental costing, expenditure associated with current intervention coverage are estimated and assumed to continue to be available, meaning that only the resources and expenditures required over and above current spending levels will be included. The projected expenditures only include the financial resources for scaling up of services. Additional capital expenditures will be needed in relation to the development of a National Institute of Mental Health, Centers of Excellence and tertiary level mental health facilities.

Three scenarios namely basic, good and best, with increasing level of coverage of disorders and intervention types are presented.

Prevalence estimates:

- Psychosis: 0.3%
- Bipolar disorder: 0.5%
- Depressive disorder: 2%
- Epilepsy: 1.4%
- Developmental disorders: 0.6%
- Behavioural disorders: 1.9%
- Dementia: 0.1%
- Alcohol use disorder: 5%
- Suicide attempt/Deliberate Self Harm: 0.1%

Psychopathological Disorders and Recommended Treatments

All the treatments to be provided are assumed to be basic. The estimated distribution of specific medications for each disorder is shown in percentages after the specific medication.

Depression:

- · Basic Psychosocial care and treatment
- Very limited group therapy only in scenario 3
- Antidepressants
 - Amitriptyline 75%
 - Fluoxetine 25%

Psychosis:

- · Basic Psychosocial care and treatment
- Antipsycotics
- Chlorpromazine 60%
- Haloperidol 25%
- Fluphenazine decanoate 5%
- Anticholinergics 10%

Bipolar Disorder:

- · Basic Psychosocial care and treatment
- Medications
- Chlorpromazine 60%
- Haloperidol 15%
- Amitriptyline 10%
- Lithium 15%

Epilepsy:

- · Basic Psychosocial care and treatment
- Medication
- Phenobarbital 80%
- Phenytoin 10%
- Carbamazepine 5%
- Sodium valproate 5%

Developmental Disorder:

• Basic Psychosocial care and treatment

Behavioral Disorders:

• Basic Psychosocial care and treatment

Dementia:

- · Assessment, diagnosis, advice & follow- up
- Medications (antidepressants, antipsychotics)

Alcohol:

- Identification and assessment (new cases)
- Brief intervention & follow up
- · Management of alcohol withdrawal

Suicide:

• Basic Psychosocial care and treatment

The calculation was made based on a 15 years scale up plan. Below, the first four years of a 15 years scale up plan and associated costs are presented.

The costing is made in US dollars using three scenarios, namely basic scenario, good scenario and best scenario.

Basic Scenario

- Depression—scale up to 30%
- Care for Postnatal depression—scale up to 20%
- Psychosis— scale up to 75%
- Bipolar disorder— scale up to 50%
- Epilepsy— scale up to 75%

Cost Summary

Year	Total cost	Per person
2012/13	5,528,737	0.07
2013/14	5,846,617	0.07
2014/15	6,512,901	0.07
2014/16	7,351,989	0.08
Total	25,240,244	

Good Scenario:

- Basic Scenario +
- Developmental disorders scale up to 10%
- Behavioral disorders scale up to 10%
- Alcohol use disorder/dependence scale up to 25%
- Self-harm/suicide —30%

Cost Summary

Year	Total cost	Per person
2012/13	6,097,365.00	0.07
2013/14	6,523,993.00	0.08
2014/15	7,318,200.00	0.08
2015/16	8,306,713.00	0.09
Total	28,246,272.00	

Best Scenario:

- Depression—add group therapy (40% scale up)
- Psychosis scale up to 80%
- Bipolar disorder scale up to 75%
- Epilepsy scale up to 80%
- PND scale up to 20%
- Dementia scale up to 30%
- Alcohol scale up to 35%
- Alcohol add relapse prevention medication—20%
- DSH 40%
- Developmental disorder 30%
- Behavioral disorder unchanged

Cost Summary

Year	Total cost	Per person
2012/13	6,728,809.00	0.08
2013/14	7,389,362.00	0.08
2014/15	8,486,902.00	0.09
2015/16	9,866,846.50	0.11
Total	32,471,919.00	

3.10 Human Rights and the Mentally III

The principle underlying this strategy is that all persons with mental illness will enjoy the full range of human rights on an equal basis with others. No one will be discriminated on the ground of mental illness and disability.

All rights enshrined in the Convention on the Rights of Persons with Disabilities (CRPD), that Ethiopia has signed and ratified, will apply to persons with mental illness, including:

- the right to live in the community
- the right to equal recognition before the law
- the right to access to justice
- the right to adequate standard of living and social protection
- the right to vote and stand for elections
- the right to marry and found a family
- the right to property
- · the right to education
- · the right to work
- · the right to health
- right to confidentiality
- right to freedom from torture or cruel, inhuman or degrading treatment or punishment

All the rights listed above include relevant areas that impact enormously on the life of persons with mental illness and that are not necessarily directly related to medical care and treatment.

In order to assure the protection of human rights of patients, FMOH will develop:

- a. Policies and procedures to protect and to promote patients rights related to involuntary admission or treatment.
- Policies and procedures in relation to the practices of seclusion and restraint to ensure that the right to freedom from torture, cruel, inhuman or degrading treatment or punishment is upheld.
- c. Provision for requiring consent for admission and/or treatment.
- d. Specific protections for use of electro-convulsive therapy, including standards for the method of administration.
- e. Specific legislation for the protection of persons with mental disorders will be developed. This legislation will address access to care, the rights of family and caregivers, and the protection of the rights of people with mental disorders, including the right to be treated equally, without discrimination, with respect and dignity, and in a safe environment.
- f. Stronger links with professional organizations to strengthen their regulatory roles so that clinicians who are not fit to practice are identified and given training, monitored or barred from practicing.
- g. Quality assurance measures so that persons with mental illness get the best possible care.
- h. Principles for patients' rights and responsibilities.

3.11 Establishment of Centers of Excellence for Mental Health

FMOH will develop a National Institute of Mental Health (NIMH) with the mandate to guide, direct and supervise the overall development, implementation and monitoring of the strategy. NIMH will not be involved in the direct delivery of services but rather will act as a facilitating body for capacitating direct service delivery organizations throughout Ethiopia. To achieve this goal, NIMH will operate in partnership with a range of national, local, and international organizations and key stakeholders. In particular, NIMH will establish and coordinate centers of excellence in mental health.

Initial activities of the NIMH will be in the following areas:

Knowledge and Information Resource

- 1. Assist in the development and implementation of a national mental health monitoring system.
- 2. Provide national state-of-the-art knowledge on mental health care.
- 3. Establish a website and electronic reference library that is readily available to all healthcare practitioners and consumers.

Human Resources

- 1. Develop and implement a strategy to expand the mental health workforce in order to support integration of mental health in PHC
- 2. Develop and implement a strategy for the training of the new and expanded mental health workforce.
- 3. Develop and implement a strategy for training PHC and general health care workers in mental health care

Development of Centers of Excellence in Mental Health

The Centers of Excellence will carry out the following activities:

- 1. Offer training in clinical care and research; local and international faculty will transfer skills for state-of-the-art clinical care, education, and research to key Ethiopian faculty across disciplines.
- 2. Provide trainings in specialized areas to develop experts so they can provide optimal clinical care, help establish excellent standards of clinical care and become the expert trainers of psychiatric practitioners, nurses and other healthcare workers.
- 3. Collaborate with academic institutions to develop methods for assessment and training initiatives of all levels of health workers. These include physicians, health officers, nurses, midwives, social workers, occupational therapists and health extension workers.)

Research and collaboration

- 1. Collaborate with persons with mental disorders, local NGOs, a policy planning group, and other governmental organization and training institutions to address mental health issues.
- 2. Develop a research unit to (a) promote studies in the priority areas outlined below, (b) work with FMOH Technical Working Group to develop evidence-based guidelines and protocols based on research available and make them living

documents susceptible to new data from research collaboration above, and (c) conduct training on research methods, design of studies, and ethical conduct of research and protection of human subjects.

