



Demographic characteristics associated with access to HAART, HIV care and HIV viral load testing



Questions

1. In Canada, is access to HAART/ARV therapy associated with demographic characteristics of PHAs?
2. In Canada, is access to HIV viral load testing, or HIV medical care in keeping with established guidelines and standards, associated with demographic characteristics of PHAs?

Key Take-Home Messages

- In many Canadian studies, issues related to access to HAART are not addressed because it is assumed that everyone in the universal health care system has the access they need. However, most provinces provide only partial coverage for prescription drugs and individuals are responsible for any amount not covered through provincial health insurance plans (either through private insurance and/or out-of-pocket expense). More research must be conducted to uncover the barriers to accessing HAART given the financial barriers that some may face in accessing treatment.
- The demographic factors associated with adherence to HAART have been studied more fully and may be more applicable to the Canadian context where, theoretically, everyone has access to HAART.
- There are a large number of people with HIV who do not undergo viral load testing or CD4 cell count monitoring according to established guidelines, but most people access HIV care within one month of initial diagnosis. Most of the people who have difficulty accessing continuous HIV care belong to marginalized populations.

The Issue and Why It's Important

On Friday 5 October 2012, the Supreme Court of Canada released two decisions regarding the criminal law obligation of PHAs to disclose their HIV status to sexual partners. Amongst other changes to the law, the Supreme Court decided that people living with HIV (PHAs) do not have a criminal law duty to disclose their HIV status to a sexual partner prior to sexual intercourse if: 1) a

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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condom is used; and 2) the HIV-positive person's HIV viral load is "low." Thus, at least in the case of sexual intercourse, criminal liability is now contingent in part upon a PHA achieving HIV viral suppression (usually achieved through appropriate use of HAART, and access to quality HIV and healthcare), and being able to prove he/she had a "low" HIV viral load (established through HIV viral load test results) at the time of sexual intercourse.

Based on the details of this decision, it may disproportionately impact marginalized PHAs, which could include: women in abusive relationships, newcomers to Canada, members of African/Caribbean/Black communities, Aboriginal people, and other people who face challenges accessing health, social and legal services. Specifically, some may now face greater criminal liability due to: 1) inequitable access to HAART and HIV-related medical care, making it more difficult to achieve and sustain HIV viral suppression; 2) ability to access and adhere to HAART and HIV-related medical care, which has been found to be associated with certain demographic characteristics (e.g., race, ancestry, immigration status, gender, residence, substance use, mental health status, having suffered physical/emotional/psychological abuse, housing status, involvement in sex work, income level and source and history of imprisonment); and 3) inequitable access to viral load testing, which may impede one's ability to receive proper defend themselves in criminal legal proceedings.

What We Found

Question 1: In Canada, is access to HAART/ARV therapy associated with demographic characteristics of PHAs?

In the context of Canada's universal health care system, coverage for HAART for people with HIV/AIDS varies by province. While some Canadians have access to HAART free of charge, others incur expenses that must be paid for by private insurance plans or out-of-pocket. A large number of studies consider the impact of demographic characteristics on adherence to HAART, but few address the impact of these characteristics on access. In Ontario, a study of patients attending hospital-based, outpatient HIV clinics found that male and female patients did not experience differential access to HAART.(1) Both male and female patients were found to initiate HAART approximately 2.2 years following diagnosis, and both had similar average CD4 counts at the time of HAART initiation.(1) A study of injection drug users with HIV/AIDS found that marginalization from the healthcare system acts as a barrier to both access and adherence to HAART – because female injection drug users and more likely to be street involved and more likely to engage in survival sex, they are more likely than male injection drug users to face barriers to accessing HAART.(2) Another study found that among 153 women participating in survival sex in Vancouver's Downtown Eastside, only 15% of those who had been diagnosed with HIV had ever initiated HAART, and only 9% were currently accessing HAART.(3) The women in this study indicated that the reasons they did not access HAART included fear of side effects (72%), inability to adhere to daily regimes (48%), inability to make regular medical appointments (55%), and fear that others would suspect their HIV status (46%).(3)

Question 2: In Canada, is access to HIV viral load testing, or HIV medical care in keeping with established guidelines and standards, associated with demographic characteristics of PHAs?

