

# HIV Treatment Outcomes, Barriers, and Facilitators Among Refugees in British Columbia (BC)

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# Background

- Refugees have been identified by the BC Centre for Disease Control as an underserved population and target for reducing health inequalities.
  - Refugees experience higher rates of HIV than the Canadian-born population and face multiple barriers to care.
  - Studies have shown that refugee or migrant patients with HIV have less viral load suppression, higher stigma scores, higher rates of depression and delays in treatment.
  - In contrast, some studies have shown no difference in receiving antiretroviral therapy (ART), progression to AIDS or care costs.
  - Minimal data exists on HIV outcomes among refugees in Canada.
  - The purpose of this study is to describe the refugee population engaged in HIV care in BC, describe their clinical outcomes and identify barriers and facilitators to care.
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# Methods

- Retrospective study reviewed charts of refugees for 1 year following their first dispensing of ART in BC.
- Interim Federal Health (IFH) billing codes from the centralized BC Centre for Excellence in HIV/AIDS' pharmacy were used to identify refugees who received ART in BC and their HIV-care providers.
- Inclusion Criteria: HIV+ patients aged  $\geq 19$  years whose first ART in BC was dispensed between 01-January-2012 and 01-January-2018
- Exclusion Criteria: Patients using antiretrovirals for pre-exposure prophylaxis or post-exposure prophylaxis
- Data were collected from Positive Health Services (Surrey), Oak Tree Clinic (Vancouver), and St. Paul's Hospital Ambulatory Pharmacy and HIV clinics (Vancouver) using REDCap and analyzed descriptively

# Results

Table 1: Patient Characteristics (n=48)

		Frequency (%)
<b>Gender</b>	Male	28 (58.3%)
<b>Pregnant</b>	Yes	2 (4.2%)
	Unknown	3 (6.3%)
	Not applicable	28 (58.4%)
<b>New diagnosis upon entry to Canada</b>	Yes	18 (37.5%)
	Unknown	4 (8.3%)
<b>CD4 cell count at 1<sup>st</sup> fill</b>	<200 cells/mm <sup>3</sup>	9 (18.8%)
	Unknown	3 (6.2%)
<b>HIV Viral load at 1<sup>st</sup> fill</b>	<40 copies/mL	22 (45.8%)
	Unknown	3 (6.2%)
<b>ARV Naïve</b>	Yes	18 (37.5%)
<b>Class of Drug used with NRTI Backbone</b>	PI	9 (20.8%)
	NNRTI	21 (43.8%)
	INSTI	13 (29.2%)
	PI and INSTI	1 (2.1%)
	Unknown	4 (8.3%)
<b>HIV risk factors</b>	MSM	18 (39.5%)
	PWID	0
	Heterosexual (Endemic Country)	22 (47.9%)
	Perinatal	2 (4.2%)
	MSM + Hetero Endemic Country	1 (2.1%)
	Unknown	5 (10.4%)
<b>Mental health comorbidity</b>	Yes	14 (29.2%)
	Unknown	19 (39.5%)
<b>Chronic HCV</b>	Yes	14 (29.2%)
	Unknown	9 (18.8%)
<b>Chronic HBV</b>	Yes	5 (10.4%)
	Unknown	10 (20.8%)