NIMH will thus serve as the major repository of cultural- and evidence-based knowledge and practices that can assist in the implementation and further development of this strategy.

3.12 Human Resources Development and Training

3.12.1 Mental Health Workers

While the short-term strategy will be to upgrade and utilize the skills of the existing mental health workforce, in light of the dearth of skilled mental health professional manpower to provide services directly, train other health workers in mental health and support mental health care delivery through primary care, an accelerated development of skilled manpower is imperative. The required expansion of mental health workers is detailed in the Health Sector Development Plan (IV) [60] and the report from the mhGAP working group for Ethiopia [45], see Figure 2.

To this end, the FMOH will:

- Create educational and training opportunities for psychiatrists, psychologists, master-level mental health workers, psychiatric nurses, and clinical social workers. These specialized professionals will support delivery of care for the mentally ill from non-specialized health providers.
- 2. Produce mental health procedural guidelines and contribute to development of standardized curricula for each profession, in consultation with academic institutions and, potentially in the future, with professional associations.
- 3. Explicitly define the responsibility and authority of each profession as they relate to mental health care.
- 4. Support the development of standardized training relevant to mental health workers in Ethiopia, which will guarantee consistency with international standards of practice.
- 5. Ensure the development of relevant credentialing and licensing systems that will be competency-based. It will also collaborate with the Ministry of Education and other training institutions in the development of procedures and systems related to the proper accreditation of organizations and institutions involved in mental health related training programs.
- 6. Designate funds explicitly for training the existing and future mental health workforce.
- 7. Work with the various public and private academic institutions to expand their programs by facilitating the access of human and financial resources.
- 8. Develop a process to certify non-physician mental health workers trained by public and private organizations, such as counselors and other mental health specialists.
- 9. Develop a way of galvanizing and recruiting students with a natural interest in the field of mental health by developing scholarship opportunities and financial incentives to complete additional training in mental health.

- 10. Organize and promote self-care education programs about mental health to reduce stigma and misconceptions about mental illness and other co-occurring disorders such as HIV/AIDS, substance abuse, epilepsy and other diseases are clearly understood and demystified.
- 11. Develop mechanisms to address burn-out rates among mental and general health workers.
- 12. Support the newly created National Institute of Mental Health which will facilitate the development of mental health related training curricula, provide selected and specialized trainings and overall buttress and help sustain the mental health workforce.
- 13. Encourage and support the current and upcoming university medical, nursing, psychology, and social work schools to expand their programs to include specialization areas in the field of mental health.

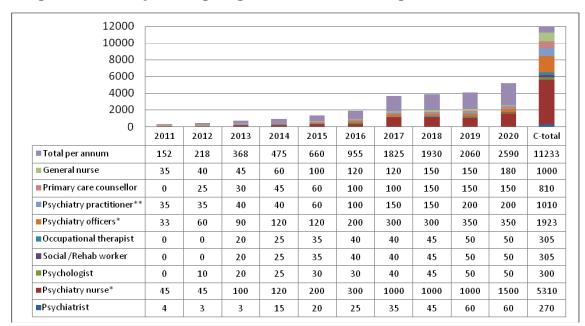


Figure 2: Scaled up Training Program to Increase Coverage for mhGAP

Abbreviations: C-total=cumulative total.

From the Ethiopia mhGAP working group report [45]

^{*}Psychiatry officers are mostly BSc nurses with psychiatry training or psychiatry nurses who upgraded to have a BSc. These cover the tasks of the traditional psychiatry nurse as well as doing other clinical duties, for example, running outpatient clinics.

^{**}Psychiatry practitioners are MSc level practitioners with psychiatry training. Psychiatry practitioners are expected to replace medical officers or psychiatrists where these are not available.

3.12.2 General Health Workers

The need for training at all levels cannot be overemphasized. For general health workers, mental health training needs to be incorporated into pre-service training, in-service training and continuing professional development, and focused on ensuring competency to deliver care as well as theoretical knowledge.

In light of the critical shortage of skilled manpower in the areas of mental health FMOH will facilitate the establishment of educational opportunities and develop evaluation criteria and process of accreditation for these programs. This will include certification and or accreditation of teachers or trainers, or guidelines that demand and ensure they have appropriate degrees (from both local and international institutions).

In order to implement an effective mental health program, a system of training of all cadres of health workers in the diagnosis and management of mental disorders at their level of functioning and expertise is fundamental and vital. For example, currently while the service packages for the Urban Health Extension Workers also includes mental health, the planned upgrade training package for the Rural Health Extension workers will also include a mental health service package.

To this end, FMOH will:

- 1. Ensure that all general health workers are educated about the nature and treatment of mental health related issues, and are competent to deliver mental health care at a level appropriate to their training.
- 2. Organize and promote self-care education programs for health professionals about mental health to ensure stigma and misconceptions about mental illness and other co-occurring disorders such as HIV/AIDS, substance abuse, epilepsy and other diseases are clearly understood and demystified.
- 3. Provide opportunities for strengthening the capacity of health workers.
- 4. Ensure the training and recruitment of a core group of essential mental health experts who will be involved in training and capacity building, and who will serve as resources for referral and tertiary support.
- 5. Develop evidence-based protocols and guidelines for all levels of care to ensure standardization and quality of services throughout the system.

Following are the functions of various health professionals at the different levels in the health services delivery system.

Regional / national specialist mental health services	Function Provide second-line specialist mental health care
Multi-disciplinary team of psychiatrists, psychologists, psychiatric nurses, social workers and occupational therapists Location: Tertiary and referral hospitals	 Specific tasks Expert review of complex or treatment-refractory cases Treatment in accordance with evidence based guidelines Longer-stay in-patient care Rehabilitation facilities Specialist interventions, including individual and group psychological therapies, electro-convulsive therapy Specialist substance use interventions Competencies Diagnosis, assessment and ongoing management of complex or treatment-refractory cases Implement specialized treatment protocols
Local specialist mental health services	Function Support local delivery of mental health care
Psychiatric practitioners and nurses, working with general practitioners, general nurses and health officers Location: General hospitals and primary health centers	 Specific tasks Provide clinical support to PHC workers in a district, through direct contact, referral pathways and consultation Treatment in accordance with evidence-based guidelines Active role in training PHC workers in mental health care Active role in advocacy for mental health care at the district level / supporting the mental health co-ordinators Short-stay in-patient psychiatry service for acute stabilisation and alcohol detoxification Review of complex cases or those not responding to initial care Competencies Diagnosis and assessments Treatment (medication and psychotherapies)
Wereda health bureau	Function: Provide overall co-ordination to delivery of mental health care within the district
Mental health focal person / health bureau staff Location: Wereda Health Bureaus	 Specific tasks Co-ordinate mental health training of primary health care workers within the district, including refresher training Ensure continuous supply of psychotropic medication Oversee the supervision structure to support PHC workers to deliver mental health care Monitoring and evaluation of mental health care delivery

Competencies · Knowledge of National Mental Health Strategy Basic knowledge in mental health regarding issues and prevention of mental illness • Basic knowledge pertaining to organizing psychotropic medication procurement, developing of budgets for mental health services, and other administrative issues. **Health Centre Function** Frontline treatment team within the health system for diagnosing and treating priority mental disorders Health officer / nurses Specific tasks located in health Acute management of violence and aggression centers • Diagnose and treat priority mental disorders in accordance with WHO's mhGAP evidence-based guidelines adapted for Ethiopia · Assess risk of harm to self or others and manage appropriately Case-manage persons with severe mental disorders • Provide physical health care to persons with mental disorders · Link with health extension workers Refer to specialist mental health workers as per protocol Competencies • Diagnostics and assessments Treatment and follow up (medication and psychotherapies) **Health post Function** Interface between mental health in PHC and the community, with particular role in prevention, promotion and continuing care Health extension Specific tasks workers trained at Prevention and promotion activities Level 4 Screening for mental health disorders in the community Location: Health Posts Mental health education for patients, families and communities and the community · Monitor medication adherence Monitor side effects Monitor for early signs of relapse and refer, as needed First aid management of violence and aggression Community awareness-raising and countering stigma • Follow-up of persons with severe mental illness Competencies Identification of basic mental illnesses and symptoms Mental health communications (ICC/BCC) Referral and follow-up

3.13 Certification and Licensing

All mental health programs will be officially evaluated and certified by the FMOH/FMHACA in order to operate or practice mental health care to ensure a minimum quality standard across settings.

