Comparing substance use patterns among women in Canada

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- Researchers compared substance use between HIV-positive and HIV-negative women
- Women living with HIV were more likely to report use of most substances except alcohol
- Study authors call for harm reduction programs tailored to women living with HIV

Studies have found that substance use is relatively common among some populations at high risk for and who have HIV infection. In general, continued use of harmful levels of some substances can affect the health of the brain and other parts of the body. This can result in poor quality of life and reduced life expectancy.

Researchers who are part of the Canadian HIV Women’s Sexual and Reproductive Health Study (CHIWOS) have been surveying 1,422 women living with HIV about health-related issues. This information is analysed and incorporated into reports that can be used to help guide future policy and initiatives to improve the health and well-being of HIV-positive women.

A recent analysis from CHIWOS centred on information collected from HIV-positive women about their use of substances. The CHIWOS research team compared this information to a report from Statistics Canada that surveyed a representative sample of more than 40,000 HIV-negative women. The CHIWOS researchers found that, in general, HIV-positive women reported higher rates of use of most substances, except for alcohol. The researchers stated: “These findings may indicate the need for women-centred harm reduction programs to improve the health outcomes of women living with HIV in Canada.”

Study details

CHIWOS is an ongoing community-based study with 1,422 HIV-positive women aged 16 and older. Nearly 4% of women in CHIWOS are transgender. In the present analysis, researchers used information collected from women via a survey or interview when they entered CHIWOS between 2013 and 2015. These women were recruited from HIV clinics, AIDS service organizations, peers and online networks. The survey was administered by what CHIWOS termed “peer research associates, many of whom also shared the experience of living with HIV and were hired and trained in community-based research conduction.”

A brief average profile of the women at the time they were surveyed is as follows:

- age – 43 years
- years since diagnosed with HIV – 11
- major ethno-racial groups: white – 44%; African, Caribbean or Black – 30%; Indigenous – 22%
- 83% of women disclosed that they were taking HIV treatment (ART)
- viral load – 87% of women taking ART had a viral load less than 50 copies/mL
- CD4+ count – 51% of women had a CD4+ count greater than 500 cells/mm³

HIV-negative women

For the purposes of comparison about substance use, the researchers used data collected by Statistics Canada between 2013 and 2014 for the Canadian Community Health Survey (CCHS). This survey was completed by 46,851 HIV-negative women living in British Columbia, Ontario and Quebec—the three main provinces that contributed data to CHIWOS. The CCHS excluded people living on reserves, in institutions and on Canadian Forces’ military bases.
Although the CCHS collected information on tobacco and alcohol use from all participants, they did not collect data about the use of other substances from women in Ontario and Quebec. Therefore, to make the CHIWOS data more comparable, researchers used only data about other substance use from B.C.

**Results—Trends in tobacco use**

Researchers found that, proportionally, more HIV-positive women smoked tobacco and smoked more cigarettes daily than HIV-negative women. The proportions of women who disclosed that they smoked tobacco every day was as follows:

- HIV positive – 41%
- HIV negative – 14%

**Trends in alcohol use**

More HIV-positive women reported no alcohol use compared to HIV-negative women. Furthermore, the researchers stated that HIV-positive women were less likely to engage in problematic use of alcohol than HIV-negative women.

The distribution of women who reported **no** use of alcohol was as follows:

- HIV positive – 41%
- HIV negative – 28%

The proportions of women who disclosed problematic use of alcohol (what the researchers termed “binge drinking”) at least once monthly was as follows:

- HIV positive – 20%
- HIV negative – 35%

**Trends in marijuana use**

The proportions of women who disclosed regular use of non-prescribed marijuana in the past month was as follows (this data was restricted to that disclosed by women from B.C., regardless of HIV status):

- HIV positive – 15%
- HIV negative – 7%

**Trends in cocaine and crack use**

The proportions of women who disclosed regular use of cocaine or crack was as follows:

- HIV positive – 17%
- HIV negative – 0.1%

The distribution of occasional use of cocaine or crack was as follows:

- HIV positive – 8%
- HIV negative – 2%

**Trends in speed (amphetamine) use**

The proportions of women who reported regular or occasional use of speed was as follows:

- HIV positive – 3%
- HIV negative – 0.1%

**Trends in heroin use**

The proportions of women who reported regular or occasional use of heroin was as follows:

- HIV positive – 11%
HIV negative – 0.1%

**Bear in mind**

The present study was cross-sectional in nature; that is, data were collected from each woman at one point in time.

It is possible that there may be several unaccounted factors in the present CHIWOS analysis that could have had an impact on participants’ use of alcohol, tobacco and other substances, such as the following examples:

- low income
- unemployment
- mental health conditions
- HIV-related discrimination and stigma
- exposure to abuse and violence

Despite this, the CHIWOS findings on trends in tobacco use are in line with studies of HIV-positive women from France and the U.S. Furthermore, other studies from the U.S. have found similar or, in some cases, higher rates of substance use among some women who are at high risk for or who have HIV.

**Moving forward**

Based on their findings, the CHIWOS researchers made several statements, including the following:

- “Make interventions available to women who use [substances and who take] ART, particularly in cases where substance use interferes with the maintenance of effective HIV treatment.”
- “Integration of substance use treatment services into HIV primary care settings may contribute to enhancing the quality of HIV care and care delivery.”
- “Our findings also advocate for tailored, women-centred harm reduction strategies in which women’s unique needs are effectively recognized, and peer-driven interventions through which peers can also contribute to the care and treatment programs’ delivery.”

CHIWOS is a very useful study and over time it will accumulate more data, making it possible for analyses of such data over several time points—a longitudinal study. Such studies can reveal trends or changes in behaviours and other issues.

**Resources**

- **Canadian researchers call for improved integration of family planning care for HIV-positive women** – CATIE News
- **The Women of CHIWOS – Positive Side magazine**
- **CHIWOS**
- **The epidemiology of HIV in females** – CATIE fact sheet
- **The epidemiology of HIV in people who inject drugs in Canada** – CATIE fact sheet

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**REFERENCES:**

5. Whittle HJ, Sheira LA, Frongillo EA, et al. Longitudinal associations between food insecurity and substance use in
a cohort of women with or at risk for HIV in the United States. *Addiction*. 2018; *in press*.


Disclaimer

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