

Access To Care And Impacts On HIV Treatment Interruptions During the COVID-19 Pandemic Among People Living With HIV In British Columbia

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I am presenting today from the ancestral,
traditional, and unceded territory of the
**Musqueam, Squamish, and Tsleil-Waututh
First Nations**



Background

- The COVID-19 pandemic has resulted in many changes in healthcare service delivery for PLWH
 - Limitations on in-person appointments
 - Options for virtual care
 - Longer dispensing intervals for ART
- We examined perspectives on changes in health service access due to COVID-19 of people living with HIV (PLWH) in BC and potential resulting effects on antiretroviral treatment interruptions (TIs)



Methods

- From January 2016 - September 2018, we used purposive sampling to enrol PLWH aged ≥ 19 years across BC into the STOP HIV/AIDS Program Evaluation (SHAPE) study
- Participants completed surveys at enrollment, 18 and 36 months
 - in-person interviews, telephone interviews or self-completion on-line
- Consented to linkages with the BC HIV Drug Treatment Program
- Data collection stopped from March – Sept 2020 and resumed October 2020 until Aug 2021
 - Telephone interviews or on-line only + additional COVID-19 questions



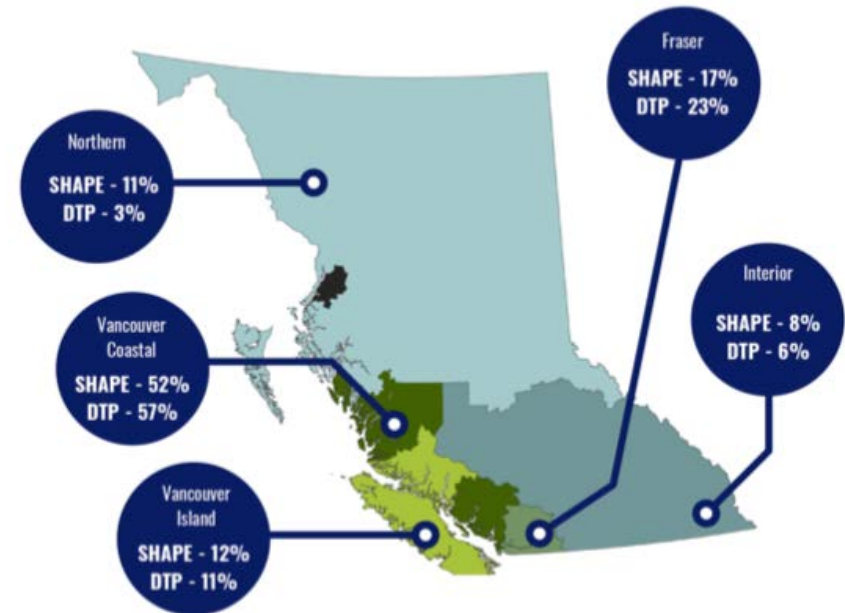
Data analysis

- We examined trends in TIs in six-month periods among all SHAPE participants between March 2019 and August 2021
 - Defined as >60 days late for ART refill using data from the BC HIV DTP
- Examined associations of TIs and reported health service access using Generalized Linear Mixed Models among participants completing COVID questions



Results

- 644 PLWH enrolled in SHAPE
 - 22% female, 77% male
 - 52% reside in Vancouver Coastal HA
 - 57% GBM, 40% PWID
- 595 were alive in March 2019 and receiving ART >3 months since enrollment
 - Overall TI trends
- 196 completed the COVID-19 module survey
 - GLMM analysis of factors associated with TIs





Proportion of SHAPE participants with TIs over time

TI within period	Mar 2019 to Aug 2019	Sep 2019 to Feb 2020	Mar 2020 to Aug 2020	Sep 2020 to Feb 2021	Mar 2021 to Aug 2021
No	554	542	530	514	517
Yes	36	36	38	41	18
Total	590	578	568	555	535
% with TI	6.1%	6.2%	6.7%	7.4%	3.4%

Period	OR	95% CI	P-value
Mar 2019 to Aug 2019	Ref		
Sep 2019 to Feb 2020	1.02	0.60 1.71	0.954
Mar 2020 to Aug 2020	1.11	0.66 1.85	0.700
Sep 2020 to Feb 2021	1.27	0.76 2.11	0.365
Mar 2021 to Aug 2021	0.47	0.25 0.88	0.019

No significant differences in TIs by 6 month period compared to pre-COVID except for last period (decreased odds of having a TI)



Results – COVID module

- 192 ppts completed the COVID module and on ART >3 months
 - 17% female, 82% male
 - 49% from Vancouver Coastal HA
 - 68% GBM; 19% PWID
- 7.8% had TIs only before March 2020;
- 7.8% had TIs only after March 2020;
- 2.6% had TIs in both periods
- Health service access questions:
 - 33% reported having difficulty accessing healthcare during COVID-19
 - 10.9% reported avoiding healthcare services due to COVID-19
 - 72.9% reported using virtual healthcare services since March 2020



Factors associated with TIs over time

Variable	Univariable			P-value	Multivariable			P-value
	Odds Ratio	95% CI			Adjusted Odds Ratio	95% CI		
Six-month period								
Mar 2019 to Aug 2019	1.00							
Sep 2019 to Feb 2020	1.15	0.44	3.06	0.773	1.02	0.38	2.71	0.969
Mar 2020 to Aug 2020	0.66	0.22	1.94	0.447	0.66	0.23	1.92	0.449
Sep 2020 to Feb 2021	1.51	0.58	3.91	0.395	1.49	0.59	3.78	0.402
Mar 2021 to Aug 2021	0.24	0.06	0.98	0.047	0.25	0.06	0.99	0.048
Use of non-prescription drugs in past 12 months	3.33	1.12	9.86	0.03	2.53	0.81	7.88	0.108
Injection drug use in past 12 months	3.70	1.38	9.89	0.009	Not selected			
Income assistance as main source of income	3.14	1.17	8.42	0.023	Not selected			
Ever Homeless	2.38	0.98	5.75	0.055	Not selected			
Smoking status								
Never	1.00							
Former	1.55	0.42	5.68	0.508	1.40	0.37	5.23	0.619
Current	5.16	1.67	15.97	0.004	3.66	1.13	11.86	0.030
Used virtual services/ telehealth for health care and support	0.44	0.17	1.16	0.098	0.46	0.18	1.17	0.103
Experienced difficulty in accessing health care								
No	1.00				Not selected			
Yes	1.02	0.38	2.77	0.966				
No need to access health care	5.70	1.08	29.99	0.04				

No associations with *age, gender, education level, ethnicity, HIV exposure category, change in alcohol, cannabis or tobacco-use or challenges to health service* access during COVID-19



Conclusions

- While some participants reported challenges to accessing services or avoidance of services due to COVID-19, treatment interruptions were not more likely during COVID-19 than before
- None of these challenges were associated with treatment interruptions
- Many participants reported accessing virtual health services
 - those who did appear to be less likely to interrupt treatment but this was not statistically significant



Strengths and Limitations

- Purposive recruitment allowed investigators to recruit a sample that was generally representative of PLWH in BC
 - Gender, regional distribution, Indigenous status, HIV exposure group
- Data linkages with the DTP allows us to follow participants even if they miss or have completed survey data collection
- However, as in any cohort study, participants become less representative of the underlying population over time
 - Only 30% of completed the COVID-19 module, as most had exited the study by 2020



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