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MENTAL HEALTH AND HIV/AIDS

TECHNICAL BRIEF

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INTRODUCTION

While there is no single definition of mental health, the World Health Organization (WHO) defines mental health as “a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully and is able to make a contribution to his or her community.” It is more than just the absence of mental disorders, but “is the foundation for well-being and effective functioning for an individual and for a community” (WHO 2007a).

Addressing the mental health issues for people living with HIV (PLHIV) is central to a comprehensive approach to their care and support. Estimated rates of depression among PLHIV vary widely and range between 20 percent and 48 percent among PLHIV in high-income countries (Berg et al. 2007) and up to 72 percent in resource-limited countries (Adewuya et al. 2007). Mental illness may also be a risk factor for HIV infection due to impaired judgment and high-risk behaviors (Collins et al. 2006; Smit et al. 2006). Despite the high prevalence of mental health disorders related to HIV, indications are that mental health conditions in PLHIV are under-diagnosed and undertreated (WHO 2001). A comprehensive response is needed that focuses on building systems to support the full range of care, treatment, and prevention services, including mental health services, for people living with and affected by HIV. This is of special importance in resource-limited countries where the burden of disease is greatest.

The purpose of this technical brief is to review the key mental health issues in the care and support of PLHIV, and to present a framework for integrating mental health services into the HIV continuum of care. This brief was developed to help U.S. Government and national program planners and implementers design,

plan, and implement mental health services as part of a comprehensive approach to the care and support of PLHIV and their families.

The information presented in this brief was obtained through a review of published and gray literature relating to mental health issues in HIV/AIDS, and in discussions with program directors from Project Accept and the Academic Model for Prevention and Treatment of HIV/AIDS (AMPATH) and the Peter Alderman Foundation.

