





# Tips for HIV Clinicians Working with Patients Taking Psychotropic Medications

## **Psychotropic Medications**

Psychotropic medications, sometimes called psychiatric medicines, are "those medications prescribed to affect the central nervous system to treat psychiatric disorders or illnesses. They may include, but are not limited to, anxiolytic agents, antidepressants, mood stabilizers, antipsychotic medications, anti-Parkinson agents, hypnotics, medications for dementia, and psychostimulants." Psychotropic medications exert their effects largely by affecting levels of neurotransmitters such as serotonin, dopamine, and norepinephrine.

Limited public information is available about the extent of use of psychotropic medications in the U.S.; however the five most frequently prescribed include three antidepressants, one anti-anxiety medication, and zolpidem tartrate (Ambien).<sup>2</sup> Psychotropic medications are a vital component of an effective treatment plan for many psychiatric conditions. However, certain categories of psychiatric medications have a high potential for abuse and diversion, i.e., benzodiazepines and stimulants.

## **Black Box Warnings**

The packaging of some psychotropic medications contain "Black Box" warnings in which the dangers of use are emphasized. These warnings are reserved for medications that have received the highest scrutiny from the FDA due to potential adverse effects of use such as liver failure, seizure, and high abuse risk. All antidepressants contain a Black Box warning for potential increase in suicidal thinking and behavior.

## HIV and Serious Mental Illness (SMI)

Among people living with HIV (PLWH), mental, neurological, and substance (MNS) issues are common and may exceed comorbid physical conditions. Development of MNS conditions is associated with reduced antiretroviral medication adherence, lower quality of life, and worse medical and mental health outcomes.<sup>3</sup> The prevalence of HIV among people with SMI is higher in the United States than anywhere in the world other than sub-Saharan Africa.<sup>4</sup>

# Depression

Studies have shown that up to 72% of PLWH experience depression.<sup>5</sup> Untreated depression is associated with social isolation, poor diet, vocational impairment, and reduced medication adherence.<sup>6</sup> Some antiretroviral medications are associated with increased depression symptoms, i.e., efavirenz (Sustiva),<sup>7</sup> so a thorough medical and medication assessment should be conducted before issuing a diagnosis of depression. Depression is likely related to a deficit in the monoamine neurotransmitters (i.e. serotonin, dopamine, and norepinephrine), each of which is related to a characteristic group of depression symptoms.<sup>8</sup> Antidepressant medications exert their effects primarily through increasing levels of these neurotransmitters.<sup>9</sup> The major categories of antidepressants are selective serotonin reuptake inhibitors (SSRI's), serotonin/norepinephrine reuptake inhibitors (SNRI's), tricyclic antidepressants, and the dopamine/norepinephrine reuptake inhibitor bupropion (Wellbutrin).

#### Anxiety

Anxiety disorders are also very common among PLWH, ranging from 4.5%-82%. Since anxiety commonly manifests in physical symptoms, it is imperative to do a full physical and medical history prior to making an anxiety disorder diagnosis. Anxiety is also often a sign/symptom of substance intoxication or withdrawal. The major classes of anxiety medications are the benzodiazepines and the barbiturates.

# **Bipolar Disorder**

Bipolar disorder must be distinguished from HIV-associated mania or a substance-induced disorder i.e. methamphetamine-induced mood symptoms. Bipolar disorder has a strong genetic component. The most common treatments for bipolar disorder are mood stabilizers such as Lithium and valproic acid (Depakote).

#### **Psychosis**

Psychosis is relatively rare in the general population, so when psychotic symptoms are observed care should be taken to rule out possible organic causes, including physiological symptoms of HIV. Schizophrenia and other psychotic symptoms are likely caused by excessive dopamine in certain brain regions. Stimulant drugs like methamphetamine can also stimulate excess dopamine production, so a thorough drug history should be taken when a patient presents with psychotic symptoms such as paranoia and persecutory delusions. Antipsychotic medications are divided into "typical" and "atypical" categories.

## **Drug-Drug Interactions**

Many psychotropic medications, antiretroviral medications, and illicit drugs are metabolized by the same enzyme system in the liver. Medication blood levels can be increased or reduced by certain drug combinations. <sup>10</sup> This may result in antiretroviral medication insufficiency, leading to medication-resistant strains of the virus, or to psychotropic medication levels that are either sub-therapeutic or toxic.

#### **Treatment Recommendations**

It is important to integrate mental health prevention and intervention approaches into HIV primary care, both to improve outcomes and to reduce long-term costs. Specific recommendations are to use a life-course approach; use evidence-based interventions; understand the environmental factors impacting a patient; and use system-wide approaches to integrate screening and interventions into primary care settings.<sup>3</sup> Brief motivational interventions can be helpful in identifying alcohol or illicit drug use among patients. Ask patients directly about side effects and medication adherence. Assist patients in improving their health literacy around medication and drug interactions. Also be sure to refer patients to psychiatrists or other prescribers with experience treating HIV and co-occurring mental health conditions.

# References

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