Professional, paraprofessional, and volunteer standards will be established for all programs currently functioning and for all new programs prior to their start-up.

The licensing and certificate team which will be providing advice and consultation to FMOH/FMHACA will include key informants and the staff from the National Institute of Mental Health.

Licensing criteria will need to be established by the respective professional boards, in consultation with the regulatory body i.e. FMHACA.

3.14 Information, Education, Communication and Advocacy

Since advocacy is the best approach to promote good mental health, FMOH will develop and provide information and education to the general population about various aspects of mental health. All levels of advocacy will be encouraged and supported utilizing all human resources, organizations and groupings. To this end, FMOH will:

- 1. Target the young, adolescents, and other vulnerable populations, including schools, churches, and youth organizations.
- 2. Seek to promote the rights and needs of those with mental illnesses and to reduce the stigma associated with their condition.
- 3. In coordination with all stakeholders utilize all forms of media to reduce stigma and increase education about disorders and treatments among populations with high rates of illiteracy.

3.15 Essential Psychotropic Medications

In the last five years there has been a significant increase in the number of psychotropic medicines on the FMOH's Essential List of Drugs. Although there may be a shortage in some types of drugs available in pharmacies, the demands and supplies of these drugs has substantially increased over the years. In 1998 a highly successful "Special Pharmacy" was established at Amanuel Specialized Mental Hospital, to ensure the availability, accessibility and affordability of psychotropic medications.

In order to ensure the supply of essential drugs, FMOH will:

- 1. Support the revision of the essential drugs list to include psychotropic medications required for utilization by the various service delivery programs.
- 2. Determine the drugs which may be prescribed at the various levels of care including the cadre of workers who may prescribe the various classes of drugs.
- 3. Develop standards for the prescription and administration of psychotropic drugs.
- 4. Be integrated and be part of work a plan within the FMOH as outlined in the National Drug Policy thereby ensuring not only the sustainability of drugs but also the accessibility and affordability of drugs when and where required.
- 5. Quantification of and use of psychotropic medications.

3.16 Mental Health Research

Mental health research has been an important driver for service development in Ethiopia, and has a critical future role to play in guiding the provision of evidence-based, culturally-appropriate and cost-effective mental health care.

3.16.1 Existing Research Evidence

A series of rigorous, large-scale, population-based studies has established that mental disorders are as common in Ethiopia as in Western countries. In Ethiopia, there is highquality data on mental disorders in many different population groups: rural [9, 67], urban [10, 67, 68], children [69-71] (including child labourers [72-74]), women of reproductive age [18, 25], pastoralists (Borana) [75], Rift Valley islanders [76], refugees [77-79], migrants to Arab countries [80], students [81], persons living with HIV/AIDS [27, 28] and commercial sex workers [31]. Studies have looked at severe mental illness [43, 82], depression [11, 83], suicide [47, 84-86], alcohol and drug use [48, 87, 88] and trauma [89-93]. Some risk factors for mental disorder in Ethiopia have been determined, including domestic violence [18], poverty [94] and non-adherence to traditional perinatal practices [24]. The impact of mental disorder in Ethiopia has been shown to be high in terms of disability [35], poorer maternal [25] and child health [21, 22], undernutrition [95], premature mortality [36] and economic disadvantage [38]. One of the most important predictors of good outcome in severe mental illness in Ethiopia is adherence to antipsychotic medication [43]; however, the service structure required to maintain people in care and on medication has not been investigated. In general, there has been relatively little research into mental health service delivery in Ethiopia to date [55, 58, 96, 97].

3.16.2 Priority Research Areas for the Future

There is an urgent need for action-orientated research, in particular (1) clinical trials to evaluate interventions for mental disorders, and (2) health service research to evaluate models of care appropriate to the Ethiopian setting. Underpinning these research endeavours is a need for further research into potentially modifiable risk factors for mental disorders, including social, cultural and biological factors. Research evidence from the West regarding interventions for mental disorders, especially psychosocial interventions, cannot be assumed to be transferrable to Ethiopia [98] and there is a large gap in research into interventions and health service research in LMICs [99]. Other priority areas include mental health in vulnerable populations, for example, prisoners, persons with epilepsy, and persons with HIV/AIDS. Because of its international reputation in mental health research, in-country expertise, well-characterised epidemiology of mental disorders and a proposed new PhD programme in mental health epidemiology by the Addis Abeba University's Department of Psychiatry, Ethiopia is well-placed to become a regional leader in the field of global mental health, generating evidence of relevance to Ethiopia and beyond.

There is also a robust international collaboration in mental health research in Ethiopia that is led by Ethiopians. These include the Stanley Medical Research Institute (USA), Umeå University (Sweden), King's College London (UK), University of Toronto (Canada) and the Falk Institute (Israel). Future collaborations include a DFID-funded "Program for Improving Mental Health Care" (PRIME) which will link Addis Ababa University together with University of Cape Town, Makerere University (Uganda), Sangath (India), King's College London (Centre for Global Mental Health) and the World Health Organization to provide high-quality evidence to

support implementation of the strategy. Further international collaborations are encouraged to support the research priorities outlined above.

3.17 Special Vulnerable Populations

Every society is responsible for caring for its most vulnerable populations. Vulnerable groups are at high risk for physical and mental morbidity and mortality, and require additional and more comprehensive services. This strategy has identified persons with severe mental illness, people with substance abuse disorders, children and adolescents, persons living with HIV / AIDS, child-bearing women, prisoners, and victims of violence and abuse, persons with epilepsy and the elderly as vulnerable groups who require special consideration when developing mental health services. To this end, particular attention must be given in the design and implementation of mental health services and in the development of strategic partnerships with special groups who have specific needs.

3.17.1 Services to the Severely Mentally III

Severe mental illness (SMI) refers to mental illnesses that are persistent and debilitating, and require long term interventions.

Treatment for persons with SMI has four goals: (1) reduce or eliminate symptoms, (2) maximize quality of life and adaptive functioning, (3) promote and maintain recovery from the debilitating effects of illness to the maximum extent possible, and (4) include education for persons with mental illnesses and their families. Appropriate treatment will be provided for the care of persons with severe mental illness (SMI) based on best practices.

- Care close to home: Consistent with a decentralized approach to mental health care and the Basic Package of Health Services provided by Health Extension Wrokers, the treatment of SMI will take place, when possible, at health clinics and health centers, supported by home outreach by health extension workers. This will allow care to be delivered as close to a patient's home and community as possible. It is also in harmony with evidence-based research that demonstrates the improved cost-effectiveness and positive health outcomes of managing chronic mental illnesses in a community setting. Referral between primary and secondary services will be bi-directional: as soon as a person requiring care at a higher level is stabilized, they will be referred back to PHC for ongoing care and follow-up.
- Appropriate use of hospital admissions: Referral to the General Hospital or Regional Mental Health Unit should be made when community settings cannot guarantee safety of the individual and when more intensive treatment and support are required. Referral should also be made during acute emergencies, such as uncontrollable psychosis and agitation, or suicidal or homicidal ideation, which warrant urgent inpatient hospitalization. The goals of treatment during an acute emergency may be to prevent harm, control disturbed behavior, reduce the severity of psychosis and associated symptoms (e.g. agitation, aggression, negative symptoms, and affective symptoms), return to the best level of functioning at rapid speed, develop an alliance with the patient and family, formulate short- and long-term treatment plans, and connect the patient with appropriate aftercare in the community. Efforts to engage and collaborate with family members and other natural caregivers are often most successful during the acute crisis.