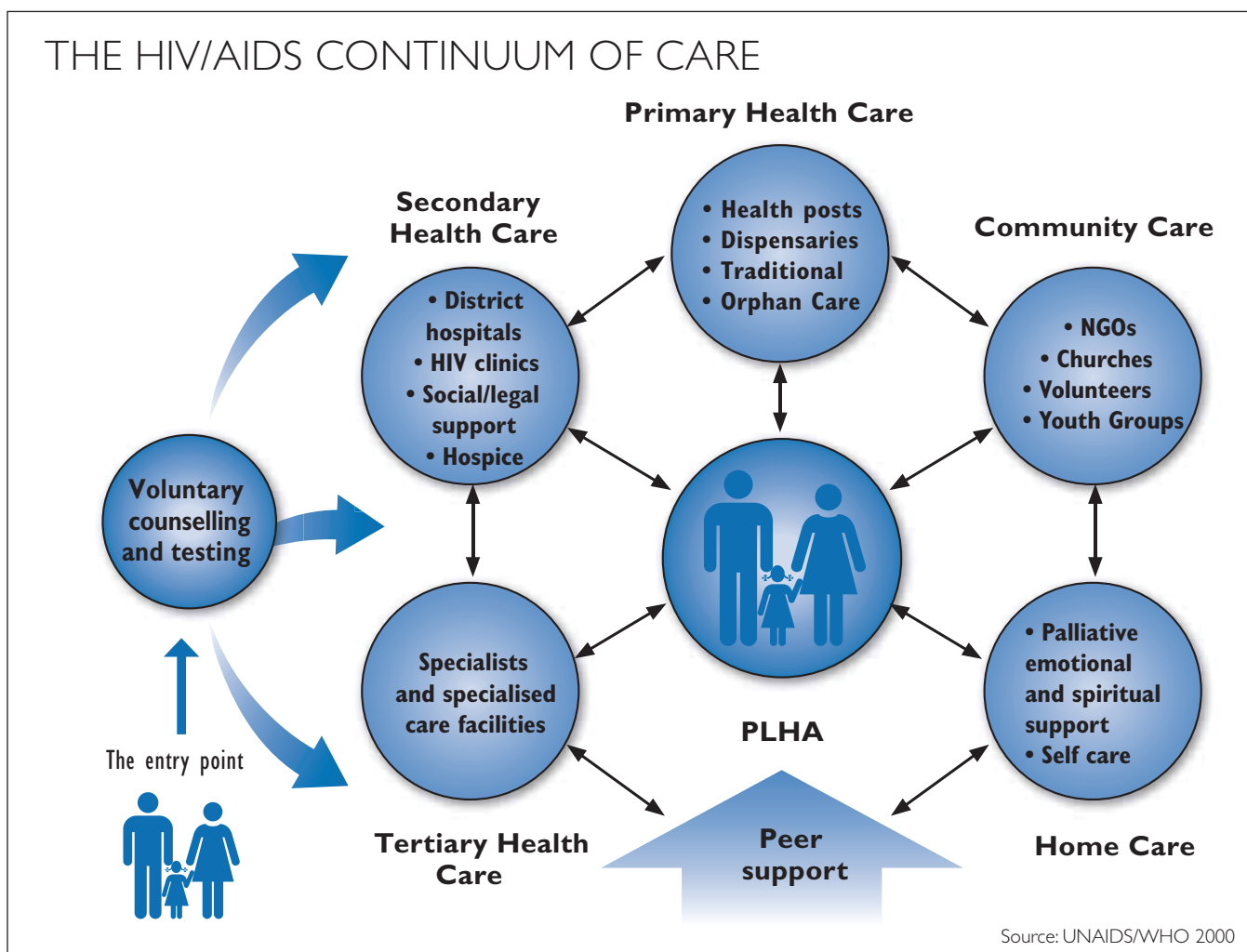
PROGRAM CONSIDERATIONS

With the advent of antiretroviral therapy (ART) and highly active ART (HAART), many PLHIV can lead a relatively normal and active life for many years. Recognizing that PLHIV and their families experience a range of emotional, social, physical, and spiritual needs that vary over the course of their illness, WHO and UNAIDS (UNAIDS 2000b) presented a “continuum of care” model that views HIV as a chronic disease and proposes systems to provide both continuous and responsive care throughout the course of a patient’s care and treatment. It involves input from different sources and levels of the formal and informal health care system (see Figure 1). Mental health and psychosocial support is a key element of the continuum of care and should be part of the comprehensive services at all levels. The following sections discuss the key mental health issues at selected stages of the continuum of care and review programmatic approaches at different levels of care that have shown promise in addressing those needs. Table 1 in the Annex (page 11) summarizes some of the key mental health issues and related interventions at different stages of the continuum of HIV care across different levels of care.

Mental health issues in the continuum of HIV care and support

Despite the growing evidence of the mental health needs of PLHIV, mental health and behavioral disorders are often overlooked and undertreated (Bainjana et al. 2005; WHO 2001). Undetected mental health problems such as depression, cognitive disorders, personality disorders, and co-occurring conditions such as substance-related disorders (substance dependence, substance abuse, intoxication, and withdrawal) can have a profound effect on adherence, clinic attendance, and quality of life, and can influence the progression of disease and high-risk behaviors that increase risk of HIV transmission

(Berg et al. 2007; Ickovics et al. 2001; Hartzell et al. 2008; Leserman 2008). Given the potential impact of mental health problems on the overall care and support of PLHIV, it is important to be aware of the different mental health needs at varying points in the continuum of care, and to design interventions and support services to address those needs. The discussion below highlights the key mental health issues associated with the continuum of care, and suggests promising practices or resources that may help program planners address these problems. For purposes of this discussion, the continuum of care is divided into pre-ART, ART, and advanced disease/end-of-life phases.



Pre-ART Phase

The initial entry point into the continuum of care is through counseling and testing services. Individuals who test positive should be referred to an HIV clinic or primary care facility where comprehensive HIV care and treatment are provided. The scope of these services could involve a variety of elements, including nutritional care, treatment of common opportunistic infections (OIs), preventive therapy for tuberculosis, and psychosocial support. This phase of care and support can extend for many years and requires a multidisciplinary approach and the close coordination of facility- and community-based services at all levels of care.

Described below are a number of mental health issues that may impact initiation and management of HIV care and support in persons with mental health or co-occurring substance abuse problems.

- **Early identification and diagnosis of mental health and co-occurring substance abuse problems:** This is an essential part of a comprehensive approach to the care and support of PLHIV, and can contribute to better treatment outcomes as well as reduced risk of further transmission of the virus due to risky behavior. Promising practices and resources in the early identification and treatment of mental health and co-occurring substance abuse problems are discussed below in the section on co-occurring disorders.
- **Access to care:** The presence of mental health and/or substance abuse problems is not only a potential risk factor for HIV infection (Baingana et al. 2005; Collins et al. 2006; Solomon et al. 2008), but persons with mental health or substance abuse problems in resource-limited settings may have undiagnosed HIV infection (Joska et al. 2005) and are less likely to receive ART if diagnosed (Melo et al. 2006; Martinez et al. 2008). The reasons for this lack of

access are complex and require specific strategies for increasing access to routine HIV screening and referral to care and support for individuals with mental health and/or substance abuse problems (Parry et al. 2007).