Figure 1: Continent of Origin

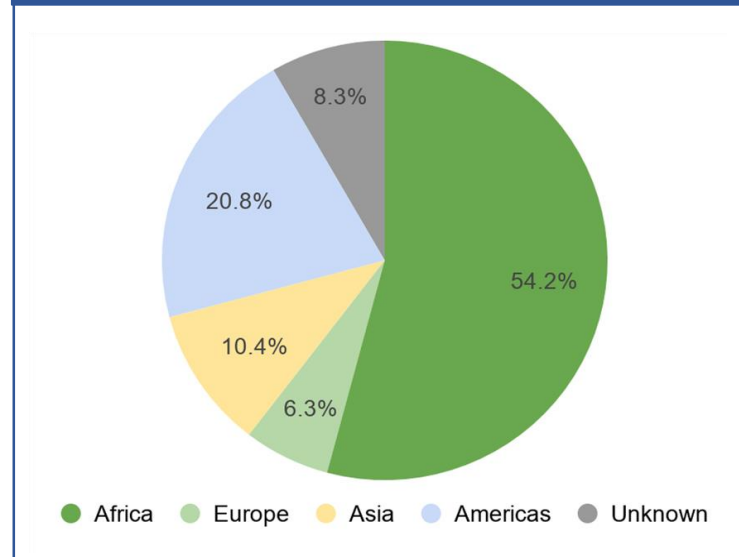


Table 2: Clinical Outcomes

Variable	Frequency (%)
<b>ART adherence</b>	
≥ 95%	41 (85.4%)
< 95%	6 (12.5%)
<b>Lost to follow up</b>	1 (2.1%)
<b>Viral load &lt;40 copies/mL</b>	48 (100%)
<b>Viral rebound &gt;200 copies/mL</b>	1 (2.1%)
<b>Viral load monitored at least twice</b>	47 (97.9%)

Figure 2: Documented Barriers

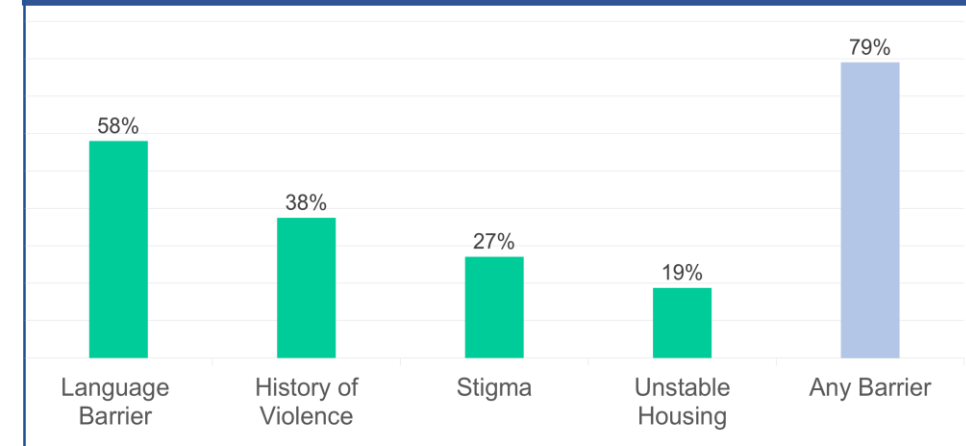
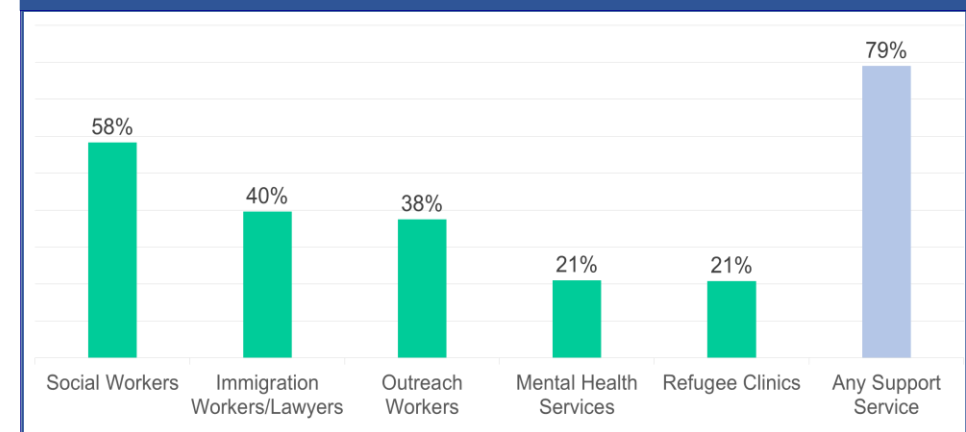


Figure 3: Documented Facilitators



# Limitations

- Retrospective chart review
- Could not verify information with patients or health care providers
- Captured only patients engaged in care
- Number of patients not engaged in care still unknown
- IFH billing code used to identify study sample
- Only refugee claimants were identified, sponsored refugees with provincial medical coverage were not identified

# Conclusions

- Refugees connected with care achieve clinical targets despite multiple barriers
  - Clinics should have a system for identifying and monitoring refugees to ensure supports are in place
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