- Case management: Another defining feature of care for persons with SMI will
 be use of the case management approach in order to provide continuity of
 care. Following the success of case management in the field of HIV/AIDS,
 persons with SMI who are at risk of dropping out of care will be provided with
 case management services. The case-manager will co-ordinate care (including
 from non-health sectors), ensure regular follow-up takes place and link up with
 community health extension workers to provide outreach where needed.
- Targeting as a priority for development activities: in keeping with WHO
 recommendations [4], persons with SMI should be considered as a vulnerable
 group and, as such, a priority to involve in development activities. This requires
 cross-sectoral collaboration, linking with NGOs locally active in development,
 and has the potential to alleviate poverty, promote rehabilitation and counter
 social exclusion and marginalization.
- Outreach to homeless severely mentally ill: a multi-sector approach will be required to meet the needs of the homeless mentally ill to enable them to receive acute treatment, shelter and rehabilitation. To this end, FMOH will coordinate with the Ministry of Labor and Social Affairs to develop and coordinate an action plan.

3.17.2 People with Substance Abuse Disorders

Substance abuse is a highly prevalent problem in Ethiopia, particularly among the young population [48]. Alcohol, khat and cannabis are the main substances used within Ethiopia. Substance abuse and mental illnesses are frequently co-occurring disorders and services and programs should acknowledge the strong link that exists between them. Substance abuse has also been linked to increase risky sexual behaviour in out-of-school youth [30] and commercial sex workers [31], thus making substance abuse an important focus for prevention of HIV transmission. Young people should be a main target of services, not only with the aim of reducing their substance abuse, but also including them in social and income generating activities.

The huge profit derived from growing potential substances of abuse is a great incentive in its production. In Ethiopia, growing khat results in profits exceeding those that can be achieved from growing other crops. The demand for cannabis is also increasing. Strategies to control production and consumption of substances requires collaboration between the health sector and other governmental sectors.

Strategic partnerships will also be developed between FMOH and Ministries of Education, Sports and Youth, Labor and Social Affairs in order to focus on high risk populations for substance abuse. Depending on the topic area and level of interest international organizations such as WHO, UNODC, UNAIDS and international partners such as USAID, CDC, etc. will also be engaged to enrich various programs.

3.17.3 Specialized Services to Children and Adolescents

The goal of programs for children mental is to develop a quality mental health and substance abuse prevention programs.

Evidence from Ethiopia indicates that mental illness in children is common, ranging between 17 and 23% of children in the community [49, 50, 100], although lower estimates were found

in a rural setting using a diagnostic approach [69]. Specific mental and developmental problems, as well as epilepsy, occur at certain stages of child and adolescent development, often as a result of complications during pregnancy and childbirth. Screening programs and interventions can therefore be targeted at the stage of fetal development, delivery and childbirth. Early intervention (in childhood) can prevent or reduce long-term impairment as there is a high degree of continuity between child and adolescent disorders and those in adulthood. For example, early treatment and stabilization of epilepsy will allow a child, at limited cost, to live a normal life and to avoid unjustified discrimination and injuries (as a result of seizures).

A very positive message is that to a large extent the identification and management of most of these mental disorders can be done at primary health care level, by front-line health care providers, incorporated into primary health care routines.

The FMOH will ensure alignment of this strategy with other national policies that have an impact on the overall wellness of children and their families. Local and international NGOs associated with children must also make their programs and activities consistent with this strategy. In particular, it focuses on children's mental health promotion and de-stigmatization, school-based mental health, guidelines for the treatment of children in community- and hospital based settings, and mental health services for specialized populations.

Since a growing number of children spend a greater part of their days in school, with the support of the Ministry of Education, components of mental health will be incorporated into existing school-based health related activities.

3.17.4 People Living with HIV/AIDS

HIV/AIDS has significantly increased the need for an urgent scale-up of comprehensive mental health services that work in collaboration with national and local AIDS programs. Particular attention must be given to the needs of care givers, people living with HIV/AIDS and children affected by HIV/AIDS - groups identified as often experiencing the most significant mental health challenges as a result of AIDS.

People affected by HIV/AIDS are more prone to developing mental disorders such as depression and anxiety which, in turn, impair their immune function, reduce their quality of life and adherence to treatment and contribute significantly to their premature deaths. In Ethiopia, People Living with HIV/AIDS (PLWHA) have high levels of depression (38% of people receiving anti-retroviral therapy), especially those who are also co-infected with TB (64%) [27, 28]. HIV and some opportunistic infections affect the brain and the nervous system, which can lead to mental and behavioural disturbance, for example in HIV-associated dementia. In addition, antiretroviral therapies can have mental, behavioural or neurological side-effects. HIV-positive individuals cope with unique stresses stemming from their diagnosis, including discrimination and consequences both in their private and professional life as well as the difficulty of sharing their diagnosis with others. Those who have HIV and mental illness are doubly stigmatized.

Caregivers also experience high levels of stress and their role can take a substantial mental and physical toll on their health as they care for the physical, emotional and economic needs of their family members/friends.

There is a need to better understand how mental health problems increase the vulnerability of individuals to HIV infection and the need to train health care workers in order to reduce the mental health and HIV related stigma.

3.17.5 Reproductive Mental Health

Mental health problems during pregnancy and after childbirth are common worldwide, and Ethiopia is no exception [24] More than one in ten pregnant women, and one in 20 postnatal women in Ethiopia suffer from undetected depression. Around half of those affected by depression have thoughts of ending their life. In Ethiopia, perinatal mental disorders contribute to maternal morbidity, in terms of poorer health, increased disability and prolonged labor [25]. Perinatal mental disorders have also been shown to negatively impact on children's health in Ethiopia e.g. increasing episodes of diarrhoea [21], interfering with initiation of breast-feeding [25] and negatively affecting child cognitive and motor development [22].

There is a need for prevention and early detection of mental disorders during pregnancy and after childbirth. In other LMICs, community-based health workers [101] and lay workers [102] have been successfully trained to deliver culturally-appropriate, brief, psychosocial therapies to treat postnatal depression. Efforts to develop non-medical interventions for postnatal depression that can be integrated into the PHC system will be a high priority in Ethiopia.

3.17.6 People in Prisons

Mental Health can be affected by life in prisons. Here, many factors may have negative effects on mental health, including: overcrowding, various forms of violence, enforced solitude or conversely lack of privacy, lack of meaningful activity, isolation from social networks, insecurity about future prospects (work, relationships, etc), and inadequate health services - especially mental health services - in prisons. Persons with severe mental illness may be inappropriately imprisoned for relatively minor offences, when treatment in a mental hospital setting would be preferable. The increased risk of suicide in prisons (often related to depression) is one common manifestation of the cumulative effects of these factors.

There is no accurate count of persons with mental disorder who are incarcerated in Ethiopia. In a survey of Federal Prisons in Addis Ababa and Kaliti, 61.9% of prisoners were found to have high levels of mental distress [103].

There is also a very limited capacity to evaluate and or manage individuals with psychiatric conditions who have committed serious offences, meaning that they remain untreated for their condition for the duration of their sentence and continue to pose threat to others. Therefore, FMOH will develop working relationship with the Ministry of Justice to:

- 1. Identify critical information to be collected regarding the prevalence and the type of mental illnesses among incarcerated persons (see research priorities).
- 2. Negotiate and develop a memorandum of understanding on the roles FMOH can and will play with regard to the mental health assessment and treatment of needs of those persons going through the court system, and those who are awaiting a hearing and those who already serving time in the jail.

3.17.7 Victims of Violence and Abuse

A majority of key stakeholders interviewed stressed the importance of developing services for persons who have been victims of violence and abuse. The forms of abuse or violence range from physical and/or sexual abuse perpetrated during conflict to mutilations, child abuse, human trafficking, commercial sex workers, and domestic violence, among other forms of violence. Intimate partner violence and abuse in Ethiopia have been shown to negatively affect mental health [56, 104] leading to an increased levels of anxiety and depression [18]. Victims of trauma associated with forced migration within Ethiopia have also been shown to have high levels of mental disorders [92, 93]. Similarly, Ethiopian women who migrate to Arab countries for work may be exposed to poor working conditions and abuse in the new country, leading to mental health problems [80, 105].

