High-Impact HIV Prevention
Capacity Building Assistance
for Healthcare Organizations

HIV and Mental Health

The Centers for Disease Control and Prevention (CDC) reports that:

25% of adults in the U.S. suffer from a mental illness

People living with HIV/AIDS (PLWHA) are at high risk of developing mental illness, and likewise, substance abusers are at high risk of HIV transmission.

50% will develop one during the course of their life[1].

50% of those in HIV care are estimated to have a comorbid mental illness[2,3].

Mental health status can both directly and indirectly impact disease progression of PLWHA[3]. Studies have found that the severity and frequency of psychiatric comorbidities are associated with greater disease severity and adverse impacts on quality of life[4]. For PLWHA, there are various reasons for the co-occurrence of a mental illness.

- One common reason is due to the psychological burden of an HIV diagnosis on mental health[5].
- The financial burden of an HIV diagnosis can lead to loss of employment or the sale of assets to pay for treatment[5].
- Other negative social consequences brought by an HIV diagnosis include being shunned by family, facing restricted options for marriage or employment, and stigma, all of which may contribute to the high incidence of depression in PLWHA[5].

On the other hand, those suffering with mental illness may be more prone to HIV infection through participation in risky behaviors. For example, those who have used intravenous drugs are over 30 times more likely to be or become HIV-positive than those who have never done so[6]. The comorbidity of HIV and mental illness demands different protocols than PLWHA in good mental health[7,8]. Working with the complex needs of this population is crucial for the health of these patients and of the public.

Psychiatric Comorbidities in PLWHA

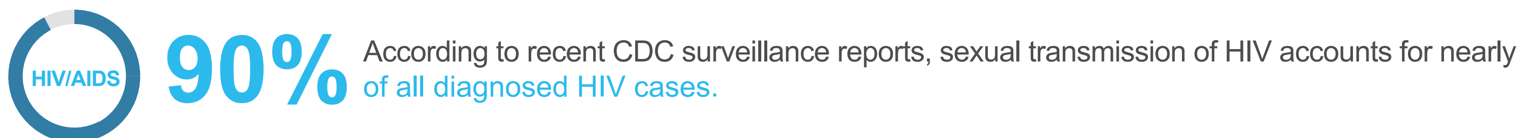
PLWHA experience an array of psychiatric illnesses that are comorbid with their HIV infection. The most common of which are depression and substance abuse[9]. An estimated **20-30%** of PLWHA have been diagnosed with or have experienced symptoms of depression[4]. Independent from depression, one-third of PLWHA had used illicit drugs in the month prior to diagnosis, and 24% of all PLWHA have been recommended treatment for alcohol or drug abuse[6].

Depression is the most common mental health disorder in the overall population as well as among PLWHA, and it is often undiagnosed[10,11]. Providers sometimes fail to identify the symptoms of untreated clinical depression, and instead view these signs as “expected reactions” to dealing with a chronic illness, such as HIV. However, when depression is diagnosed, and the treatment is involved in a PLWHA service plan, treatment of depression and HIV together have a mutually beneficial relationship. HIV treatments have been associated with decreased depression, and depression treatment enhances antiretroviral medication adherence[12,13].

Substance abuse is not only a risk factor for HIV transmission, but can also be part of a "syndemic" of violence, HIV, and substance abuse. While people who inject drugs (PWID) accounted for 9% of HIV diagnoses in 2016, they are at high risk of transmitting HIV to others through the risky behavior of sharing needles and other injection equipment[14]. This patient population has great treatment and prevention challenges, as studies have reported that in cities, 56% of PWID living with HIV are homeless and 16% had no health insurance in the last year[14]. Finally, the substance abuse, violence, and HIV/AIDS syndemic has been well documented in poor urban women[15]. Clearly, specialized resources are necessary to improve the health of these patients.

Impact on Care

Impaired mental health often corresponds to poor antiretroviral adherence and increased levels of engaging in risky behavior[16,17]. Both of these factors can lead to an increased risk of morbidity and mortality from HIV/AIDS.

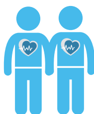


Studies have found that those with severe mental illnesses have an increased likelihood of engaging in risky sexual behaviors[2]. In addition, fear of stigma may cause a person to avoid disclosing their HIV status when engaging in unsafe sexual behavior[18].

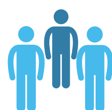
Research has shown that symptoms of depression and psychological distress are associated with lower adherence[2]. A potential consequence of decreased antiretroviral adherence is the development of a drug-resistant strain of HIV and increased risk of transmission. There are limited lines of treatment against resistant strains.