- **Response to HIV diagnosis:** For most people, finding out that they are HIV-positive raises personal concerns about death and dying, disclosure and stigma, changes in personal relationships, and uncertainties about the future. These stresses can precipitate anxiety and depression, which may contribute to delayed entry into or drop-out of HIV treatment (Cournos 2005).
- **Stigma and discrimination:** Social isolation, marginalization, and discrimination resulting from HIV stigma can have profound effects on the mental health of PLHIV and those caring for them (Cluver et al. 2008; Venable et al. 2006). Stigma also has a direct effect on care-seeking behavior and outcome and must be addressed to optimize care for those infected and affected by HIV (Whetten et al. 2008; Makoae et al. 2008).
- **Need for psychosocial support:** Because HIV infection can be chronic, PLHIV have an ongoing need for social and psychological support to deal with the stresses associated with the disease and its treatment. Events during the course of treatment can also trigger depression and anxiety, including the appearance of new symptoms, co-infections, diagnosis of AIDS, or the death of friends and family with HIV (Leserman 2008). Psychosocial support can be crucial in reducing psychological distress and improving treatment adherence and outcome (Reece et al. 2007).

ART Phase

Many of the same mental health issues related to care and support access, emotional response, stigma and

discrimination, and the need for psychosocial support apply to all three phases of the continuum of care. However, issues related to HIV treatment access, adherence to complex drug regimens, management of mental health and substance use co-morbidity, assessment of side effects, and neuropsychiatric concomitants of HIV or its treatment become even more critical during the ART phase of care and support.

- **Co-occurring mental health and substance abuse problems:** Mental health problems associated with HIV can have a major impact on willingness of providers to initiate ART and on subsequent treatment adherence and outcome. Mental health disorders commonly associated with HIV are listed in Box 1 and apply across all stages of the continuum. Estimates of the prevalence of depressive symptoms in PLHIV range from 18.8 percent (Martinez et al. 2008) to 47 percent in Uganda (Kaharuza et al. 2006). Reported rates of alcohol abuse among PLHIV in Africa vary considerably, with the highest rate of 72 percent reported in Uganda (Martinez et al. 2008; Mbulaiteye et al. 2000). Injection drug users (IDUs) are a major risk group for HIV infection and represent the focal population of HIV epidemics in Asia and Eastern Europe/Russia (Vlahov and Celentano 2006; Sharma et al. 2007). There is substantial evidence that both alcohol abuse and injection drug use are associated with limited access to ART (Martinez et al. 2008; Vlahov and Celentano 2006; Aceijas et al. 2006; Bobrova et al. 2007), treatment non-adherence, and poor clinical outcome (Berg et al. 2007; Sharma et al. 2007), and are high-risk behaviors leading to increased risk of HIV transmission (Berg et al. 2007). Of special importance is the need to assess the impact of traumatic life experiences on the mental health of PLHIV (Pence 2009; Olley et al. 2005). Estimates of post-traumatic stress disorder (PTSD) in PLHIV range from 30 percent to 64 percent, which are significantly higher than in the general population

BOX 1: MENTAL HEALTH DISORDERS ASSOCIATED WITH HIV (COURNOS 2005)

- Adjustment disorders
- Mood disorders, including major depression and dysthymia
- Anxiety disorders, including generalized anxiety disorder, panic disorder, and post-traumatic stress disorder
- Substance-related disorders (substance dependence, substance abuse, intoxication, and withdrawal)
- HIV-associated dementia or AIDS dementia complex

(Olley et al. 2005). High rates of PTSD may be associated with gender-based violence (GBV), political conflict, natural disasters, general poverty, and high crime rates, all of which are prevalent in low-income countries.

- **Side effects and cognitive impairment:** Proper management of the side effects of HIV treatment is crucial to enhancing treatment adherence and the mental well-being of patients on ART. HIV infection can act directly on the brain and create a clinical picture that resembles certain mental disorders. Estimates are that 30 to 60 percent of PLHIV experience mild forms of cognitive impairment, with 10 to 15 percent progressing to HIV-related dementia (Grant 2008). Even mild forms of impairment can affect learning and memory, attention, language, psychomotor abilities, and executive functions (e.g., planning, evaluating, problem solving) (Grant 2008), all of which are vital to the person's ability to manage ART and consequently their survival and well-being. The challenge is to assess and manage side effects and neurocognitive changes while maintaining effective levels of ART.