People exposed to violence and trauma may develop severe chronic psychological distress and dysfunction, which should be recognized and appropriately treated within the general health system. Appropriate treatment will include not only psychopharmacological treatment but also appropriate psychological and social support. A pregnant woman is at particularly high risk for intimate partner violence, and its associated mental health effects, antenatal screening should be expanded to detect these problems. Partnerships with relevant stakeholders should be developed for prevention, support/treatment and rehabilitation of the psychological consequences of these different types of adversity.

3.17.8 Epilepsy

Epilepsy is a huge problem that has been historically addressed by mental health practitioners. It is estimated that approximately 25% of the patients receiving treatment at Amanuel Hospital, which is the main out- and in-patient mental hospital, are treated for condition of epilepsy. Those suffering from epilepsy are stigmatized and ostracized in the belief that their condition is a demonic possession and believed to be contagious [106]. Epilepsy is the most common chronic neurological condition in low-income country settings [107]. In Ethiopia, epilepsy affects about 1% of the population and it is estimated that about 0.5% would have active epilepsy (with seizure in the past 1-2 years). Although antiepileptic drugs are effective, most people with epilepsy do not receive treatment. In Ethiopia, the lifetime history of treatment receipt is about 13% [108]. However, the actual treatment gap is likely to be over 95% [109]. The proportion receiving adequate treatment is likely to be under 5%. A similar scale up plan to those with severe mental illnesses is also proposed. This will require training staff and making medications available at the primary care level.

In time, care of persons with epilepsy will be transferred to neurology, but for the lifetime of this strategy the tradition remains for people to be treated in mental health facilities.

3.17.9 Elderly

Life expectancy has increased and so more people are living into older age (4 million aged 60 years and above in 2010; 2.7% aged 65 years and above; CSA 2011). To date there has been little attention paid to the mental health needs of the elderly in Ethiopia, with a single specialized psychiatric clinic operating from Zewditu hospital, although several non-governmental organizations are now providing services for the elderly mentally ill in Addis Ababa.

At present, demand for mental health services in the elderly is very low, but this does not reflect the likely burden in the population. Studies from Ethiopia have shown that increasing age appears to be a risk factor for poorer mental health [110]. Across most cultures, dementia affects 5% of those above the age of 65 years. In Ethiopia, the number of people suffering from dementia was estimated to be 76,000 in 2010, rising to 281,000 by 2050 [111].

Diseases of the brain and mind; dementia, stroke and depression; are the leading contributors to disability and needs for care in this age group. Co-morbidity with chronic physical health conditions, is common, and deteriorating physical health is the main risk factor for depression in older people. Older people are often especially vulnerable owing to lack of an independent income, and fragility of family support. These factors and physical frailty complicate access to care, and the treatment gap for dementia and depression is likely to be particularly high. Awareness-raising activities will be particularly important in this group, for example, to counter the widely held misconception that forgetfulness or loss of interest in life are inevitable aspects of aging. This strategy also encourages development of multi-sectoral services to meet the complex needs of the elderly mentally ill. Early dementia diagnosis, psychoeducation and support and training for caregivers can maximise quality of life even if the underlying disorder cannot be reversed. Older people generally respond as well as younger people to evidence-based treatments for depression.

3.18 Monitoring and Evaluation

Mechanisms for monitoring and evaluating (M&E) the strategy will be developed enabling effective management and optimum mobilization, allocation and use of resources. This helps to make timely decision making and minimize possible problems during the implementation phase. The sources of information for timely monitoring will be routine service and administrative records compiled through the Health Management Information System (HMIS). The strategy will be monitored regularly throughout its lifetime. Monitoring will include the collection and review of valid, reliable, useful and timely information available from HMIS sources. To enrich M&E data, supervisory visits and review meetings will be conducted. MOH will also undertake periodic assessments of the mental health strategy. This will help to identify program strengths, weaknesses, and, if necessary, adjustments will be done. Furthermore, steps will be taken to ensure effective monitoring of services using indicators incorporated in the HSDP-IV. Mid-term reviews and end of implementation evaluation will be made in collaboration with partners.

Jointly with RHBs, an implementation plan will be developed and the implementation plan will be communicated to all stakeholders, including civic society organizations and professional associations for their input. The output from the stakeholders' meeting will be a joint plan of action for the country with budget provision and technical assistance from all partners. This process will make possible meaningful cost estimates that are in line with existing allocations for HSDP IV and the realization of the Millennium Development Goals (MDGs). Monitoring and evaluation for the mental health strategy will be integrated to overall M&E system of the health sector. It will specifically address monitoring of mental health initiatives implementation, adherence to human right principles, quality assurance, elucidate the cause for success or failure of the strategy and measure changes in results that can be attributed to the program.

To establish and strengthen the M&E component of mental health strategy, the FMOH will:

- a. Integrate the mental health data recording and reporting within the existing HIS
- b. Integrate the mental health supportive supervision activities
- c. Strengthen periodic performance monitoring of mental health program
- d. Conduct periodic facility based and population based survey
- e. Conduct evaluation and operational research

3.18.1 Data Recording and Reporting

The health extension worker will capture patient related data on Family Folder. A new mental health register will be developed to capture data from health centers and hospitals based on ICD 11. Agreed data elements and limited indicators will be gathered from FF/ registers using a tally sheet reporting format. The data will be aggregated and analyzed to compare plan versus performance primarily for the facility's own consumption.

Facilities will supply reports to the relevant administrative levels through the routine reporting mechanism as per the HMIS reporting calendar. Health posts will review their performance and submit monthly reports to health centers. Health centers aggregate health post data with their own for monthly primary health care unit review. The aggregated HC and HP report will be submitted monthly to the Woreda health office. Hospitals will review their performance and submit quarterly report to the respective administrative body. The immediate higher level will review reports to check data accuracy and provide feedback. Final compilation of national mental health service data will occur at the FMOH, Planning and Policy Directorate.

3.18.2 Supportive Supervision

Supportive supervision activities will be carried to health facilities and lower administrative levels periodically to guide, help, train and encourage staff to improve their performance in the provision of high-quality health services and program management. Mental health supportive supervision will be integrated into the existing system. Verbal feedback will be given to the supervised facility and administrative body to close the learning feedback.

3.18.3 Performance Monitoring and Quality Improvement

Quality improvement process is a performance monitoring activity in which health facilities (hospitals, health centers and health posts) use locally available data generated during health service provision for a continuous process of measurement, reflection and improvement. Health centers with satellite health posts will review performance monthly. At zonal and woreda level performance monitoring will be carried out quarterly to identify challenges to take corrective action and share best practices among facilities. At regional level the performance monitoring will be carried out bi-annually. At national level an annual mental health review meeting will be held with the involvement of all stakeholders. Annual performance report and mental health bulletins will be disseminated.

3.18.4 Periodic Facility and Population Based Survey

Periodic facility and population based surveys will be conducted to capture data elements and indicators that are not obtained by routine HMIS. Facility based surveys will be carried out every other year. Population based surveys will be carried out every five year to assess the prevalence of major mental disorders and to comprehensively understand knowledge, attitude and practice towards healthy behavior. Also records of suicide and violence will be captured from police and other authorities. The surveys will help to triangulate evidence obtained from routine information. FMOH will incorporate mental health into the demographic and health survey.

3.18.5 Evaluation

Evaluation will be conducted on issues identified during supervision, performance monitoring and the surveys. It will focus on process and implementation environment of the mental health service. It will attempt to answer the cause for performance and to find ways for future planning. In addition the FMOH will conduct case studies to learn best practices that can be transferable across the nation. Impact evaluation will be designed from the beginning on selected interventions to get valid estimates of their effect and best use of resource. To ensure the quality of mental health program implementation, a detailed monitoring and evaluation framework will be developed jointly with RHBs and key stakeholders.

