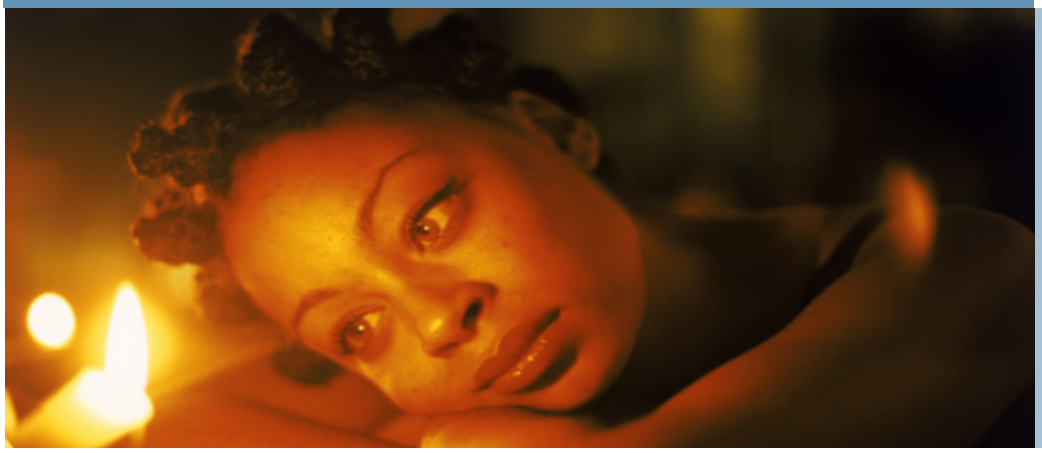
TLALELETSO

BOTSWANA-UPENN PARTNERSHIP



UPDATES IN HIV: MENTAL HEALTH
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UPDATES IN HIV:

DIAGNOSING & MANAGING ILLNESS IN PEOPLE LIVING WITH HIV

People with mental illness are the "invisible" risk group for HIV infection. Numerous studies have shown that HIV prevalence is higher among people with mental health problems compared to the rest of the population[1,2]. Unfortunately, mental illness can have significant adverse effects on health for people living with HIV, leading to decreased adherence, increased losses to follow up, reduced quality of life and poorer health outcomes.

Evidence suggests that people with mental health problems also have less access to HIV services, or at least have worse health seeking behavior. This is particularly concerning since the overall contribution of mental illness to the global burden of disease is growing.[3]

Early diagnosis and effective treatment of mental illness can significantly improve the quality of life for people living with HIV. In this edition of Tlaleletso we review how mental illness presents in people living with HIV, as well as strategies to treat it.

MENTAL ILLNESS IN SOUTHERN AFRICA

In Botswana, depression is highly prevalent among people living with HIV. A recent study of people living with HIV found that up to 25% of women and 31% of men were depressed[4]. Evidence suggests that mental illness is a significant problem in similar settings across southern Africa:

- A study in Johannesburg found 56% of the people with HIV were depressed (and this was unrelated to subjects' immune status)[5]. While in another South African study, 56% of people with HIV had at least one psychiatric disorder at baseline, and 48% of patients had at least one psychiatric disorder at 6 months.[6]

- In Zimbabwe , 71.3% of the people with HIV were suffering from mental health complications compared to 44.3% of those who were HIV-negative (OR=3.12, 95% CI=1.64-5.95, P=0.0002)[7]. The most common psychiatric symptoms were "emotional withdrawal, depressed mood, suspiciousness, apparent sadness, reduced sleep and suicidal thoughts (especially among women)."