Advanced Disease/End-of-Life Phase

With HIV progression, PLHIV and their caregivers have an increasing need for physical, emotional, and spiritual support, which can overwhelm the resources available to them. A coordinated approach between formal and informal support systems is needed to support PLHIV and their caregivers through the death and dying process and the grief and loss afterwards.

Promising practices in mental health care and support of PLHIV

In spite of the challenges, there are a number of innovative programmatic approaches that show promise in addressing the mental health needs of PLHIV. Some of these approaches are reviewed below, followed by a discussion of the integration of these program elements with HIV care across different levels of the health care system.

Extending access to care

Two programmatic approaches can be useful in increasing access to HIV care for persons with mental health and co-occurring substance use disorders. One approach is targeted screening for HIV in mentally ill populations to increase detection and recruitment into treatment (Joska et al. 2005). The second approach is the use of HIV stigma reduction strategies to increase HIV knowledge, change attitudes about PLHIV, and minimize barriers to seeking HIV care. Brown and co-authors (2003) reviewed 22 studies on interventions to reduce HIV/AIDS stigma in both resource-rich and resource-limited countries. The most effective approaches involve increased contact with PLHIV combined with information-based approaches (Brown et al. 2003).

Post-test clubs

One promising approach to addressing the emotional response to HIV test results is the use of “post-test clubs” after counseling and testing to provide psychosocial support and promote health behavior change

by mobilizing community resources (Rwekikomo et al. 1992). Examples of post-test clubs include the one organized by the AIDS Information Center (AIC) in Kampala, Uganda, and Project Accept (Khumalo-Sakutukwa et al. 2008), both of which provide a range of services, including HIV risk reduction counseling, medical consultation, educational activities, and group work to sustain health behavior change. Initial findings suggest that participation in post-test clubs increases perceived social support and enhances treatment adherence (Khumalo-Sakutukwa et al. 2008). Post-test clubs can also be a significant form of peer support for individuals with mental health and/or substance use problems/disorders. Clubs could be developed specially for individuals with these HIV co-morbidities to allow for an environment of reduced stigma as well as provide a means for medical providers to maintain access to individuals frequently lost to care and follow-up.

Assessment of mental health needs of PLHIV

Health care providers, either at the primary care level or at HIV clinics, can play a pivotal role in assessing the mental health needs of PLHIV and linking people to needed services (Olley et al. 2005; WHO 2008b). A number of standard mental health assessment tools have proven useful for primary care providers for identifying clients in need of mental health services and for obtaining epidemiological information to guide program planning and policy development. These are listed in Box 2 (see page 6), with hyperlinks to the sources.

Psychosocial support

A variety of approaches for providing psychosocial support have shown promise in addressing the psychosocial needs of PLHIV (Berg et al. 2007; Catalan et al. 2005). These interventions include individual, family, or group counseling; stress management and coping sessions; educational sessions; home visits; and respite care. Peer support groups in particular have

been used successfully as part of a comprehensive psychosocial support program. Examples of programs that have implemented effective psychosocial support services include the counseling and social support services of The AIDS Support Organization of Uganda (TASO-Uganda) and the patient-initiated and facilitated peer support program of the Academic Model for Providing Access to Healthcare (AMPATH) (Chege 2004). The main purpose of the psychosocial support programs is to address the emotional and social impact of HIV and to enhance coping, self-care, and better adherence to HIV treatment.

Several programmatic elements that are critical in providing psychosocial support to PLHIV include:

- **Trained counselors or peer support volunteers** who receive basic training in HIV treatment, supportive skills such as active listening and empathy, stress management and coping skills, self-care strategies, and HIV risk reduction.
- **Peer counselors and volunteers, who should have** access to medical personnel and other professional staff (e.g., psychologists, psychiatrists, and social workers) for supervision, consultation, and support.
- **Program activities and services, which should be** adapted to the local culture and sensitive to the attitudes, beliefs, and practices of the people they serve. Peer counselors and community volunteers can then serve as cultural informants to help guide program planning and implementation.
- **Interventions to address common areas of concern** that include social discrimination and stigma, disclosure of HIV status, relationship with partners, coping with ART, grief, and fear of disability and death.
- **Psychosocial support activities, which should be** coordinated with such other HIV services as coun-

