



Evaluating Experiences of HIV-related Stigma Among People Living with HIV Diagnosed in Different Treatment Eras in British Columbia, Canada

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Background

- Experiences of stigma among people living with HIV (PLWH) are pervasive and are associated with poorer health outcomes
- Stigma is defined by UNAIDS and Goffman (1963)^{1,2} as:
 - "a dynamic process of devaluation that significantly discredits an individual in the eyes of others"
- There is limited data on whether experiences of HIV stigma vary by age and living experience with HIV
- We sought to examine whether PLWH diagnosed in different treatment eras experience varying levels of self-reported HIV-related stigma

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- 2. Goffman, E. (1963). Stigma: Notes on the Management of Spoiled Identity. Simon and Shuster.







Methods

- Between January 1, 2016 to August 30, 2018, we used purposive sampling to enrol a representative sample of PLWH ≥19 living in BC into the STOP HIV/AIDS Program Evaluation (SHAPE) study³
- Participants completed the 10-item Berger HIV Stigma Scale^{4,5}
 - 4 subscales measuring: personalized stigma, disclosure concerns, negative self-image, concerns with public attitudes toward people with HIV
 - Higher scores indicate higher perceived HIV stigma
- Multivariable linear regression was used to model the association between year of diagnosis by treatment era and mean HIV stigma score
 - Treatment era defined as: pre-HAART (before 1996), early HAART (1996-1999), modern HAART (2000-2009), Treatment as Prevention (TasP) (2010-present)
- 3. Bever, A., Salters, K., Tam, C., Moore, D. M., Sereda, P., Wang, L., Wesseling, T., Grieve, S., Bingham, B., & Barrios, R. (2020). Cohort profile: The STOP HIV/AIDS Program Evaluation (SHAPE) study in British Columbia, Canada. BMJ Open, 10(5), 1–8.
- 4. Berger, B. E., Ferrans, C. E., & Lashley, F. R. (2001). Measuring stigma in people with HIV: Psychometric assessment of the HIV stigma scale. *Research in Nursing and Health*, *24*(6), 518–529.
- 5. Wright, K., Naar-King, S., Lam, P., Templin, T., & Frey, M. (2007). Stigma Scale Revised: Reliability and Validity of a Brief Measure of Stigma for HIV+ Youth. *Journal of Adolescent Health*, 40(1), 96–98.





Results

- Of 644 participants:
 - Median age at diagnosis: 34 (Q1-Q3: 27-40)
 - Median age at interview:
 50 (Q1-Q3: 42-56)
 - Mean stigma score: 19.05 (range 0-40)
- HIV treatment era was not associated with higher HIV stigma scores
 - Controlling for age, gender, HIV risk group, ethnicity, ever having a mental health disorder diagnosis

Variable	Overall	HIV stigma score	Multivariable Linear Regression
	(n, %)	(median, Q1-Q3)	(Estimate, 95% CI)
Treatment era (by year diagnosed) Pre-HAART Early HAART Modern HAART TasP	160 (24.8)	17 (11-23)	Ref
	81 (12.6)	20 (13-25)	0.35 (-1.92, 2.62)
	255 (39.6)	20 (14-26)	1.42 (-0.33, 3.17)
	148 (23.0)	19 (12-25.5)	0.83 (-1.25, 2.91)
Age at interview Less than 40 40 to 49 50 to 59 60 or greater	127 (19.7)	19 (12-26)	Ref
	183 (28.4)	22 (16-27)	2.44 (0.47, 4.40)
	229 (35.6)	18 (14-24)	0.23 (-1.77, 2.24)
	105 (16.3)	17 (11-22)	-1.76 (-4.14, 0.61)
Gender Male Female Other	493 (76.6) 139 (21.6) 12 (1.9)	19 (13-24) 20 (14-26) 16 (11-22)	Ref -0.47 (-2.50, 1.57) -1.90 (-6.66, 2.87)
Risk group gbMSM only IDU only Both gbMSM and IDU Heterosexual only Other	281 (43.6) 179 (27.8) 94 (14.6) 77 (12.0) 13 (2.0)	18 (12-24) 21 (14-26) 18 (13-23) 20 (16-27) 15 (12-24)	Ref 0.89 (-1.02, 2.80) 0.34 (-1.59, 2.26) 2.60 (0.22, 4.98) -0.81 (-5.59, 3.97)
Ethnicity Caucasian Indigenous Asian/African/Black/ Caribbean/Latin Other	447 (69.4)	19 (13-24)	Ref
	101 (15.7)	21 (14-26)	0.11 (-1.81, 2.03)
	44 (6.8)	17.5 (13-25.5)	-0.95 (-3.57, 1.67)
	52 (8.1)	19.5 (13.5-25.5)	0.76 (-1.63, 3.15)
Mental health diagnosis ever	433 (67.2)	20 (14-26)	2.36 (0.97, 3.75)

Table 1: Multivariable model used to model the association between treatment era and HIV-related stigma score (per one unit increase)







Discussion

 We did not find that HIV stigma scores varied by era of treatment engagement, suggesting that despite therapeutic advances, HIV-related stigma remains a problem even for PLWH diagnosed in recent years

Limitations

- HIV stigma scores only characterize experiences of HIV stigma at the time of the baseline interview
- Those facing highest levels of HIV stigma may be less likely to disclose or be inclined to participate in an HIV study

Future research

 Longitudinal analyses that characterize stigma experiences over time may help determine whether individual stigma experiences change the longer they live with HIV

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