Finally, co-treatment of multiple pathologies is difficult to achieve in practice. Due to the socioeconomic disadvantages of many PWID, access to substance abuse treatment may be limited or absent[14]. It has been reported that only 33% of PLWHA with both psychiatric disorders, such as anxiety or psychosis, and substance abuse disorder received treatment for both. The rest of the study participants received only substance abuse treatment (15%), only mental illness treatment (26%), or no treatment in addition to HIV treatment (25%)[19]. The researchers recommended integration of care at a single site to increase the proportion of individuals receiving adequate care.

Best Practices for Improving the Mental Health of PLWHA



In all PLWHA, antiretroviral therapy is recommended and critical for patient health and wellness. However, even when the pathology of the disease is controlled, the mental health of the patient needs to be addressed. A systematic review of interventions in individuals with HIV and depression found that HIV-specific behavioral interventions, specifically those that incorporated a cognitive-behavioral component or stress management component, were generally effective in improving depression[13].



Perceived social support is an integral aspect of mental health. Qualitative evidence suggests that social relationships among PLWHA facilitate and improve treatment adherence and an increased sense of empowerment[3,8]. The World Health Organization (WHO) recommends intersectional strategies, such as the socio-economic empowerment of women and the inclusion of mental health programs in everyday life settings, such as in school or at work[20].

Moreover, the unique health needs of PLWHA with mental illness require multifaceted care. Initiatives to coordinate this treatment in order to achieve both higher access and more effective services have been labeled as integration of care.

Integration models place HIV treatment and mental health care (including substance abuse) in the same location, in multiple sites in a network, or as coordinated by a single case manager. A significant review that investigated these integration models found that integrated care coordinated by a case manager was most suitable for lower and middle income patients[21].

Mental health and substance abuse treatment can also be used as HIV prevention. A meta-analysis investigating the effect of methadone treatment on HIV risk behaviors saw that in the vast majority of studies, substance abuse treatment was associated with a decrease in risk factors in these PLWHA[22]. Pharmacological treatment, in addition to behavioral treatment for substance abuse, has also been shown to decrease sex-related and drug-related (e.g., sharing needles) HIV risk behaviors in PLWHA; importantly, occurrence of the risk behaviors was usually lower in the group that received behavioral treatment and pharmacological treatment than in the group that received only pharmacological treatment[23].

Research has shown that treatment of depression in PLWHA through telemedicine also decreases sex-related risk behaviors[24]. By decreasing HIV risk behaviors through mental health care, prevention is increased. Providers of PLWHA that have comorbid substance abuse or mental illness should seek to link these patients to care not only for their own health and wellbeing, but also to help stop the spread of HIV.

HIV and mental health is a complex issue that requires a multidisciplinary approach in order to improve patient outcomes. The National HIV/AIDS Strategy: Updated to 2020 (NHAS) details actions to support and strengthen an integrated and patient-centered care of HIV and related screening, substance abuse, mental health, intimate partner violence, viral hepatitis, and linkage to basic services[25].

While there are limitations in the availability of existing guidance for mental health screening in PLWHA, NHAS has identified mental health as a priority. As a result, the NHAS details specific plans for agencies such as the Substance Abuse and Mental Health Services Administration (SAMHSA), CDC, Health Resources and Services Administration (HRSA) and other agencies to develop further guidance for screening in high-risk populations. As part of achieving the goals of NHAS, SAMHSA recommends co-located HIV and mental health care and an integration of this care for a more holistic approach. Community-based organizations, advocacy groups, educational institutions and organizations, and health care delivery organizations all have separate but complementary roles to achieve each of these goals[25].

Building Organizational Capacity

The CDC-funded HIV CBA center at CAI can help conduct an assessment of your organizational needs, identify resources, plan for implementation and provide you with training and capacity building support to ensure successful programs for high-impact HIV prevention. The HIV CBA Center is able to shape trainings and technical assistance to the specific needs of your healthcare organization. Our approach includes capacity building of the providers and support staff in areas such as:

- Behavioral Change & Motivational Interviewing
- HIV Treatment Adherence
- Anti-Retroviral Treatment and Access to Services (ARTAS)
- Identifying Early Red Flags for Abandoning Care & Poor Adherence
- PrEP – Pre-Exposure Prophylaxis

For more information on how to obtain our capacity building services to incorporate into your HealthWare Organization, visit www.CBA.CAIGlobal.org.

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