

Uptake of Hepatitis C treatment among people living with HIV and Hepatitis C

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Background

Hepatitis C (HCV) direct-acting antiviral (DAA) regimens offers a promising way to control the **HCV epidemic**. In British Columbia (BC), DAAs are publicly funded; however, **treatment uptake has remained low** among certain vulnerable populations including **people living with HIV** (PLWH), women, and people who use drugs.

Objective

To assess access to HCV treatment uptake in a population-based cohort of people living with HIV (PLWH) and HCV.

Methods

Study design: Retrospective observational cohort study [utilizing data from the Seek and Treat for Optimal Prevention HIV/AIDS cohort].

Sample: PLWH and HCV aged ≥ 19 in BC between January 1996 and March 2017

Study outcome: Receipt of HCV treatment (interferon-era, early DAA, and modern DAA treatment era) via Pharmanet/care administrative data.

Explanatory variables: gender, age at HIV diagnosis, history of injection drug use (IDU), health authority.

Statistical analysis: Unadjusted and adjusted generalized estimating equation (GEE).

Results

Participants characteristics

Variable	N or Median	% or IQR
Gender		
Female	900	27
Male	2418	73
Age	37	(31,44)
History of IDU		
No	531	16
Yes	2681	81

Bivariable analyses of factors associated with receiving HCV treatment in PLWH, by era

Variable	HCV tx ever (OR & 95% CI)	HCV DAA tx (OR & 95% CI)
Gender (Female vs Male)	0.68 (0.56-0.83)	0.73 (0.56-0.94)
Age	1.11 (1.02-1.21)	1.15 (1.03-1.29)
Health Authority (Other vs VCH)	0.84 (0.71-0.99)	0.92 (0.74-1.14)
History of IDU (yes vs no)	0.72 (0.58-0.89)	0.73 (0.56-0.97)

Results

Multivariable GEE analyses of factors associated with ever HCV treatment, by era

Variable	HCV tx ever AOR (95% CI)	HCV DAA tx (AOR & 95% CI)
Gender (Female vs Male)	0.74 (0.60 - 0.90)	0.79 (0.61-1.04)
Age	1.06 (0.97-1.16)	1.11 (0.99-1.25)
Health Authority (Other vs VCH)	0.87 (0.73-1.03)	0.94 (0.76-1.18)
History of IDU (yes vs no)	0.78 (0.63-0.97)	0.80 (0.60-1.05)

Women and IDU were **less likely** to **ever** be treated for HCV

Women and IDU were **as likely** to be treated for HCV with **DAAs**

Discussion and Conclusion

- Only one fifth of PLWH and HCV ever received HCV treatment. There is room to expand treatment to a greater proportion of people.
- Historically, women and IDU living with HIV and HCV were **less likely** to be treated for HCV.
- When looking at modern **DAA treatment**, there was no indication of differences in treatment uptake by gender, health authority, history of IDU or age.
- These optimistic findings speak to the various **initiatives aimed at increasing DAA uptake** among vulnerable populations in BC, including **publicly-funded DAA treatment**.
- However, these results are BC specific, and increasing the scale of initiatives offering DAA treatment to vulnerable populations is needed across Canada. Other jurisdictions can model similar initiatives.