Indicator	Туре	Baseline (2011)	Target (2015)	Source	Periodicity	Level of Data Collection
Mental health as global burden of diseases (DALY/1000)	Impact	2131*	1719	Survey	5 year	Population
Proportion of eligible population who received mental health service (psychosis, depression, bipolar disorder and epilepsy)	Outcome	N/A	50%	Survey/ HMIS	2-3 year	Health Facility
Health facilities with stock out for tracer psychotropic medication	Input	35%	0%	Survey	2-3 year	Health Facility
Mental health professional to population ratio by category	Output	0.65/100,000	3/100,000	HMIS	Annually	WorHO/RHB
Proportion of health facilities providing integrated mental health services	Output	10%**	50%	Admin Report	Annually	Health Facility
Beds allocated for mental health clients per 1 million population	Input	5	25	HMIS	Annually	Health Facility

^{*} Global Burden of Diseases (DALY). Source: WHO, 2004 Basic scenario (depression 30%, bipolar disorder 50%, psychosis, 75% and epilepsy 75%) with 70% intervention.

^{** 10%} Data is taken from HSDP IV.

ACKNOWLEDGEMENTS

FMOH acknowledges the contributions and support of various partners in supporting the development of National Mental Health Strategy. To this end, FMOH would like to thank members of the FMOH's Mental Health Technical Working Group for their guidance in the preparation of this document. Special acknowledgement goes to Visions for Development, Inc. for undertaking the development of this strategy, UNICEF for providing support to initiate this strategy, Addis Abeba University, Department of Psychiatry for providing technical and editing support, WHO for providing insightful feedback, and the Johns Hopkins University (Tsehai) for facilitating the vetting and printing of this document.

It also should be noted that there were many people, whose names are too many to list, who provided support, information and encouragement towards the development of this strategy. That is why the acknowledgement is based on organizational entity rather than a listing of specific names. That said, we are very confident that those who made a significant contribution will see their finger prints all over this strategy. Thank you!

References

- World Health Organization, Mental health: facing the challenges, building solutions.
 Report from the WHO European Ministerial Conference. 2005, WHO Regional Office for Europe: Copenhagen, Denmark.
- 2. Miranda, J.J. and V. Patel, Achieving the Millennium Development Goals: Does mental health play a role? PLoS Medicine, 2005. 2(10): p. e291.
- 3. Lund, C., et al., Poverty and common mental disorders in low and middle income countries: A systematic review. Social Science & Medicine, 2010. 71: p. 517-528.
- 4. Funk, M., et al., Mental Health and Development: Targeting people with mental health conditions as a vulnerable group. 2010, WHO: Geneva.
- 5. UNDP. International human development indicators. Ethiopia country profile. 2010 [cited 2011 2nd July]; Available from: http://hdrstats.undp.org/en/countries/profiles/ETH.html.
- 6. Kebede, D., et al., Short-term symptomatic and functional outcomes of schizophrenia in Butajira, Ethiopia. Schizophrenia Research, 2005. 78(2-3): p. 171-85.
- 7. Negash, A., et al., Prevalence and clinical characteristics of bipolar I disorder in Butajira, Ethiopia: a community-based study. Journal of Affective Disorders, 2005. 87(2-3): p. 193-201.
- 8. Tekle-Haimanot, R., L. Forsgren, and J. Ekstedt, Incidence of epilepsy in rural central Ethiopia. Epilepsia, 1997. 38: p. 541-546.
- 9. Awas, M., D. Kebede, and A. Alem, Major mental disorders in Butajira, southern Ethiopia. Acta Psychiatrica Scandinavica, Supplement, 1999. 99(397): p. 56-64.
- 10. Kebede, D. and A. Alem, Major mental disorders in Addis Ababa, Ethiopia. II. Affective disorders. Acta Psychiatrica Scandinavica, Supplementum, 1999. 397: p. 18-23.
- 11. Fekadu, A., et al., Utility of the concept of minor depressive disorder: Evidence from a large rural community sample in a developing country setting. Journal of Affective Disorders, 2007. 104: p. 111-118.
- 12. Kebede, D., A. Alem, and E. Rashid, The prevalence and socio-demographic correlates of mental distress in Addis Ababa, Ethiopia. Acta Psychiatrica Scandinavica, Supplementum, 1999. 397: p. 5-10.
- 13. Alem, A., et al., Suicide attempts among adults in Butajira, Ethiopia. Acta Psychiatrica Scandinavica, Supplementum, 1999. 397: p. 70-6.
- 14. Shibre, T., et al., Schizophrenia: illness impact on family members in a traditional society rural Ethiopia. Social Psychiatry and Psychiatric Epidemiology, 2003. 38: p. 27-34.
- 15. Walker, S., et al., Child development: risk factors for adverse outcomes in developing countries. The Lancet, 2007. 369: p. 145-157.
- 16. World Health Organization, Caring for children and adolescents with mental disorders: setting WHO directions, WHO, Editor. 2003: Geneva.
- 17. Garcia-Moreno, C., et al., Prevalence of intimate partner violence: findings from the WHO multi-country study on women's health and domestic violence. The Lancet, 2006. 368(9543): p. 1260-1269.
- 18. Deyessa, N., et al., Intimate partner violence and depression among women in rural Ethiopia: a cross-sectional study. Clinical Practice and Epidemiology in Mental Health, 2009. 5(8): p. doi:10.1186/1745-0179-5-8.
- 19. Stewart, R.C., Maternal depression and infant growth A review of recent evidence. Maternal and Child Nutrition, 2007. 3(2): p. 94-107.

- 20. Patel, V., et al., Maternal psychological morbidity and low birth weight in India. British Journal of Psychiatry, 2006. 188: p. 284-5.
- 21. Ross, J., et al., Perinatal mental distress and infant morbidity in Ethiopia: a cohort study. Archives of Disease in Childhood, 2010: p. In Press.
- 22. Hadley, C., et al., Parental symptoms of common mental disorders and children's social, motor, and language development in sub-Saharan Africa. Annals of Human Biology, 2008. 35(3): p. 259-75.
- 23. Deyessa, N., et al., Joint effect of maternal depression and intimate partner violence on increased risk of child death in rural Ethiopia. Archives of Disease in Childhood, 2010. 95: p. 771-775.
- 24. Hanlon, C., et al., Sociocultural practices in Ethiopia: association with onset and persistence of postnatal common mental disorders. British Journal of Psychiatry, 2010. 197: p. 468-475.
- 25. Hanlon, C., et al., Impact of antenatal common mental disorders upon perinatal outcomes in Ethiopia: The P-MaMiE population-based cohort study. Tropical Medicine & International Health, 2009. 14(2): p. 156-166.
- 26. Jemal, M., Alem, A., Maggi, J. and Hanlon, C., Depression in persons with HIV receiving antiretroviral therapy, in Psychiatry. 2006, Addis Ababa University: Addis Ababa.
- 27. Deribew, A., et al., Common mental disorders in TB/HIV co-infected patients in Ethiopia. BMC Infectious Diseases, 2010. 10: p. 201.
- 28. Deribew, A., et al., Tuberculosis and HIV co-infection: its impact on quality of life. Health and Quality of Life Outcomes, 2009. 7: p. 105.
- 29. Farinpour, R., et al., Psychosocial risk factors of HIV morbidity and mortality: findings from the Multicenter AIDS Cohort Study (MACS). Journal of Clinical and Experimental Neuropsychology, 2003. 25(5): p. 654-670.
- 30. Kebede, D., et al., Khat and alcohol use and risky sex behaviour among in-school and out-of-school youth in Ethiopia. BMC Public Health, 2005. 5: p. 109.
- 31. Alem, A., et al., Unprotected sex, sexually transmitted infections and problem drinking among female sex workers in Ethiopia. Ethiopian Journal of Health Development, 2006. 20(2): p. 93-98.
- 32. Michaud, C.M., C.J. Murray, and B.R. Bloom, Burden of disease--implications for future research. JAMA, 2001. 285(5): p. 535-539.
- 33. Ustun, T.B., et al., Global burden of depressive disorders in the year 2000. British Journal of Psychiatry, 2004. 184: p. 386-392.
- 34. World Health Organization, Update of the Global Burden of Disease. 2004, WHO:
- 35. Abdulahi, H., D. Haile-Mariam, and D. Kebede, Burden of disease analysis in rural Ethiopia. Ethiopian Medical Journal, 2001. 39: p. 271-281.
- 36. Fekadu, A., et al., The medium-term mortality among patients with severe mental disorders in Butajira, Ethiopia, and implications for community care., in World Psychiatric Association Regional Meeting. 2009: Abuja, Nigeria.
- 37. Mogga, S., et al., Outcome of major depression in Ethiopia: population-based study. British Journal of Psychiatry, 2006. 189: p. 241-6.
- 38. Zergaw, A., et al., A longitudinal comparative analysis of economic and family caregiver burden due to bipolar disorder. African Journal of Psychiatry, 2008. 11: p. 191-198.
- 39. Shibre, T., et al., Perception of stigma among family members of individuals with schizophrenia and major affective disorders in rural Ethiopia. Social Psychiatry & Psychiatric Epidemiology, 2001. 36(6): p. 299-303.

