



# Does Living with HIV/AIDS Increase the Risk of Substance Use?



## Question

Are people living with HIV/AIDS at greater risk for substance use?

## Key Take-Home Messages

### The Problem

- “HIV diagnosis often precipitates myriad physical, social, emotional, and financial concerns that may influence mental health and substance use treatment outcomes.” (5)
- HIV-positive individuals are already at increased risk for experiencing stressful and traumatic events, including AIDS-related losses and grief, which increase their risk of substance use and abuse. (3)
- None of the research studies reviewed analyzed the risk of substance use among people with HIV (post diagnosis) who do not have histories or dual diagnosis of substance use/abuse. The articles under review widely considered substance use as a pre-existing problem or diagnosis among people living with HIV.
- This review identified the clear need for research on this question, with particular focus on the risk of substance use among urban (newly diagnosed) HIV positive youth.

### The Recommended Solutions

- Social support has been demonstrated to provide a buffer against substance use. The provision of integrated HIV/AIDS services and HIV group intervention formats is important as an effective strategy for substance use prevention and treatment among people with HIV. Examples of strategies include
  - ◇ adequate case management and links to care providers;
  - ◇ links and access to available social support resources, such as self-help groups and community and/or religious organizations; and

## EVIDENCE INTO ACTION

The OHTN Rapid Response Service offers HIV/AIDS programs and services in Ontario quick access to research evidence to help inform decision making, service delivery and advocacy.

In response to a question from the field, the Rapid Response Team reviews the scientific and grey literature, consults with experts, and prepares a brief fact sheet summarizing the current evidence and its implications for policy and practice.

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- ◇ adaptive coping skills and stress management training. (1;2) For example, HIV positive youth and adolescents with maternal histories of substance use have demonstrated need for family support to help decrease their risk of substance use. (6;7)
- Given the prevalence levels of substance use and associated problems among HIV-positive adults, further research on the risk and protective factors for substance use behavior among people with HIV (especially those coping with AIDS-related bereavement) is recommended in order to reduce substance use and abuse and improve health outcomes. (1;6)
- Further studies evaluating the efficacy of coping interventions in reducing alcohol and substance use among HIV-positive persons is also recommended. (2)
- Research has identified that important need to undertake further studies on the negative health consequences of personality disorder in people with HIV, including substance abuse. (1)
- Research on substance use prevention and HIV risk reduction interventions, and mental health treatments, are needed to address the complex needs of individuals with co-morbid personality disorder and HIV infection. (1)

## The Issue and Why It's Important

Substance use – the legal or illegal, medicinal or non-medicinal use of substances on a continuum from experimental use to harmful use and dependence, including alcohol, marijuana, crack, cocaine, prescription painkillers, sedatives, inhalants, poppers, amphetamines, heroin, methadone, hallucinogens, or other substances - is prevalent and considerably higher among HIV-positive patients than the general population and is shown to be linked to a number of deleterious health consequences, including death. (1;2)

While alcohol and drug use can be harmful to the health outcomes of any individual, substance use among people living HIV puts them at particular risk because substance use has proven to: 1) Be a key determinant of secondary HIV transmission risk and treatment adherence (2); 2) Adversely affect immune function by decreasing infection-fighting white blood cell counts and antibody production (3); 3) Increase the risk of exposure to stressful and traumatic events, including physical and sexual assault, which are likely to lead to the development of post-traumatic stress disorder which complicates existing health outcomes (3); and 4) Further compound elevated distress associated with HIV-related burdens which are common among HIV-positive individuals and have high association with suicide ideation. (4)

## What We Found

### HIV and Stressors

Given the frequency of substance abuse problems among people with HIV, which often precede HIV infection, and the multiplicity of stressors associated with the disease and social status, it is probable that people with HIV have several potential triggers for substance use that are relatively independent of each other. For this reason, it is difficult to determine the impact of individual stressors, such as bereavement or grief severity, on substance use among people living with HIV as compared to less stressed populations. (1)

## HIV Diagnosis and Behaviour Change

Health behavior changes, such as reduced substance use, are commonly endorsed as positive changes resulting from HIV diagnosis (as opposed to negative health behavior changes such as initiation of or increased substance use). (8)

To date, findings from research investigating the association of adaptive coping (i.e. positive reframing, using emotional support, acceptance, religion, etc.) to specific health behaviors among HIV+ people have been mixed. One study found a small inverse association of adaptive coping to alcohol and drug use. Another study found that a form of adaptive coping (benefit finding) was associated with lower levels of alcohol use, but showed no association to illicit drug use. (8)

## HIV and Coping

In general, two styles of coping with HIV/AIDS diagnosis and HIV/AIDS-related burdens have been identified as: 1. Adaptive coping, i.e. positive reframing, using emotional support, acceptance, religion, etc.; and 2. Maladaptive coping, i.e. substance use, denial, self blame, and behavioral disengagement. (2)

A research study on coping strategies and substance use patterns among HIV-infected patients in the southeast United States found that stronger maladaptive coping strategies predicted greater frequency of drinking to intoxication but not other measures of alcohol and drug use. Individuals with more lifetime traumatic experiences reported higher substance use. (2)

## HIV, Substance Use and Treatment

The challenge of providing effective treatment services for the growing population of people with HIV who are dually diagnosed with substance use and mental disorders has only recently been recognized as an important public health concern that affects both HIV treatment and prevention. Research has been undertaken to create treatment models for studying integrated treatment for HIV-positive individuals with substance use and mental disorders. (5)

## Factors that May Impact Local Applicability

Due to the limited amount of literature identified on this topic, it is difficult to provide clear answers on this topic. In addition, much of the research evidence was completed in the United States, which may not be applicable to local settings within Canada.

## What We Did

To identify any systematic reviews we first conducted hand searches of the reviews and protocols from the HIV/AIDS and the Drugs and Alcohol Cochrane review groups as well as reviews from [www.health-evidence.ca](http://www.health-evidence.ca) in the 'Addiction/substance use' and 'HIV' categories. Using text search terms (HIV AND substance use AND coping), we searched Medline and Embase (1996 to 27 November 2009, hits =82), the Cumulative Index to Nursing and Allied Health Literature (hits=70), the Database of Reviews of Effects (hits=3), and the Cochrane Library (Hits = 1 Cochrane review, 8 clinical trials) to locate additional reviews and primary literature.

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