

Viral Suppression and Viral Rebound among Young Adults Living with HIV in Canada

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Objective

The purpose of this study was to examine viral suppression and viral rebound among young adults aged 29 or younger.

Importance of this Study

- For people living with HIV, viral suppression is the principal goal of HIV treatment
- Combination antiretroviral therapy (cART) is used to maintain good health and decrease likelihood of HIV transmission.
- Previous research shows that young adults are less likely than older adults to achieve and maintain viral suppression.

How this Study was Conducted

- Data was analyzed from the CANOC collaboration, an interprovincial collaborative cohort of HIV-positive individuals on antiretroviral therapy in Canada.
- Viral load measurements from patients' clinical health data were used to see if young adults were more or less likely than older adults to experience viral suppression and rebound.
- Viral load below the level of 50 copies/mL was the definition used for achieving viral suppression.
- Viral rebound was defined by a viral load above 50 copies/ml after previously achieving suppression.
- Patient characteristics and social indicators such as age, sex, ethnicity, injection drug use, etc., were examined for their effect on viral load suppression for younger and older adults.
- We also analyzed age-based differences in time to achieving viral suppression and time to viral rebound after suppression.

Study Results

- Adults aged 29 or younger were less likely to experience viral suppression. They also experienced faster viral rebound than older adults.
- For younger adults, viral suppression was associated with being male and having initiated HIV treatment during a later era of cART.
- Viral rebound was associated with a history of injection drug use and Indigenous ancestry.
- Viral rebound was also associated with initial CD4 count being greater than 200 and starting treatment with a regimen containing an ingredient called a protease inhibitor.

Implications

- Viral suppression and rebound were modestly affected by age in this study.
- Future health studies and interventions could target women, people who use injection drugs and people with Indigenous ancestry.

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