- 40. Prince, M., et al., Global mental health 1: no health without mental health. The Lancet, 2007. 370: p. 859-77.
- 41. WHO, Mental Health Atlas. 2005, World Health Organization: Geneva.
- 42. World Health Organization, The mental health context. 2003, WHO: Geneva.
- 43. Alem, A., et al., Clinical course and outcome of schizophrenia in a predominantly treatment-naive cohort in rural Ethiopia. Schizophrenia Bulletin, 2009. 35(3): p. 646-654.
- 44. Kebede, D., et al., Onset and clinical course of schizophrenia in Butajira-Ethiopia. A community-based study. Social Psychiatry and Psychiatric Epidemiology, 2003. 38: p. 625-631.
- 45. mhGAP-Ethiopia Working Group, Mental Health Gap Action Programme in Ethiopia: final document. 2010, Ministry of Health, Ethiopia: Addis Ababa.
- 46. Kebede, D., et al., Onset and clinical course of schizophrenia in Butajira-Ethiopia--a community-based study. Social Psychiatry & Psychiatric Epidemiology, 2003. 38(11): p. 625-31.
- 47. Abdullahi Bekry, A., Trends in suicide, parasuicide and accidental poisoning in Addis Ababa, Ethiopia. Ethiopian Journal of Health Development, 1999. 13(3): p. 247-261.
- 48. Fekadu, A., A. Alem, and C. Hanlon, Alcohol and drug abuse in Ethiopia: past, present and future. African Journal of Drug and Alcohol Studies, 2007. 6(1): p. 39-53.
- 49. Mulatu, M.S., Prevalence and risk factors of psychopathology in Ethiopian children. Journal of the American Academy of Child & Adolescent Psychiatry, 1995. 34(1): p. 100-9.
- 50. Tadesse, B., et al., Childhood behavioural disorders in Ambo district, western Ethiopia. I. Prevalence estimates. Acta Psychiatrica Scandinavica, Supplementum, 1999. 397: p. 92-7.
- 51. Kebede, D., et al., Symptomatic and functional outcome of bipolar disorder in Butajira, Ethiopia. Journal of Affective Disorders, 2006. 90(2-3): p. 239-49.
- 52. Alem, A., et al., How are mental disorders seen and where is help sought in a rural Ethiopian community? A key informant study in Butajira, Ethiopia. Acta Psychiatrica Scandinavica, Supplementum, 1999. 397: p. 40-7.
- 53. Deribew, A. and Y.S. Tamirat, How are mental health problems perceived by a community in Agaro town? Ethiopian Journal of Health Development, 2005. 19(2): p. 153-159.
- 54. Mulatu, M.S., Perceptions of mental and physical illnesses in north-western Ethiopia. Journal of Health Psychology, 1999. 4(4): p. 531-549.
- 55. Bekele, Y.Y., et al., Pathways to psychiatric care in Ethiopia. Psychological Medicine, 2009. 39: p. 475-483.
- 56. Hanlon, C., et al., Postnatal mental distress in relation to the sociocultural practices of childbirth: An exploratory qualitative study from Ethiopia. Social Science & Medicine, 2009. 69: p. 1211-1219.
- 57. Giel, R., Y. Gezahegn, and J.N. van Luijk, Psychiatric morbidity in 200 Ethiopian medical outpatients. Psychiatria, Neurologia, Neurochirurgia, 1968. 71(2): p. 169-76.
- 58. Araya, M., M. Mussie, and L. Jacobsson, Decentralized psychiatric nursing service in Ethiopia--a model for low income countries. Ethiopian Medical Journal, 2009. 47(1): p. 61-64.
- 59. Federal Democratic Republic of Ethiopia Ministry of Health, Health Sector Development Program IV: 2010/2011-2014/2015. 2010, FMOH: Addis Ababa.
- 60. Federal Ministry of Health, Health Sector Development Programme IV, 2010/11 2014/15. 2010, Federal Democratic Republic of Ethiopia: Addis Ababa.

- 61. World Health Organization, mhGAP Mental Health Gap Action Programme: scaling up care for mental, neurological and substance use disorders. . 2008, WHO: Geneva.
- 62. World Health Organization, The world health report 2001. Mental health: new understanding, new hope, WHO, Editor. 2001: Geneva.
- 63. Hanlon, C., D. Wondimagegn, and A. Alem, Lessons learned in developing community mental health care in Africa. World Psychiatry, 2010. 9(3): p. 185-189.
- 64. WHO. The optimal mix of services. Mental health policy, planning and service development. Information sheet, sheet 2, 2007; Available from: http://www.who.int/mental_health/policy/services/2_Optimal%20Mix%20of%20Services_Infosheet.pdf, accessed April 2011.
- 65. WHO and Wonca, Integrating mental health into primary care. A global perspective. 2008, World Health Organization and World Organization of Family Doctors: Geneva.
- 66. Lancet Global Mental Health Group, Global Mental Health 6. Scale up services for mental disorders: a call for action. The Lancet, 2007. 370: p. 1241-52.
- 67. Alem, A., et al., The prevalence and socio-demographic correlates of mental distress in Butajira, Ethiopia. Acta Psychiatrica Scandinavica, Supplementum, 1999. 397: p. 48-55.
- 68. Kebede, D. and A. Alem, Major mental disorders in Addis Ababa, Ethiopia. III. Neurotic and somatoform disorders. Acta Psychiatrica Scandinavica, Supplementum, 1999. 397: p. 24-9.
- 69. Ashenafi, M., et al., Prevalence of mental and behavioural disorders in Ethiopian children. East African Medical Journal, 2001. 78(6): p. 308-311.
- 70. Ashenafi, Y., et al., Socio-demographic correlates of mental and behavioural disorders in children in southern Ethiopia. East African Medical Journal, 2000. 77(10).
- 71. Desta, M., et al., Socio-demographic and psychopathologic correlates of enuresis in urban Ethiopian children. Acta Paediatrica, 2007. 96(4): p. 556-60.
- 72. Alem, A., et al., Child labor and childhood behavioral and mental health problems in Ethiopia. Ethiopian Journal of Health Development, 2006. 20(2): p. 119-126.
- 73. Fekadu, D. and A. Alem, Child labour and emotional disorders in an urban district, Ethiopia: a rapid assessment on community perception of child labour. Ethiopian Journal of Health Development, 2001. 15(3): p. 197-202.
- 74. Fekadu, D., A. Alem, and B. Hagglof, The prevalence of mental health problems in Ethiopian child laborers. Journal of Child Psychology & Psychiatry & Allied Disciplines, 2006. 47(9): p. 954-9.
- 75. Beyero, T., et al., Mental disorders among the Borana semi-nomadic community in Southern Ethiopia. World Psychiatry, 2004. 3(2): p. 110-114.
- 76. Fekadu, A., et al., Bipolar disorder among an isolated island community in Ethiopia. Journal of Affective Disorders, 2004. 80(1): p. 1-10.
- 77. Araya, M., et al., Effect of trauma on quality of life as mediated by mental distress and moderated by coping and social support among postconflict displaced Ethiopians. Quality of Life Research, 2007. 16(6): p. 915-927.
- 78. Araya, M., et al., Quality of life after postconflict displacement in Ethiopia: comparing placement in a community setting with that in shelters. Social Psychiatry & Psychiatric Epidemiology, 2010.
- 79. Araya, M., et al., Gender differences in traumatic life events, coping strategies, perceived social support and socio-demographics among postconflict displaced persons in Ethiopia. Social Psychiatry & Psychiatric Epidemiology, 2007. 42: p. 307-315.

