Substance Use Disorders in People Living with Human Immunodeficiency Virus/AIDS

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KEYWORDS

• Substance use disorder • HIV • AIDS • Health outcomes • ART

KEY POINTS

- Existing Data support the high prevalence of the comorbidity of substance use disorder, psychiatric disorder and human immunodeficiency virus illness. Furthermore, there is a vast heterogeneity of people with this "triple diagnosis".
- Each of these comorbidities influences each other, creating a vicious cycle that could potentially result in poor health outcomes.
- An integrated approach to medical, psychiatric, and substance use care provides the best health outcomes.

Substance use disorders (SUDs) and human immunodeficiency virus (HIV) are pervasive overlapping epidemics with a vast array of social and health consequences at individual and societal levels. SUDs are chronic relapsing medical conditions that, if left untreated, result in negative medical, psychological, and social consequences. People who use drugs (PWUD) play a role in the HIV epidemic by simultaneously needing care and potentially transmitting HIV to their injecting and/or sex partners. Therefore, providing effective care to PWUD is essential for both the care of HIV+ individuals as well as the reduction of new diagnoses of HIV. This article covers the prevalence of comorbid SUDs with HIV infection, the complex interactions and impact on negative health outcomes, as well as a practical approach to addressing SUDs in people living with HIV/AIDs (PLWHA).

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PREVALENCE OF SUBSTANCE USE DISORDERS IN PEOPLE LIVING WITH HUMAN IMMUNODEFICIENCY VIRUS AND AIDS

There are higher rates of substance use among PLWHA than in general populations. Several individuals use more than one drug class, and the overall prevalence of substance use is around 84%.[1] Nicotine use is prevalent in 40% to 70% of individuals in different HIV cohorts.[2] When another substance is used, nicotine use is present in more than 90%. Alcohol is used in 22% to 60% of PLWHA.[3] The prevalence in cocaine use is more variable. Approximately 25% of PWLHA with an alcohol use disorder are also using cocaine.[3] Methamphetamine prevalence rates have not been established. However, methamphetamine use, such as with 3,4-methylenedioxymethamphetamine (MDMA), produces sexual disinhibition and high-risk sexual behavior. The National Survey on Drug Use and Health found that although intravenous (IV) drug users represent 13% of new HIV cases annually, men who have sex with men account for 53% and heterosexual contacts account for 31%.[4] Therefore, drugs, such as MDMA, that increase high-risk sexual behavior significantly contribute to HIV infection.

Triple diagnosis, or the presence of both an SUD and another psychiatric illness along with HIV infection, affected around 10% to 25% of PLWHA.[1] This finding is noteworthy, as individuals with triple diagnosis are more ambivalent about treatment and have increased hopelessness, depression, and suicidality.[1] PLWHA also have higher rates of posttraumatic stress disorder as well as personality disorders, particularly antisocial, avoidant, and borderline personality disorder.[1]

CLINICAL PRESENTATIONS AND MANAGEMENT OF SUBSTANCE INTOXICATION AND WITHDRAWAL

Opioids

The classic description of opioid intoxication is respiratory depression with pinpoint pupils. Other symptoms include bradycardia, hypotension, possible seizures, and coma. The management of clinically significant intoxication, which produces respiratory depression, includes oxygen supplementation and naloxone. Opioid withdrawal symptoms include lacrimation, rhinorrhea, gastrointestinal upset, diarrhea, restlessness, piloerection, muscle and joint aches, and insomnia. Management is symptomatic.

Alcohol and Benzodiazepines

Alcohol intoxication symptoms include slurred speech, gait instability, impaired decision-making, and memory impairment. At high levels of intoxication, somnolence, respiratory depression, coma, and death can occur. Benzodiazepine intoxication symptoms are similar, and benzodiazepines are the first-line treatment of alcohol and benzodiazepine withdrawal. This withdrawal can lead to negative outcomes, including seizures, coma, and death. Individuals without a history of complicated withdrawal can be managed with benzodiazepines as an outpatient through ambulatory detox programs. For people with a history of complicated withdrawal, inpatient management is recommended.

Cocaine

People with cocaine intoxication may presents with hyperthermia, hypertension, tachycardia, tachypnea, and pupillary dilation. They may present with agitation, hypervigilance, and hallucinations. Tremor, diaphoresis, and hyperreflexia may occur. Cocaine intoxication can produce chest pain. Never give beta-blockers for chest