A larger number of studies assessed the impact of demographic factors on access to HIV viral load testing or HIV medical care according to established guidelines. The factors that were considered include demographic characteristics and other factors, including province or city of residence, injection drug use, age, sexual orientation, time since HIV/AIDS diagnosis, time since HAART initiation, viral load, education, number of drugs in a HAART regime, whether HAART is being accessed at all, ethnicity, CD4 count, and refugee status.

The International AIDS Society recommends that patients with HIV/AIDS undergo viral load testing once every three to four months.(4) In an Ontario-based study of more than 1,000 HIV-positive individuals, findings indicated that many people access care sporadically.(5) In other studies of people with HIV/AIDS in Ontario, it was found that 13-15% of patients underwent fewer than three viral load tests per year.(5, 6) In another Ontario-based study among people who underwent at least one viral load test between June and December, nearly 20% did not undergo at least two additional tests in the following year.(7) In the same sample of 10,930 HIV-positive patients, only 65% had undergone a viral load test within the last year, and only 55% had done so within the last six months.(7, 8) This study found that while the majority of men and women – 81% and 82%, respectively – underwent viral load testing within three months of their original HIV diagnosis, 10% of men and 7% of women did not undergo viral load testing within the first year following diagnosis.(7) Overall, the mean number of days between diagnosis and first viral load testing in this sample was 65 days.(7) While there is evidence that people with HIV/AIDS may not undergo viral load testing according to established guidelines, one study found that when HAART was prescribed in hospital-based HIV outpatient programs in Ontario, prescribing practices were consistent with guidelines established by the U.S. Department of Health and Human Services.(1)

Similarly, a study in Vancouver found that less than 5% of people who inject drugs had CD4 monitoring that was consistent with local guidelines.(9) People who inject drugs who were female, of non-Caucasian ethnicity, and use heroin daily were significantly associated with decreased frequency of CD4 cell count testing.(9) Use of methadone was associated with more frequent and regular CD4 monitoring.(9)

One study found that discontinuous care (i.e., care that was inconsistent with established guidelines) among HIV-positive women in Ontario was associated with identification as lesbian or bisexual, being a refugee, having discontinuous care in the previous year, or having experienced the lowest observed CD4 count within the last five years.(6) A national study found that injection drug use and non-receipt of HAART were independently associated with greater frequency of longer than recommended gaps between viral load testing.(10) This study also found that a gap between viral load tests of greater than nine months was more likely to occur in Ontario and Québec than in British Columbia, and among

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people who injection drugs; but less likely to occur among older people, men who have sex with women, people within their first year of accessing HAART, people taking HAART at the time of viral load testing, and people with viral loads of less than 50 copies/ml at their previous test.(10) Other factors that have been associated with less frequent viral load testing include lower educational attainment, history of injection drug use, younger age, residence in Toronto, and fewer drugs in the current HAART regime.(5) The greatest delays were observed among people who inject drugs, and people who were not currently accessing HAART – for each, the gap between tests was typically increased by 10 days (5). Few studies examined the impact of ethnicity on continuity of care, but one study in Ontario found no significant differences in continuity of care between Aboriginal and non-Aboriginal patients.(11)

One study also assessed how long people who had recently been diagnosed with HIV/AIDS waited before accessing care. It was found that the patients who waited the longest were younger than 45 years of age, lived in non-metropolitan regions, injected drugs, and engaged in heterosexual activity with high risk partners.(12) Typically, patients with these characteristics waited 31-32 days for care, compared to other patients who waited approximately 15-21 days for care. (12)

Factors That May Impact Local Applicability

Most of the studies included in this report were conducted in major cities Ontario and British Columbia. Only one study was national in scope, and many provinces in central and Atlantic Canada had little representation. Further, it is difficult to study the population of people with HIV who are undiagnosed, and whether the reason they remain undiagnosed is related to access to care or treatment. The studies included here largely relate to people who have accessed HIV testing and care at least one time. The findings reported here may not be applicable to regions outside of Canada.

What We Did

We extracted relevant information from studies that were sent to us from the group (Ontario Working Group on Criminal Law & HIV Exposure) that requested this rapid response. Next, we contacted colleagues working in this area to see if they could identify any additional studies that might address either of the questions. We then conducted a related articles search using one study (5) that was directly relevant to the rapid response. Lastly, we conducted a search in PubMed using the following combination of search terms: ((viral load testing) or (access to HAART)) AND (Canada)).