- 80. , B., et al., Migration and mental health: a study of low-income Ethiopian women working in Middle Eastern countries. International Journal of Social Psychiatry, 2009. 55(6): p. 557-568.
- 81. Alem, A., et al., Mental distress in medical students of Addis Ababa University. Ethiopian Medical Journal, 2005. 43(3): p. 159-66.
- 82. Fekadu, A., et al., Clinical outcome in bipolar disorder in a community-based followup study in Butajira, Ethiopia. Acta Psychiatrica Scandinavica, 2006. 114(6): p. 426-34.
- 83. Fekadu, A., et al., Validity of the concept of minor depression in a developing country setting. The Journal of Nervous and Mental Disease, 2008. 196: p. 22-28.
- 84. Abdullahi Bekry, A., Trends in suicide, parasuicide and accidental poisoning in children in Addis Ababa, Ethiopia. Ethiopian Journal of Health Development, 1999. 13(3): p. 263-269.
- 85. Abdullahi Bekry, A., A hundred cases of parasuicide: IV validation of the Amharic version of IDA-scale at St Paul's General Specialised Referral Hospital, Addis Ababa, Ethiopia. Ethiopian Journal of Health Development, 2008. 22(3): p. 282-297.
- 86. Abdullahi Bekry, A., A hundred cases of parasuicide: V Validation of the Amharic version of Hopelessness scale at St Paul's General Specialised Referral Hospital, Addis Ababa, Ethiopia Ethiopian Journal of Health Development, 2008. 22(3): p. 275-281.
- 87. Alem, A., D. Kebede, and G. Kullgren, The prevalence and socio-demographic correlates of khat chewing in Butajira, Ethiopia. Acta Psychiatrica Scandinavica, Supplementum, 1999. 397: p. 84-91.
- 88. Alem, A., D. Kebede, and G. Kullgren, The epidemiology of problem drinking in Butajira, Ethiopia. Acta Psychiatrica Scandinavica, Supplementum, 1999. 397: p. 77-83.
- 89. Abdullahi Bekry, A. and M.H. Hyder Ali, Morbid grief I: Are close relatives of the 'red-terror' victims of Addis Ababa still suffering from morbid grief and other complications of bereavement? Ethiopian Journal of Health Development, 1997. 11(3): p. 241-249.
- 90. Abdullahi Bekry, A. and M.H. Hyder Ali, Morbid grief II: The phenomenology of pathologic grief process, depression and anxiety among close relatives of 'red-terror' victims. Ethiopian Journal of Health Development, 1997. 11(3): p. 251-256.
- 91. Abdullahi Bekry, A. and M.H. Hyder Ali, Morbid grief III: The influence of variables on the degree of grief reaction, depression and anxiety among close relatives of the 'red-terror' victims. Ethiopian Journal of Health Development, 1997. 11(3): p. 257-261.
- 92. De Jong, J.T.V.M., I.H. Komproe, and M. van Ommeren, Common mental disorders in postconflict settings. The Lancet, 2003. 361: p. 2128-30.
- 93. De Jong, J.T.V.M., et al., Lifetime events and post-traumatic stress disorder in 4 postconflict settings. JAMA, 2001. 286(5): p. 555-562.
- 94. Hadley, C., et al., Food insecurity, stressful life events and symptoms of anxiety and depression in east Africa: evidence from the Gilgel Gibe growth and development study. Journal of Epidemiology & Community Health, 2008. 62: p. 980-986.
- 95. Lijalem, M., et al., Nutrition status of cases of schizophrenia and bipolar disorders in Butajira, rural Ethiopia. 2003, Addis Ababa University: Addis Ababa.
- 96. Deribew, A. and M. Tesfaye, Assessment of knowledge, attitude and practice of nursing staff towards mental health problems in Jimma zone, south western Ethiopia. Ethiopian Journal of Health Sciences, 2005. 15(2): p. 197-204.

- 97. Fekadu, D. and A. Alem, Retrospective analysis of 10 year medical board proceedings at Amanuel hospital, Addis Ababa, Ethiopia, 2001. Ethiopian Medical Journal, 2004. 42: p. 23-33.
- 98. Patel, V., Editorial: The need for treatment evidence for common mental disorders in developing countries. Psychological Medicine, 2000. 30: p. 743-746.
- 99. Patel, V., et al., Global Mental Health 3: Treatment and prevention of mental disorders in low-income and middle-income countries. Lancet, 2007. 370: p. 991-1005.
- 100. Desta, M., Epidemiology of child psychiatric disorders in Addis Ababa, Ethiopia, in Division of Child and Adolescent Psychiatry, Department of Clinical Sciences. 2008, Umeå University Umeå.
- 101. Rahman, A., et al., Cognitive behaviour therapy-based intervention by community health workers for mothers with depression and their infants in rural Pakistan: a cluster-randomised controlled trial. The Lancet, 2008. 372(9642): p. 902-909.
- 102. Cooper, P.J., et al., Improving quality of mother-infant relationship and infant attachment in socioeconomically deprived community in South Africa: randomised controlled trial. British Medical Journal, 2009. 338: p. b974.
- 103. Asgedom, A., Prevalence of mental distress among federal prisoners in Ethiopia, in Department of Psychiatry, 2008, Addis Ababa University: Addis Ababa.
- 104. Hanlon, C., et al., Between life and death: exploring the sociocultural context of antenatal mental distress in rural Ethiopia. Archives of Women's Mental Health, 2010: p. DOI 10.1007/s00737-010-0149-3.
- 105. Kebede, E., Ethiopia: An assessment of the international labour migration situation. The case of female labour migrants., in Gender Promotion Programme series on Women and Migration. 2002, International Labour Organisation: Geneva.
- 106. Shibre, T., et al., Community attitudes towards epilepsy in a rural Ethiopian setting: a re-visit after 15 years. Ethiopian Medical Journal, 2008. 46(3): p. 251-259.
- 107. Mbuba, C.K. and C.R. Newton, Packages of care for epilepsy in low and middle-income countries. . PLoS Medicine, 2009. 6(10): p. e1000162. Doi:10.1371/journal. pmed.1000162.
- 108. Berhanu, S. and M. Prevett, Treatment of Epilepsy in Rural Ethiopia: 2 Year Follow-up. Ethiopian Journal of Health Development, 2004. 18(1): p. 33-34.
- 109. Meyer, A.C., et al., Global disparities in the epilepsy treatment gap: a systematic review. Bulletin of the World Health Organization, 2010. 88: p. 260-266.
- 110. Alem, A., D. Kebede, et al. (1999). "The prevalence and socio-demographic correlates of mental distress in Butajira, Ethiopia." Acta Psychiatrica Scandinavica, Supplementum 397: 48-55.
- 111. Prince, M., R. Bryce, et al. (2011). World Alzheimer Report 2011: The benefits of early diagnosis and intervention, Alzheimer's Disease International.

