

Painful Memories

Associations between pain and history of trauma and stigma among people living with HIV

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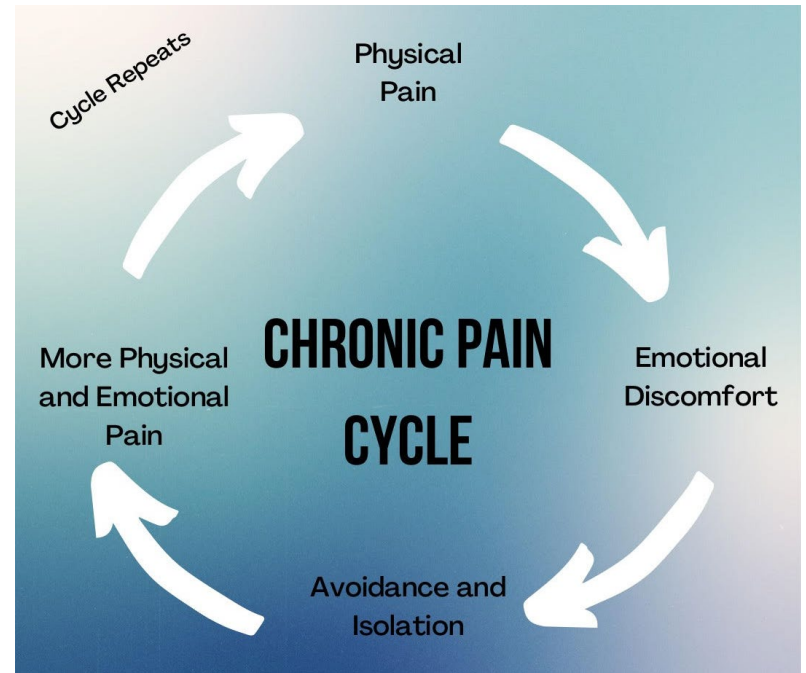


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Background

- Experiences of pain are highly prevalent among people living with HIV.^{1,2}
 - Viral replication
 - Antiretroviral treatments
 - Comorbidities (diabetes, arthritis, cancer)
 - Nutritional deficiencies, alcohol use
- Mental health conditions are associated with worse pain outcomes and are common in people living with HIV.³



¹Bruce RD et al. 2017 HIVMA of IDSA Clinical Practice Guideline for the Management of Chronic Pain in Patients Living With HIV. Clin Infect Dis. 2017;65(10):e1-e37.

²Madden VJ et al. Chronic pain in people with HIV: a common comorbidity and threat to quality of life. Pain management. 2020;10(4):253-60.

³Scott W et al. Psychosocial factors associated with persistent pain in people with HIV: a systematic review with meta-analysis. Pain. 2018;159(12):2461-76.



Background

- Historically, pain in people living with HIV has been under-treated.⁴
- Barriers to treatment are amplified among women, individuals with low socioeconomic status, and people who inject drugs.
- Pre-existing barriers to accessing pain management services have been magnified by the COVID-19 pandemic.
- Increased rates of substance use and opioid-related mortality.⁵



⁴Marcus KS et al. HIV/AIDS-related Pain as a Chronic Pain Condition: Implications of a Biopsychosocial Model for Comprehensive Assessment and Effective Management, *Pain Medicine*. 2000;1(3):260–273.

⁵Gomes T et al. Measuring the Burden of Opioid-Related Mortality in Ontario, Canada, During the COVID-19 Pandemic. *JAMA network open*. 2021;4(5):e2112865.



Objectives

- Characterize the prevalence, functional impact, and treatment of pain among PLWH in Ontario, Canada, prior to and during the first year of the COVID-19 pandemic.
- Examine associations between pain and traumatic events and HIV related stigma among adults living with HIV in Ontario.



The OCS

- The Ontario HIV Treatment Network Cohort Study (OCS) is an observational, community governed, open dynamic cohort of PLWH receiving medical care in Ontario, Canada, established in 1996.
- Cohort participants complete a yearly standardized questionnaire since its introduction in 2007.
- Introduction of a 'pain module' in 2019.



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Methods

- Cross-sectional analysis using data from the OCS.
- Adults, age 16 and older, who completed the OCS questionnaire in 2019/2020 were included in the analysis.