MENTAL ILLNESS INCREASES THE RISK OF HIV

Many studies have shown that there is higher HIV infection rates in the mentally ill population, which seems to be driven by high-risk behavior[8]. Mental illness is associated with both risky sexual behavior and substance abuse.[9,10] Misuse of alcohol and other drugs among people with mental illness, is also associated with a significant risk of HIV acquisition[10]. Mental illness is associated with inconsistent condom use and multiple sexual partners over a 12-month period.[8]

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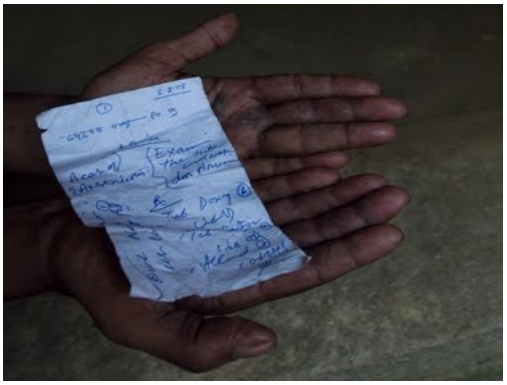
MENTAL ILLNESS WORSENS HIV OUTCOMES

Having a diagnosis of HIV has been found to worsen depression in North America and Europe[12,13]. In turn depression worsens HIV-related health outcomes. Depression has been associated with steeper declines in CD4 counts[14,15], greater risk of developing HIV-dementia[15], worse anti-retroviral medication adherence[16], and more rapid progression to AIDS[17,18]. However, helping patients with psychiatric disorders to come regularly to clinic visits and consistently adhere to their antiretroviral regimen is associated with significant improvements in mental health[19].

HIV AND SUBSTANCE ABUSE

While 10% of HIV infections worldwide are estimated to be attributable to injection drug use[20] in Botswana injection drug accounts for only a small fraction of all HIV transmissions. However, alcohol abuse is significant risk factor for HIV acquisition in southern Africa[21], and especially in Botswana[22]. Elevated rates of alcohol abuse (*defined as persistent alcohol use despite persistent physical, social and interpersonal problems related to alcohol*) are also reported in other African countries. For example, in Kenya, the prevalence of hazardous alcohol use was 54% in the HIV-infected population[23], whereas in Uganda, alcohol use was associated with twice the risk of being infected with HIV[23].

It is vital for doctors and nurses to discuss alcohol use in the IDCC, as it is associated with unprotected sex and other HIV risk behaviors, which can increasing the risk that they will infect others.



DIAGNOSING MENTAL ILLNESS

Patients with mental disorders can present in one of two ways:

- Abnormal behavior, including confusion, strange or frightening behavior. Patients may appear unkempt. They may have odd ways of relating to others. Speech may be disorganized or strange. Patients may report or respond to hallucinations or delusions. These patients require URGENT evaluation, to rule out delirium. Patients with persistent abnormal behavior may have schizophrenia.
- Sad or anxious states of mind. Often these patients feel unable to cope with activities of daily life. They may also have unexplained somatic symptoms, such as aches and pains, palpitations, gastrointestinal abdominal discomfort and shortness of breath. If on HAART, they may present with elevated viral loads and inability to adhere to their medications. If depression is suspected perform a simple screening questionnaire, the **PRIME-MD PHQ2** (see below).

Strategies to improve outcomes include:

-Developing good rapport with patients, so that he/she feel secure enough to disclose how much alcohol they are consuming

-Establishing strong links between the IDCC and social services and mental health providers for referral of patients with alcohol/drug abuse problems[24]

- For individuals who are unable to contemplate or achieve abstinence from alcohol/drug use, the use of directly observed antiretroviral therapy has been associated with improved clinical outcomes.[25] However, this strategy is very demanding for both patients and clinicians.

HIV AND DEPRESSION

Diagnosing and managing depression in people living with HIV is challenging. The physical symptoms of depression can look similar to physical symptoms of HIV (e.g., weight loss, low energy, anorexia). Depressed mood can also be related to HIV-related psychological stressors (e.g. grief).

However, it is vital to diagnose depression promptly: research has shown that people with depressive symptoms are more likely to be non-adherent [25] with their HIV medications and more likely to have worse HIV outcomes[13]. On the other hand, several studies have demonstrated that treatment of depression has a significantly beneficial effect on HAART adherence and overall morality. A review of 1713 American patients found that depressed patients treated with antidepressants were more adherent to HAART than those with untreated depression.[26]

The association between depression and poorer prognosis is probably not only the result of adherence issues. The molecular changes that occur in depression are similar to the brain changes associated with HIV infection[27]. Initiation of an antidepressant is appropriate when persistent depression symptoms are noted. Tricyclic antidepressants such as amitriptyline can be prescribed. However, these drugs have many side effects and should not be given to patients with significant suicide risk. Serotonin Selective Reuptake Inhibitors, such as **fluoxetine** and sertraline, are preferred when available.