BOX 2: MENTAL HEALTH ASSESSMENT TOOLS

- General Health Questionnaire
<http://mailer.fsu.edu/~cfigley/Tests/documents/GHQ12.doc> (Goldberg 1992)
- WHO Mental Disorders Checklist
http://whqlibdoc.who.int/hq/1998/WHO_MSA_MNHIEAC_98.1.pdf (WHO 1998)
- Global Assessment of Functioning
<http://www.cucs.org/storage/cucs/documents/globalassessmentoffunctioning.pdf> (DSM IV-TR)
- Brief Symptom Inventory
<http://www.iprc.unc.edu/longscan/pages/measures/Ages5to11/Brief%20Symptom%20Inventory.pdf> (Shacham et al. 2008)
- Patient Health Questionnaire (PHQ)-9
<http://www.treatmenthelps.org/treatmenthelps/PHQ9.pdf> or the PHQ-2
http://www.cqaimh.org/pdf/tool_phq2.pdf (Monahan et al. 2009)
- Short Form Health Survey
http://www.rand.org/health/surveys_tools/mos/mos_core_36item_survey_print.html

seling and testing and prevention of mother-to-child transmission (PMTCT), and should be linked to community-based health and social service programs to have maximum benefit and sustainability.

- **Peer support counselors, especially those who** are volunteers, who should be recognized and valued for their contributions to the care and support of PLHIV.

Co-occurring mental health and substance abuse Disorders

Both mental health and substance use disorders are commonly associated with HIV infection. Substance abuse and dependence are complex physiological, social, and behavioral disorders that often coexist with

psychiatric illness, as well as co-morbid medical conditions. Thus it is imperative to screen, identify, and treat both mental health and substance abuse/dependence problems as early as possible in the continuum of HIV care and support. The screening of substance users for co-occurring psychiatric illness is an integral part of any medical intervention, particularly in HIV care and treatment, as is the screening of the mental health patient for the use and abuse of drugs and alcohol.

In diagnosing both co-occurring mental health and substance use disorders, it may be difficult to determine which co-morbidity—substance abuse, mental illness, or HIV—to address first. However, medical treatment of the substance use disorder may be necessary to create sufficient patient stability to begin the treatment of other conditions. In addition, substance abuse treatment can be a helpful intervention as an HIV prevention strategy. When possible, combining mental health services and substance abuse treatment can enhance the medical outcomes in those with HIV disease and co-occurring disorders. However, this is not always possible, so HIV clinicians should become familiar with community mental health and substance abuse resources to provide referrals to care and treatment services for individuals with co-occurring mental health and substance use disorders.

Early identification and treatment of drug or alcohol use disorders are essential in both the care and treatment of PLHIV and for the prevention of HIV transmission due to risky drug and sexual behavior. WHO has published guidelines on the use of the Alcohol Use Disorders Identification Test (AUDIT), which is a short 10-item questionnaire designed specifically for use by primary care providers (Babor et al. 2001) in screening for harmful or hazardous alcohol use. A similar 11-item, self-administered instrument called the Drug Use Disorders Identification Test (DUDIT) is also available for screening for drug-related problems in select populations (Berman et al. 2005). Cross

training of mental health, substance abuse, and HIV treatment staff is critical in programs without integrated mental health, substance abuse treatment, and infectious disease care and treatment to provide the necessary knowledge base and skills to manage the complex care needed and the problems that arise in patients with triple diagnosis. Coordination of care and treatment is fundamental to good clinical outcomes.

Brief interventions such as advice and brief counseling delivered by physicians and primary health workers have been shown to be effective in reducing hazardous drinking (Patel et al. 2007). Stepped-care and collaborative models for integrating drug and psychological treatments help improve treatment adherence (Patel et al. 2007). The benefits of treatment can be enhanced by psychosocial support through community-based services. An example of an innovative program for IDUs is the Family Health International (FHI) program in Vietnam combining drop-in centers that provide a variety of support and preventive services and the ECHO peer education model, which is far more effective than traditional outreach programs in engaging IDUs in risk-reduction activities (FHI 2009).

