

Antiretroviral Therapy Interruption Among HIV-Positive People Who Use Drugs in a Setting with a Community-Wide Treatment as Prevention Initiative

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Introduction

- HIV Treatment as Prevention (TasP) initiatives promote antiretroviral therapy (ART) access and optimal adherence ($\geq 95\%$) to produce viral suppression among people living with HIV (PLHIV) and prevent the onward transmission of HIV.¹
- ART interruptions (≥ 30 consecutive days without taking ART) undermine the effectiveness of TasP by prompting viral load rebound,² and are more likely to be experienced by HIV-positive people who use drugs (PWUD) even in settings with TasP initiatives.³
- We undertook this study to examine individual, social, and structural dimensions of ART interruptions among structurally vulnerable PWUD in Vancouver, Canada, a setting with a community-wide TasP initiative.

Methods

- Semi-structured interviews were conducted with 39 individuals recruited from an observational cohort study comprised of HIV-positive PWUD (ACCESS).
- All participants had not filled an ART prescription for a period of at least 30 days between January 2011 and December 2012.
- Interview transcripts were imported into Atlas.ti, analyzed using inductive and deductive methods, and interpreted by drawing on the concept of structural vulnerability.⁴

Findings

| Participant Characteristics | n (%) N=39 |
|---|-----------------|
| Age | |
| Mean | 46 years |
| Interquartile Range | 42 – 52.5 years |
| Gender | |
| Men | 21 (53.8%) |
| Women | 16 (41.0%) |
| Transgender persons | 2 (5.1%) |
| Race | |
| Indigenous | 23 (59.0%) |
| White | 14 (35.9%) |
| Other | 2 (5.1%) |
| Drug use (Thirty days prior to interview)^a | |
| Crack cocaine (smoked) | 22 (56.4%) |
| Cocaine (injected) | 22 (56.4%) |
| Heroin (injected) | 12 (30.8%) |
| Crystal methamphetamine (injected or smoked) | 10 (25.6%) |
| Years since ART diagnosis | |
| Mean (Interquartile Range) | 14.8 (10–19) |
| Years since ART initiation | |
| Mean (Interquartile Range) | 11.3 (6–16) |
| ART interruption events (≥ 30 days) since treatment initiation | |
| Mean (Interquartile Range) | 7.2 (5–9) |

Individual & Contextual Influences on 'Treatment Fatigue'

While participants positioned ART interruptions as the result of 'treatment fatigue', the following themes illustrate the role of social-structural influences within the broader context of the structural vulnerability of PWUD in producing these outcomes.

Negotiating Prior Adverse ART experiences

Some participants emphasized how changes placing them on complex ART regimens following the development of viral resistance evoked the stress of their diagnoses and negative early ART-related experiences. These accounts demonstrated that, while these participants emphasized that they were simply "tired" of ART, they interrupted treatment to avoid re-experiencing the hardships encountered when originally initiating ART.

I just got sick of taking them. It reminded me of getting sick every time [i.e., due to side effects after initiating ART], every morning... I started with five pills. Every time I took them five pills [after being transitioned to a more complex regimen], I was almost in tears. I said, "Screw it!" [Participant #29, White Man, 42 years old]

Social Isolation & Treatment Motivation

Social isolation stemming from structural vulnerability undermined participants' motivation to adhere to ART regimens. Participants, and in particular Indigenous participants, expressed that experiences of depression resulting from "feeling alone" or estrangement from their communities reduced motivation to adhere to ART regimens and led to the intensification of drug use patterns, which fueled ART interruptions :

It's usually around the holidays [or] my birthday. [I get] down, alone thinking about the way life's supposed to be. The way people with families and everything are supposed to be 'cause I've never had that. Christmas and holidays come and everybody's fuckin' family family family, and the TV's always family family family. I haven't spoke to my family in a long time. [...] The times I get depressed is when I'm doing drugs and, if I get depressed when I'm doing drugs, that's when I don't take my meds. [Participant #6, White Man, 39 years old]

Structural Vulnerability & Discontinuities in the Continuum of HIV care

Disruptions in everyday patterns and breakdowns in the continuity of HIV care occurring as a consequence of the intersection of extreme poverty (e.g., homelessness) and drug criminalization (e.g., incarceration) often led to ART interruptions. For example, many participants reported "giving up" on ART regimens when these interruptions were, in fact, associated with changes that made it difficult to access and adhere to ART:

There were times where I just more or less just gave up. I said, "Screw this." But at the time, it was kinda stupid of me. That was usually the reason I would stop taking them. [...] It was usually because I was homeless and another reason was 'cause I'd lose them. [Participant #10, Indigenous Woman, 42 years old]

Conclusion

- Findings emphasize need to advance beyond individualized understandings of 'treatment fatigue' by focusing attention on its underlying social and structural mechanisms (e.g., poverty, social isolation).
- Findings also demonstrate the need for comprehensive structural reforms (e.g., drug decriminalization, housing programs) and targeted interventions to optimize TasP among HIV-positive PWUD.

References

- Montaner JSG, et al. Expansion of HAART coverage is associated with sustained decreases in HIV/AIDS morbidity, mortality and HIV transmission: the "HIV Treatment as Prevention" experience in a Canadian setting. *PLoS One*. 2014; 9(2): e87872
- Nosyk B, et al. Characterizing retention in HAART as a recurrent event process: insights into 'cascade churn'. *AIDS*. 2015; 29(13): 1681-9.
- Samji H, et al. Predictors of unstructured antiretroviral treatment interruption and resumption among HIV-positive individuals in Canada. *HIV Medicine*. 2015; 16(2): 76-87.
- Quesada J, et al. Structural vulnerability and health: Latino migrant laborers in the United States. *Medical Anthropology*. 2011; 30(4): 339-62.