Outcomes of interest:

1. Prevalence, functional impact and treatment of pain pre vs during first year of the pandemic
2. Associations between pain prevalence and
 - Diagnosis of post-traumatic stress disorder → Clinical diagnosis
 - History of intimate partner violence → 8-item IPV questionnaire
 - History of Adverse Childhood Events → 10-item ACE questionnaire (0-10)
 - History of HIV stigma → 12-item HIV-stigma scale (12-60)



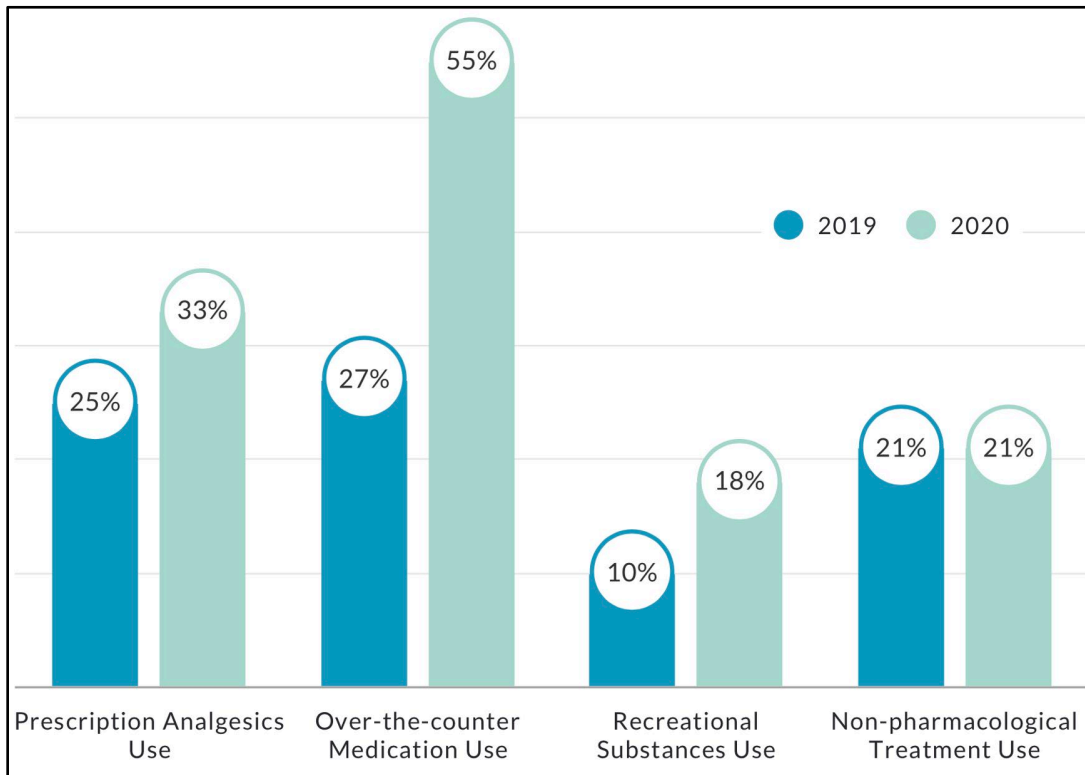
Results

- A total of 4040 responses across the two study periods from 2874 participants were included in the analysis.
- 23% women, median age of 53 years.
- Prevalence of pain increased from **66%** to **74%** during the first year of the pandemic.
- Women had greater prevalence of pain compared to men both in 2019 (72% vs 65%, $p < 0.001$) and 2020 (79% vs 73%, $p < 0.001$).
- In 2020, **91%** of those experiencing pain reported some degree of interference with daily activities, compared to **85%** pre-pandemic.



Results

Pain treatment



- In 2019, 54% of individuals with pain received any formal treatment, compared to 62% in 2020.
- This was similar between women and men in both study periods.



Results

PTSD (n=1997)

- Pain was associated with greater prevalence of PTSD
 - 10.5%, compared to 3.1% among those reporting no pain, $p < 0.05$.
 - Those with a diagnosis of PTSD had an aOR* of 3.7 of having pain

IPV (n=210)

- High prevalence of intimate partner violence among those with (64%) and without (59%) chronic pain.

*Adjusted for age, sex, race, and duration of HIV infection



Results

ACE (n=415)

- Participants reporting pain had more adverse childhood experiences
 - Mean ACE score of 3 [3,5] vs 2.3 [2,3] ($p < 0.05$) among those without pain.

Stigma (n=547)

- Pain was associated with higher degree of HIV-related stigma
 - HIV-stigma score was higher among those with pain (mean score of 35 [28,42]) compared to those without pain (mean score of 32 [33,39], $p < 0.05$).



Limitations and future directions

- Cross-sectional design
 - Varying definitions of chronic pain
 - Incomplete data for some key indicators
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- Impact of ART exposure, AIDS diagnosis
 - Effectiveness of interventions



Conclusions

- Prevalence of pain among PLWH in the OCS increased during the pandemic.
- Women continue to experience higher prevalence and more severe pain symptoms compared to men.
- There was greater reliance on pharmacological treatments and recreational substance use for pain management.
- Pain appears to be associated with measures of trauma and stigma among this sample of participants living with HIV.
- Incorporation of multidisciplinary trauma-informed management approaches in HIV care is needed.



Thank you

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