



HIV MENTAL HEALTH TREATMENT ISSUES

Sleep Disorders and HIV

Why are sleep disturbances and disorders a concern for HIV+ people?

HIV+ people experience insomnia and other sleep difficulties at a greater rate than the general population. But physicians may not always recognize the seriousness of disrupted sleep in a patient's overall quality of life. Medical providers treating HIV+ patients need to take complaints of sleep difficulties seriously, because they can indicate an increased risk for depression, pain, and substance abuse.

Studies have found that 30-40% of HIV+ patients have had some difficulty sleeping in the previous year, and as many as 50% have experienced insomnia at some time in their life. Between 10-20% of patients characterize their sleep problems as constant and severe. Nearly half (45%) of the 290 HIV+ patients ages 22-77 years in a 2012 study slept less than six hours per night; 34% reported difficulty falling asleep; 56% had fragmented sleep; 20% had both problems; and only 30% were good sleepers.

A study of 1,682 women, 69% of whom were HIV+, found that HIV+ women were 17% more likely to report insomnia symptoms than HIV- women. Women ages 31-40 years experienced even higher levels of insomnia.

Sleep disorders in HIV+ people are generally treatable. It is important that physicians monitor patients for sleep disturbances, since early and effective treatment of sleep disorders can greatly lower the potential for complications.

What is insomnia?

Insomnia is the general term for the condition of getting too little, or poor quality, sleep. People with insomnia may have trouble falling or staying asleep, experience "early morning wakening," or are simply unable to experience restorative sleep. People with insomnia will often in turn experience daytime fatigue, mood disturbance, confusion, or irritability.

There are three categories of insomnia:

- **Acute insomnia** is temporary and may be caused by pain, fever, or even a stressful event unrelated to HIV. Short-term acute insomnia lasts one to two weeks and is usually associated with a stressor such as job loss.
- **Chronic insomnia** is diagnosed in patients whose symptoms have lasted three or more nights per week for at least a month. It can be linked to a variety of neuropsychological problems as well as other medical conditions.
- **Sleep disturbance**, a form of insomnia, is characterized by an increase in stage 1 sleep (when rapid eye movement, or REM, occurs) and a decrease in stage 2, or non-REM sleep.

Is sleeping too much a sleep disorder?

Hypersomnia, or excessive sleeping, can be a sleep disorder in HIV+ people, although it may be less uncomfortable for the patient than insomnia. Hypersomnia is usually found in the advanced stage of HIV disease (AIDS), when it is associated with extreme fatigue. Hypersomnia is quite serious, as it contributes significantly to excess illness and disability. There is not much data available on effective treatment of hypersomnia, although psychomotor stimulants may be helpful.

What causes sleep disturbances in HIV+ people?

Chronic insomnia often affects HIV+ people soon after infection, even though there may be no other symptoms. This may be due to anxiety or stress-related factors, or even subtle changes in sleep architecture (the pattern and stages of sleeping) caused by HIV itself.

HIV+ patients just beginning antiretroviral therapy may experience insomnia as a side-effect of the medication itself, though it often resolves as the body adjusts to the drugs. It may be difficult at this point to distinguish the causes of insomnia, as patients also may be experiencing a great deal of anxiety about the medication as well as about HIV, which can interfere with sleep.

Sleep difficulties in HIV+ people who have experienced symptoms of their illness—such as an opportunistic infection if the immune system was seriously compromised before beginning treatment—may be caused by underlying conditions associated with HIV infection, such as fever, pain, dehydration, and poor nutrition. Sleep difficulties are more prevalent for those patients with advanced HIV disease (AIDS), and may be due to HIV-related dementia.

Insomnia in HIV+ people, as in HIV- people, can also be caused by stressful life events, substance abuse, and other psychiatric conditions.

How is a sleep disturbance diagnosed?

Evaluating a patient for insomnia begins with a clinical interview with both the patient and his or her bed partner, if there is one. There are three basic steps to evaluating and diagnosing sleep disturbances:

1. Determine the duration of the sleep problem: Is it transient? Short-term (less than three days)? Chronic (at least a month)?
2. Evaluate the progression of insomnia.
3. Ask the patient about any daytime symptoms they may have (e.g., fatigue, drowsiness), or cognitive changes such as difficulties with attention.



The clinician also should:

- Ask patients how they have responded to the problem, such as whether they have tried earlier treatments.
- Get a psychiatric and medical history as well as a family history of sleep disorders.
- Have the patient complete a sleep diary or log.
- Consider a physical with lab tests, such as polysomnography, which measures brain waves during sleep to determine sleep stages and provides objective data about disrupted sleep stages and architecture.
- Be aware of the high comorbidity potential associated with insomnia from other medical and psychiatric conditions, as well as from antiretroviral medications.
- Delay treatment of the sleep disorder until any underlying conditions have been identified or ruled out.

How are sleep disturbances treated?

Insomnia can be treated with medication or by other methods. For HIV+ patients on antiretroviral therapy, drug interactions may be a concern. So the clinician may wish to start treatment with a non-drug approach to minimize complications. Establishing sleep hygiene rules is a basic example of a non-pharmacologic treatment. The first rule is for the patient to curtail time in bed so that the bed itself is primarily associated with sleep.

After the clinician is able to determine the patient's recommended number of hours of sleep per night, s/he may recommend a bedtime strictly held to that amount. Seven hours is typically a healthy number of hours to sleep. The patient should be encouraged not to try to force sleep, since the very act of trying may actually increase arousal and thus prove counterproductive.

Exercise can be a useful tool for regulating sleep if it is timed correctly. Sleep tends to be related to core body temperature, and humans sleep best at lower core body temperatures. Because exercise increases core body temperature, patients with insomnia should not exercise just before bedtime,

but 4-6 hours beforehand. For non-exercisers, taking a hot 20-minute bath two hours before going to bed will lead to a compensatory drop in temperature, which will aid sleep.

A light bedtime snack may be helpful. Hunger disrupts sleep, while eating releases enzymes that can promote sleep. Those with insomnia should avoid coffee, alcohol, tea, nicotine, and chocolate.

When nonpharmacologic treatments prove ineffective, a physician may try a variety of medications to relieve insomnia, including antidepressants, benzodiazepines, and traditional prescription sleep aids. Any medication that is being introduced for treating HIV-related insomnia should be carefully checked against existing medications for contraindications and interactions. Take particular care with patients who are on protease inhibitors. A number of the drugs used to treat insomnia can be habit forming, and, if stopped, can trigger rebound insomnia and withdrawal.

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About this Fact Sheet

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