

High Functional Pain Interference Is Associated With Active Injection Drug Use Among A Cohort Of HIV-Positive People Who Use Illicit Drugs In Vancouver, Canada

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Background

- There is a high prevalence of pain among people living with HIV/AIDS (PLWHA)
- However, the correlates of pain among PLWHA who use illicit drugs remains poorly understood.
- This study examined factors associated with high functional pain interference (FPI) in a community-recruited cohort of PLWHA who use illicit drugs in Vancouver, Canada.

Methods

- Data were derived from the AIDS Care Cohort to evaluate Exposure to Survival Services (ACCESS), a prospective observational cohort of HIV-positive people who use illicit drugs in Vancouver, Canada.
- This analysis was restricted to participants who completed an interview between June to November 2014, and who reported having major persistent pain in the six months prior to their interview.
- High FPI (defined as ≥ 5 versus < 5) was ascertained using average individual interference scores from the Brief Pain Inventory.
- Bivariable and multivariable logistic regression was used to evaluate factors associated with high FPI.

Results

- In total, 313 participants were eligible for this analysis, of whom 99 (32%) were female.
- The median age was 51 years (interquartile range: 45-55 years). 126 (40%) participants had high FPI.
- In multivariable analysis, active injection drug use, perceived undertreated pain, and current physical disability remained positively and independently associated with high FPI.
- We did not observe FPI to be associated with differences in age, gender, ethnicity, HIV viral load suppression, CD4 count or ART adherence.

Table 1. Multivariable logistic regression analysis of factors associated with high functional pain interference among a cohort of HIV-positive people who use illicit drugs in Vancouver, Canada (n=313)

Variable	Adjusted Odds Ratio (95% CI)	p-value
Disability^Δ (yes vs. no)	5.40 (2.95, 9.87)	<0.001
Denied pain medication* (non-white vs. white)	2.04 (0.90, 4.61)	0.086
Perceived undertreated pain* (yes vs. no)	1.82 (1.07, 3.11)	0.028
Injection drug use* (yes vs. no)	3.33 (1.90, 5.84)	<0.001
Admitted to hospital* (yes vs. no)	1.68 (0.92, 3.05)	0.092

^Δ Denotes activities/events at the time of participant's interview

* Denotes activities/events within the six months prior to participant's interview

Conclusions

- A high prevalence of elevated FPI was observed in this cohort of PLWHA, which was associated with higher levels of acute health service utilization, illicit drug use behaviors, undertreated pain, and self-managed pain.
- The independent association between high FPI and active injection drug use is particularly concerning given the risks for HIV transmission, morbidity and mortality, and use of high-cost acute care services related to this high-risk behavior.
- These findings illustrate the need for increased efforts to improve function, quality of life, and pain management among PLWHA.

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