ANXIETY AND HIV

Anxiety disorders include a large number of conditions characterized by abnormal or inappropriate feelings of worry or panic, with heart palpitations, sweating, tensed muscles, agitation, nervousness but without any immediate reason for such a reaction. Other anxiety disorders result in an entirely different emotional response, such as social phobias or agoraphobia (defined as anxiety about, or avoidance of, situations where help may not be available or where it may be embarrassing or difficult to leave the situation in the event of panic symptoms or a full blown panic attack.)

Anxiety may manifest after a negative life event, such as conflict, HIV diagnosis, or related negative events, such as rejection and stigma, or losing a loved one to AIDS. There is increasing evidence that anxiety, posttraumatic stress disorder and panic attacks exacerbate non-adherence to HAART[29]. Nevertheless, there is little research that has assessed whether these disorders are associated with immune and virologic responses to treatment[30]. One recent study in Ethiopia found that anxiety and hopelessness was a major predictor of non-readiness to initiating HAART. In turn, non-readiness was strongly associated with non-adherence, once HAART had been initiated[31].

SCHIZOPHRENIA AND HIV

Schizophrenia is a thought disorder characterized by abnormal behavior described earlier: disorganized speech, perceptual abnormalities, delusions, and hallucinations sometimes accompanied with apathy, withdrawal from social interaction, and a loss of will. The individual may believe that external forces have taken control of their thoughts and actions, or that their thoughts are being broadcast.

These patients experience many difficulties accessing healthcare services because of cognitive deficits and poor social skills. They also experience significant stigma and discrimination when accessing clinical care. It is vital that anyone suspected of having schizophrenia be evaluated by psychiatric specialists at Sebrana Hospital. If such patients are very disturbed or aggressive it may be appropriate to send them for immediate inpatient assessment at Princess Marina and then transfer to Sebrana. Psychiatry specialists at Sebrana can be contacted at telephone: **5332100.**

HAART & NEUROPSYCHIATRIC ADVERSE EFFECTS

Several antiretroviral drugs are associated with neuropsychiatric adverse effects. However, Efavirenz is the most frequent offender. It is associated with a wide range of symptoms: the most common are sleep disturbances, ranging from insomnia to vivid dreams and night terrors[32]. Serious psychiatric adverse experiences, including severe depression, suicidal ideation, aggressive behavior and paranoid and manic reactions have also been reported in a small number of patients[33].

Studies suggest that individuals with a history of mental health problems may be at increased risk of developing such complications. Therefore, vigilance for development of psychiatric problems is advised in individuals with a history mental illness. The neuropsychiatric adverse effects are more pronounced when Efavirenz is taken as a single drug, rather than when co-formulated with other drugs. These side effects are also worse if the drug is taken with a fatty meal but usually resolve after 1-2 months

DIAGNOSING DEPRESSION - PRIME-MD PHQ2

A quick and easy to use screening tool for identifying patients at risk for depression is the PRIME-MD PHQ2 tool. It involves two simple questions: *'**Over the last two weeks how often have you been bothered by any of the following problems:**'*

1. **Little interest or pleasure in doing things**
    a. 0=Not at all
    b. 1=Several days
    c. 2=More than half the days
    d. 3=Nearly every day
2. **Feeling down, depressed or hopeless**
    a. 0=Not at all
    b. 1=Several days
    c. 2=More than half the days

The higher the score, the more likely the patient is to have a depressive disorder. For individuals with a positive score (i.e. score ≥1) it is vital to investigate further. A simple diagnostic tool that has been validated among people living with HIV is the PHQ9 – This questionnaire is available in many languages, including many African languages.