A recent review of treatment interventions of select mental disorders in low-income and middle-income countries indicates that depression can be effectively treated with low-cost antidepressants or psychological interventions such as cognitive-behavior therapy and interpersonal therapies (Patel et al. 2007). A number of studies have shown that mild to moderate depression in PLHIV can be effectively treated with a combination of psychotropic medications and psychosocial support (Olatunji et al. 2006; WHO 2008a; Baingana et al. 2005; Hartzell et al. 2008; Leserman 2008). More specifically, antidepressant medications (Dalessandro et al. 2007) and psychotherapeutic approaches such as cognitive behavioral therapy (Crepaz et al. 2008) and interpersonal therapy (Verdeli et al. 2003; Bolton

et al. 2003) have shown some promise in improving HIV treatment adherence and clinical outcome. Since it is beyond the scope of this technical brief to review the treatment of co-occurring mental health and substance abuse problems in the context of HIV, readers are referred to modules 3 and 4 of the WHO HIV/AIDS and Mental Health series (see Resources on page 14), which provide an excellent review of the main modalities for psychopharmacologic and psychotherapeutic approaches to mental health disorders associated with HIV infection (Counos et al. 2005; Catalan et al. 2005).

Palliative care

Palliative care includes not only the management of physical symptoms associated with advanced disease but also depression, suicidal thoughts, and other psychological problems. It also includes spiritual support and bereavement counseling and includes the client and his or her support environment. The main components of palliative care include:

- Clinical support, including pain and symptomatic relief, preventive care such as antibiotic prophylaxis for OIs, nutritional support, and clean water.
- Social care that involves community mobilization, legal services, and support for caregivers and affected households.
- Mental health services, including counseling, support groups, and bereavement preparedness.
- Positive prevention to reduce risk of transmission.

In countries with a high burden of HIV infection, palliative care is best conducted as part of a comprehensive care and support package that can be provided in hospitals and clinics or at home by community caregivers and family members. UNAIDS has published a technical update on the provision of palliative care in

HIV/AIDS that can guide program planners in developing palliative care services (UNAIDS 2000a).

Care for the caregiver

The burden of care for PLHIV usually falls on family members and community caregivers, especially in the advanced stages of disease. A high burden of care is often associated with depression and poor health among the caregivers themselves (Orner 2006; Kipp et al. 2007; Kipp and Nkosi 2008). Discrimination and stigma affect caregivers as well as PLHIV, leading to greater social isolation and lack of social support (Mwinituo and Mill 2006; Thomas 2006). In addition to practical assistance with the physical demands of caring for a terminally ill person, caregivers need the same kind of psychosocial and mental health support, since they themselves may be at risk for depression and other mental health problems. Informal social networks and other family and community members were cited as primary sources of support for family caregivers in rural communities in Africa (Chimwaza and Watkins 2004; Campbell et al. 2008).

While there is little information about formal support programs for family caregivers in resource-limited countries, community mental health services, such as those established in Guinea-Bissau (De Jong 1996) and Nigeria (Eaton and Agomoh 2008) have shown that community health care workers can be trained to identify and treat persons with mental health problems, and are potential resources for PLHIV and their caregivers. Local church groups and faith-based organizations (FBOs) can also play an important role in providing both practical and spiritual support for caregivers with terminally ill family members. Structured grief and loss programs have been shown to be helpful at the community level and can be provided by trained counselors or community health care providers (Williams 2008; Akinsola 2001). An important strategy for strengthening the local response to the needs of family caregivers is to include them as legiti-

mate clients in HIV/AIDS programs and policies and thereby garner the needed resources to address their support needs throughout the continuum of HIV care and support (Kipp et al. 2007).

Framework for integrating mental health in HIV care and support

The primary goal of a comprehensive approach to mental health is to provide an integrated system of care that links people to needed services at the point they need them in the continuum of HIV care and support. WHO has developed a pyramid framework that provides a structure for organizing the optimal mix of mental health services from a public health perspective (WHO 2007b). Presented below is a modified version of the WHO pyramid of care that intersects with the HIV continuum of care to illustrate

the points where mental health services can be integrated into the different levels of the health care system to meet the special needs of PLHIV throughout their treatment and care. Table 1 in the Annex (page 11) presents a three-tiered framework summarizing the key mental health issues and related interventions at the pre-ART, ART, and advanced disease/end-of-life phases of HIV care as described above (the examples of mental health issues and interventions in the table are meant to be illustrative, not exhaustive).

