

Impact of the COVID-19 pandemic on pain prevalence and management among people living with HIV in Ontario, Canada

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Background

- People living with HIV (PLWH) are disproportionately affected by high rates of pain with significant gaps in pain management reported.
- The COVID-19 pandemic has amplified these challenges through limited access to service providers, substance use treatment and harm reduction services, amid increased psychosocial stresses and financial burdens.
- We set out to characterize the prevalence, severity, functional impact, and treatment of pain among PLWH in Ontario, Canada, prior to and during the first year of the COVID-19 pandemic (2019 vs 2020).

Methods

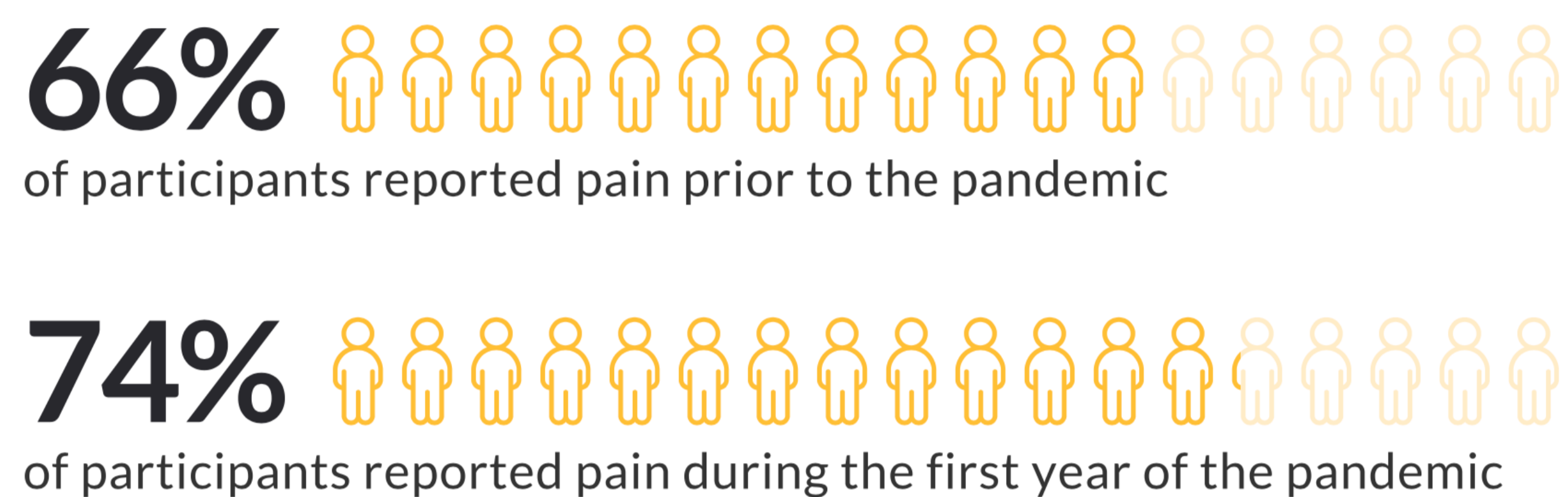
- The Ontario HIV Treatment Network Cohort Study (OCS) is an observational, open dynamic cohort of PLWH in Ontario, Canada.
- Interviews using a standardized questionnaire are administered on a yearly basis.
- Individuals who completed the OCS questionnaire in 2019 (pre-pandemic period) or 2020 (pandemic period) were included in the analysis.
- Pain prevalence in the preceding 3 months, severity (measured as mild, moderate, and severe), functional impact in the preceding week (measured as a mean of 7 interference items, each scored on a 0 to 10 scale) and treatment of pain was evaluated in each study period.
- Chi-square, McNemar's, Wilcoxon rank-sum test and Cochran-Armitage test for trend were used for analyses.

Results

- A total of 4040 responses across the two study periods from 2874 participants (77% men) with a median (interquartile range) age of 53 (43, 60) years were included in the analysis.