TREATING DEPRESSION

Identify and effectively treat depressive symptoms
Consider antidepressants when:

- Symptoms are severe and persistent
- Presence of significant agitation and/or subjective distress
- Reduced ability to perform activities of daily living
- Risk of suicide
- Medications have helped for the same symptoms in the past
- Symptoms are affecting adherence

Proper dose and length of treatment are essential. It often takes 6-8 weeks before antidepressants start to work. Therefore it is important to consider prescribing the medications for at least 3 months. Antidepressants should not be stopped abruptly. It is always important to taper the dose gradually.

- **Amitriptyline:** starting dose is 50-150mg given at night. Increase by 25-50mg/day every 2/3 days when initiating therapy to avoid side effects. Dose may be gradually increased up to 300 mg/day. Side effects include dry mouth, drowsiness, constipation and blurred vision. Rarely amitriptyline causes hypotension, syncope, seizures and ataxia.
- **Fluoxetine**: starting dose is 20mg. It is possible to increase the starting dose after several weeks. Maximum daily dose is 80 mg/day. Side effects include nausea, headache, insomnia, anxiety and depression. Rarely fluoxetine causes worsening depression and suicidality.

[It is important to avoid drug-drug interactions between HAART and antidepressants. Protease Inhibitors, such as Aluvia, may lead to elevated blood levels of both amitriptyline and fluoxetine.]

Medication	Neuropsychiatric Adverse Effect (s)
Zidovudine (AZT)	Insomnia, agitation, mania, depression
Didanosine (ddI)	Insomnia, agitation, mania, depression
Abacavir	Fatigue, depression, suicidal ideation, headache, psychosis
Nevirapine	Vivid dreams/nightmares, depression
Efavirenz	Depression, suicidal ideation, insomnia, vivid dreams/nightmares, anxiety, psychosis, and cognitive dysfunction

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CONCLUSIONS

Levels of depression and alcohol abuse are high among people living with HIV in Botswana. The prevalence of other psychiatric conditions, such as schizophrenia, among people with HIV is not known.

Improving HIV care for patients with mental illness should involve screening for substance abuse and depressive symptoms. Optimal management for mental illness depends on the severity of the disease.

Adherence is a significant challenge for many patients with psychiatric illness and these individuals should receive intensive support from all members of the IDCC multi-disciplinary team. Patients with persistent psychotic symptoms should be referred for psychiatric evaluation at Sebrana Psychiatric referral hospital in Lobatse, Tel: 532100.

SUMMARY

- Mental illnesses such as depression, anxiety disorders, psychotic disorders, and substance/alcohol abuse are prevalent in the HIV-infected population and can affect the clinical management of these patients.
- There is an increased likelihood of high-risk behavior such as multiple sex partners, sex without condoms, and substance abuse among individuals with mental illness, increasing their vulnerability to HIV infection and also the likelihood of infecting others if already infected themselves.
- Alcohol and substance abuse in HIV-infected patients must be addressed because of the association with unprotected sex and other high-risk behaviors. This can increase the likelihood of acquiring a drug-resistant strain and increase HIV transmission risk to their partners
- Untreated mental illness can complicate the management of HIV disease and, if severe, may interfere with an individuals' ability to engage effectively with the healthcare system. Mental illness may worsen difficulties with adherence to antiretroviral regimens, affecting the response to treatment, prognosis, and mortality.
- Individuals with mental illness may face additional barriers to accessing care such as stigma and discrimination.
- Interventions to assist HIV-infected patients with depression include screening for the symptoms of depression and referrals to the most appropriate mental health care professional, if necessary.
- Untreated anxiety, panic, and posttraumatic stress disorders have been shown to exacerbate non-adherence to antiretroviral regimens.

UPCOMING LECTURES

June	Guidelines Update: Overdose
July	Topics in HIV: Tuberculosis Co-infection
August	Guidelines Update: Acute Kidney Injury
Sept	Topics in HIV: HIV and Aging
Oct	Guidelines Update: Acute Resp Distress
Nov	Topics in HIV HIV and Cancer
Dec	Guidelines Update: Acute confusion

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Got a clinical question about a complicated medical patient or a patient with HIV?

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OR
Miriam Haverkamp
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WANT TO READ MORE? CHECK OUT THE REFERENCES BELOW:

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