Level I refers to psychiatric services provided in general hospitals or specialized psychiatric care facilities. Level II refers to mental health services provided in a primary care setting by general practitioners. Level III refers to organized community mental health or psychosocial support services provided through district

BOX 3: IMPORTANT ELEMENTS IN THE INTEGRATION OF MENTAL HEALTH SERVICES INTO PRIMARY CARE (KELLY AND FREEMAN 2005)

- **Policy, strategy, planning, and resourcing:** Mental health services need to be established as a matter of national policy as a required intervention modality in ART programs.
- **Drug supply and management:** Ensuring continuous drug supply and inclusion of essential psychotropic drugs on essential drug lists is critical.
- **Referral systems:** Referral systems need to be developed to deal with conditions requiring more specialized attention.
- **Support for mental health workers:** It is important to build in peer support, supervision, mentoring, and skills-building activities to ensure quality and prevent burn-out.
- **Funding:** Funding is needed to cover the cost of drug supplies, human resources, facilities, training and supervision, printing of materials and guidelines, etc.
- **Human resource development:** Development of a model human resource strategy for mental health/ARV interface is a critical step in the integration process.

health centers in partnership with NGOs, community-based organizations (CBOs), faith-based organizations (FBOs), and other informal support systems. The underlying assumption is that fewer people will need specialized psychiatric services at Level I, while mental health services at Levels II and III can provide a wider range of psychosocial support services to PLHIV through existing health care systems. Integration of mental health services into primary care is the most viable way of providing a full range of mental health services for PLHIV throughout the continuum of HIV care (WHO 2008b). WHO sees integration as a high priority and has developed guidelines on important elements in the integration of mental health services into primary care (Kelly and Freeman 2005; WHO 2008b). These are summarized in Box 3 (see page 9).

CHALLENGES

Human resource development

Given the scope of the HIV epidemic and the demonstrated need for addressing the mental health needs of people living with and affected by HIV, the capacity of health care systems to respond is of major concern. At the recent experts' forum in Cape Town, South Africa, the World Federation for Mental Health (WFMH) identified the lack of adequately trained mental health providers as a major issue in the capacity of health care systems to respond to the impact of the HIV epidemic (Griffin 2008; Anderson 2005). WHO has recognized this challenge and published a practical set of guidelines and tools to help countries develop human resources in mental health. The guidelines include strategies for human resource planning, management, training, and policy development (WHO 2005a). WHO has also published a report on integrating mental health into primary health care as an effective way to address human resource needs. The report includes a description of the core competencies needed to perform essential mental

health services and describes different types of training and education models that could prepare the health work force for these roles (WHO 2008b).

Building linkages and partnerships

To integrate mental health services across the continuum of HIV care, systems and mechanisms must be in place to build strong linkages among the various levels of mental health care and among public and private, formal and informal sources of care. There is a need to harmonize the inputs of different partners so that efforts are complementary and relevant to PLHIV care and support needs. Partnerships between communities and institutions within a catchment area should be developed in such a way that an effective referral system between VCT services, basic hospitals and health centers, and home care services is strengthened. A recent study in South Africa showed that 70 percent of civil society organizations (CSOs) and FBOs were involved in providing care and support to PLHIV, including supportive counseling, emotional care, support groups, and care/support to families and caregivers of PLHIV (Birdsall and Kelly 2005). These findings suggest that CSOs and FBOs play a major role in providing "front-line" care and support to PLHIV and their families and are essential partners in the continuum of care for PLHIV.

While a significant gap still remains between what we know about the mental health and psychosocial needs of PLHIV and what is being done to address these issues, there are promising approaches to addressing this treatment gap. More in-depth study of these programs can help us better understand the mental health needs of PLHIV and identify programmatic approaches that can be effective in addressing those needs in resource-limited settings.

ANNEX

TABLE I. FRAMEWORK FOR INTEGRATING MENTAL HEALTH IN HIV CARE AND SUPPORT				
HIV Continuum of Care	Mental Health Issues	Related Interventions		
		Level 1	Level 2	Level 3
		Psychiatric care and treatment	Mental health services through primary health care/HIV clinics	Community support programs/services
PRE-ART PHASE				
A. Counseling and testing	<p>Lack of access to VCT in mental health populations</p> <p>Emotional reactions to test results</p> <p>Stigma and discrimination, non-disclosure</p> <p>Risky sexual behavior and risky drug and alcohol use</p>	Targeted HIV screening with mental health population	<p>Post-test clubs</p> <p>Screening and brief intervention to address mental health and substance use</p>	<p>Stigma reduction programs</p> <p>Post-test peer support groups with focus on mental health/drug and alcohol use</p>
B. Initiation of care	<p>Anxiety and depression</p> <p>Social consequences of stigma (isolation, marginalization)</p> <p>Drug and alcohol use</p>		<p>Screening for depression</p> <p>Screening for drug and alcohol use; brief intervention and therapies for risky drug and alcohol use; treatment for abuse and dependence</p> <p>Psychosocial support groups</p>	Community support and recovery groups