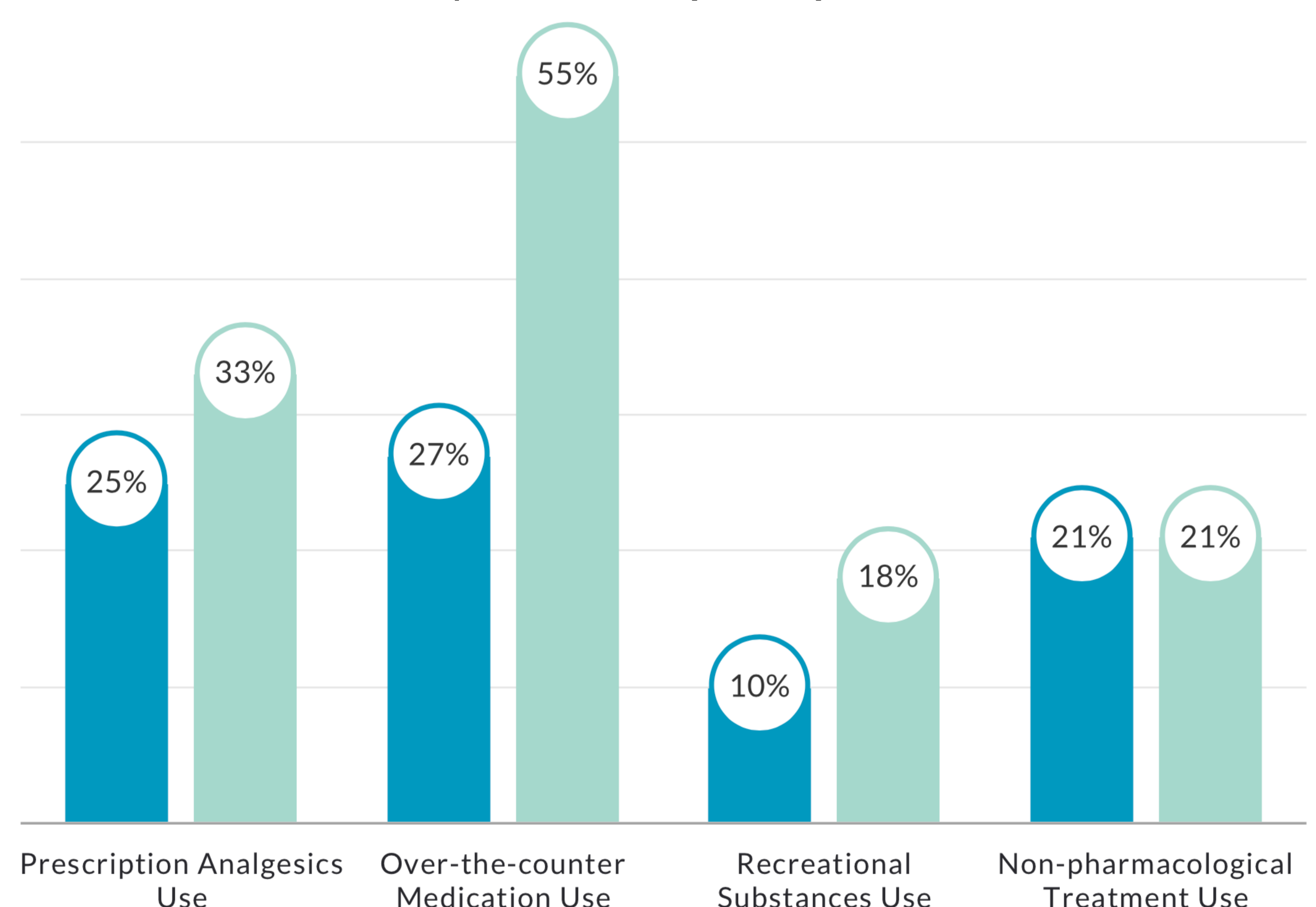
Results continued

Figure 1. Increased prevalence of pain among OCS participants during the first year of the COVID-19 pandemic, compared to 2019.



- Pain severity was similar across the two study periods with a fifth of participants reporting severe pain.
- Functional impact of pain was higher during the pandemic with 91% of those experiencing pain reporting some degree of interference with daily activities (vs 85% pre-pandemic) with a mean (standard deviation) interference score of 3.6 (1.6), compared to 3.0 (1.6) in 2019.
- A total of 54% of individuals in 2019 and 62% in 2020 reported receiving formal treatment for pain.
- In 2020, utilization of prescription analgesics, over-the-counter agents and recreational substances increased, while use of non-pharmacological methods remained stable (Figure 2).

Figure 2. Treatment of pain prior to (2019) and during the first year of the COVID-19 pandemic (2020).



Conclusions

- Prevalence and functional impact of pain among PLWH in the OCS increased during the COVID-19 pandemic with increased reliance on pharmacological and recreational substances.
- Addressing barriers to pain management among PLWH requires interdisciplinary, system-based strategies.