

Gabriel B. Tjong¹, Kristen O'Brien¹, Tsegaye Bekele¹, Francisco Ibáñez-Carrasco², Muluba Habanyama¹, Murray Jose-Boerbridge³, Abigail E. Kroch^{1,2,4}

¹Ontario HIV Treatment Network (OHTN), ²Dalla Lana School of Public Health, University of Toronto ³Toronto HIV/AIDS Network, ⁴Public Health Ontario

Background

HIV stigma is a barrier to testing, treatment, and an optimal life for people living with HIV (PLWH). In order to better understand experiences of stigma for PLWH in Ontario and its relationship to health outcomes, we asked PLWH about stigma and examined specific covariates in the OHTN Cohort Study (OCS).

82% of participants (n=2173) agreed or strongly agreed with more than one stigma question and 72% (n=1903) reported experiencing more than one type of stigma with 20% experiencing all four stigma types.

Number of Stigma Types Experienced (n=2644)

Methods

The OCS is a longitudinal study of PLWH receiving HIV care at 15 clinics in Ontario, Canada. Data were collected through interviewer-administered questionnaires.

We used the short version of the HIV stigma scale (Reinius et al., 2017) that consists of twelve items to assess stigma among OCS participants. This standardized tool includes four subscales: personalized stigma, disclosure concerns, concerns about public attitude, and negative selfimage. Answer options range from 1 to 5 (strongly disagree to strongly agree).

Stigma was analyzed by demographics, HIV risk factors, and self-rated health. A stigma score was generated using quartiles and categorized as very high, high, low, and very low. Stigma score was then dichotomized (high vs low) in a multivariable logistic regression. Descriptive statistics, Chi square and a multivariate logistic regression model were computed using SAS 9.4 software.

Results

2644 participants who completed the annual OCS questionnaire between 2019-2022 and answered all 12 stigma questions were included in the analysis.

- Median age was 52 years old
- Region: 74% Toronto, 16% Southwestern Ontario, 7% Eastern Ontario, 3% Northern Ontario
- Gender/orientation: 62% men, gay/bisexual/other; 24% women; 15% men, heterosexual



Bivariate Analysis

Very low stigma scores were more frequent among those with higher self-rated health (excellent/very good: 27.8% vs fair/poor: 15.8%, p<0.001) and more frequent in the East (28.0%) and North regions (45.2%) compared to Toronto (21.6%) and Southwest (18.1%, p<0.001).

When looking at dichotomized stigma (yes vs no stigma experienced), higher stigma was observed among women and ACB participants for overall stigma and all stigma subscales (p<0.05). Stigma

- Median years lived with HIV was 14 years
- Race: 54% White, 22% Other, 21% Black, 3% Indigenous
- Priority populations: 68% GBMSM, 24% African, Caribbean and Black (ACB), 24% Women, 5% IDU, 4% Indigenous
- 48% were employed
- 46% had excellent or very good self-rated general health

92% of participants (n=2420) reported experiencing stigma (agreed or strongly agreed)

- Disclosure concerns was the most common type of stigma experienced (84%)
- 79% agreed/strongly agreed that "I am very careful who I tell that I have HIV" and 64% agreed/strongly agreed that "Telling someone I have HIV is risky"



was lower for GBMSM participants for overall stigma and all stigma subscales (p<0.05).

| Higher Stigma (overall only, p<0.05) | Lower Stigma (overall only, p<0.05) |
|--------------------------------------|--|
| - Women | - Higher self-rated general health |
| - ACB | North (vs. East, Southwest, and Toronto) |
| - Born outside Canada | - GBMSM |

Multivariate Logistic Regression

- Stigma was higher for ACB participants (OR: 1.51, 95% CI: 1.16, 1.96, p=0.002) and women (OR: 1.64, 95% CI: 1.13, 2.37, p=0.009).
- Stigma was lower for older participants (OR: 0.98, 95% CI: 0.97, 0.99, p<0.001), participants born in Canada (OR: 0.79, 95% CI: 0.64, 0.97, p=0.023), GBMSM participants (OR: 0.63, 95% CI: 0.45, 0.87, p=0.006), and participants with longer time since HIV diagnosis (OR: 0.98, 95% CI: 0.97, 0.99, p=0.002)
- No association was found between higher stigma and employment

Discussion

Disparities exist, with women, ACB people, and people born outside Canada experiencing greater stigma. Stigma is associated with health, and therefore must be addressed in order to ensure PLWH experience optimal health.

Type of stigma experienced (n=2644)



References

Reinius, M., Wettergren, L., Wiklander, M., Svedhem, V., Ekström, A. M., & Eriksson, L. E. (2017). Development of a 12-item short version of the HIV stigma scale. *Health and Quality of Life Outcomes, 15*(1), 115. https://doi.org/10.1186/s12955-017-0691-z

Acknowledgements



The authors gratefully acknowledge the OHTN Cohort Study, team, people living with HIV who volunteer to participate in the OHTN Cohort Study, OCS Governance Committee and Scientific Steering Committee members, interviewers, data collectors, research associates and coordinators, nurses and physicians who provide support, and study coordination. We also acknowledge Public Health Ontario, for supporting linkage with the HIV viral load database. The OHTN Cohort Study is funded by the Ontario Ministry of Health.

http://ohtncohortstudy.ca/acknowledgements/

Conflict of Interest Disclosure: "I have no conflicts of interest"