TABLE 1. FRAMEWORK FOR INTEGRATING MENTAL HEALTH IN HIV CARE AND SUPPORT

HIV Continuum of Care	Mental Health Issues	Related Interventions		
		Level 1 Psychiatric care and treatment	Level 2 Mental health services through primary health care/HIV clinics	Level 3 Community support programs/services
C. Retention in and maintenance of care	Treatment adherence and drop out Risky behavior Co-occurrence of mental health and substance abuse problems	Assessment and treatment of mental health and substance abuse problems (pharmacologic and psychotherapeutic interventions)	Adherence counseling Psychoeducational approaches to reduce risk of transmission Screening and referral of mental health problems as needed Management of mild/moderate depression and anxiety disorders (see WHO mental health series) Psychosocial support groups	Community mental health services provided by nurses, community health workers
ART PHASE				
D. Initiation of ART	Access to ART Stigma and discrimination Drug and alcohol use/abuse		Adherence counseling Psychosocial support groups Screening and brief intervention for hazardous drinking/drug use; treatment for abuse and dependence	Peer/community support and recovery groups

TABLE I. FRAMEWORK FOR INTEGRATING MENTAL HEALTH IN HIV CARE AND SUPPORT

HIV Continuum of Care	Mental Health Issues	Related Interventions		
		Level 1 Psychiatric care and treatment	Level 2 Mental health services through primary health care/HIV clinics	Level 3 Community support programs/services
E. Maintenance on ART	Treatment adherence and drop out Risky behavior Co-occurrence of mental health and substance abuse problems Side effects and neurocognitive changes	Assessment and treatment of mental health and substance abuse problems (pharmacologic and psychotherapeutic interventions) Assessment and management of side effects and neurocognitive changes	Adherence counseling Psychoeducational approaches to reduce risk of transmission Screening and referral of mental health and substance abuse problems as needed Management of mild depression and anxiety disorders Psychosocial support groups	Community mental health services provided by nurses, community health workers Peer/community support and recovery groups
ADVANCED DISEASE/END-OF-LIFE PHASE				
F. End-of-life care and support, palliative care	Physical decline and increased symptoms Depression and suicidal thoughts Stigma and discrimination	Management of major depression and suicidal risk	Palliative care Psychosocial and family support	Home care and community-based care
G. Care for the care-givers	Burden of care on family members (typically women) Grief and loss		Grief counseling Management of mild/moderate depression and anxiety	Respite care Grief and bereavement support Spiritual support Social and legal support

RESOURCES

The following resources (with hyperlinks) provide up-to-date information, guidelines, tools, and recommendations for addressing the mental health needs of PLHIV. For an interactive version of this brief, visit www.aidstar-one.com.

1. WHO Mental Health and HIV/AIDS Series, 2005
 - a. Module 1: Organization and Systems Support for Mental Health Interventions in Anti-retroviral (ARV) Therapy Programmes
http://whqlibdoc.who.int/publications/2005/9241593040_eng.pdf
 - b. Module 2: Basic Counselling Guidelines for Anti-retroviral (ARV) Therapy Programmes
http://whqlibdoc.who.int/publications/2005/9241593067_eng.pdf
 - c. Module 3: Psychiatric Care in Anti-retroviral (ARV) Therapy (for second level of care)
http://whqlibdoc.who.int/publications/2005/9241593083_eng.pdf
 - d. Module 4: Psychosocial Support Groups in Anti-retroviral (ARV) Therapy Programmes
http://whqlibdoc.who.int/publications/2005/9241593105_eng.pdf
 - e. Module 5: Psychotherapeutic Intervention in Anti-retroviral (ARV) Therapy Programmes (for second level of care)
http://whqlibdoc.who.int/publications/2005/9241593091_eng.pdf
2. World Health Organization: Integrating Mental Health into Primary Care—A Global Perspective (WHO 2008b)
http://www.who.int/mental_health/policy/Mental%20health%20+%20primary%20care-%20final%20low-res%20140908.pdf

3. UNAIDS: Technical Update: AIDS Palliative Care (UNAIDS 2000a)
<http://www.hospicecare.com/resources/pdf-docs/unaidspallcare-aids.pdf>

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