

Health-related quality-of-life (QoL) among women living with HIV in Canada is associated with receipt of perceived women-centred HIV care (WCC)

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Étude sur la santé sexuelle et reproductive
des femmes vivant avec le VIH au Canada

Canadian HIV Women's Sexual and
Reproductive Health Cohort Study



Conflicts of Interest Disclosure

We have no conflicts of interest to declare.

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In **ON**: 2-Spirited People of the 1st Nations; 519 Community Centre; ACCKWA; Africans in Partnership Against AIDS (APAA); AIDS Committee of Durham Region; AIDS Committee of Guelph and Wellington County; AIDS Committee of Simcoe County; AIDS Network Hamilton; Alliance for South Asian AIDS Prevention; Black Coalition for AIDS Prevention; Bruce House; Casey House; Centre Francophone; Elevate NOW; Fife House; Hemophilia Ontario; HIV/AIDS Regional Services (HARS); Maggie's: Toronto Sex Worker's Action Project; Peel HIV Network; Positive Living Niagara; Prisoners with AIDS Support Action Network; Réseau Access Network; Toronto PWA Foundation; Women's Health in Women's Hands; Children's Hospital of Eastern Ontario; Kingston Hotel Dieu Hospital; Health Sciences North, Sudbury Regional Hospital, HAVEN Program; Lakeridge Health; Maple Leaf Medical Clinic; McMaster Family Practice; Ottawa General Hospital; Riverside Family Health Team; SIS Clinic, Hamilton Health Sciences; St. Joseph's Healthcare London; St. Michael's Hospital; Sunnybrook Health Sciences Centre; Toronto East General Hospital; Toronto General Hospital; William Osler Health System; Windsor Regional Hospital, HIV Care Program.

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Background: WCC and QoL

- Women report gaps in HIV clinical care for women and have requested services adopt a women-centred approach to HIV care and support.^{1,2}
 - Evidence-base on what constitutes **women centred HIV care (WCC)** and whether it is associated with improved health outcomes is lacking.
- Improved health-related quality of life (QoL) is one important outcome from HIV treatment, care, and support.
 - However, QoL has not been well-studied among women with HIV in Canada, nor its relationship to WCC.
- **Objective of this analysis:**
 - **To measure QoL among a cohort of women living with HIV in Canada and assess whether QoL differs by receipt of perceived WCC**

Methods: The CHIWOS Study

- A multi-site, longitudinal, community-based research study
- Enrolling >1,400 women with HIV (self-identified, ≥16 years) from BC, ON & QC
- **Study goals:** To assess patterns of use of women-centred HIV care, & the impact on sexual, reproductive, mental & women's health outcomes
- **Study procedures:** Peer Research Associates (women with HIV) administer a comprehensive, online questionnaire to participants at baseline and 18-months



Section 1: Demographics and Social Determinants of Health
Section 2: Medical and HIV Disease Information
Section 3: Health Care and Support Service Utilization
Section 4: Emotional Wellbeing, Resiliency, and Health Related Quality of Life
Section 5: Women's Reproductive Health
Section 6: Stigma and Discrimination
Section 7: Substance Use
Section 8: Violence and Abuse
Section 9: Women's Sexual Health
Section 10: Resilience

What province is this interview taking place?

British Columbia
 Ontario
 Quebec

Methods: In this analysis...

- **Study Population:**

- CHIWOS participants enrolled between Aug 27, 2013 and Mar 13, 2015, and who reported receiving HIV care in past year.

- **Two Primary Outcomes:**

- (1) **Physical** health-related QoL
- (2) **Mental** health-related QoL

- Assessed by SF-12, a well-validated 12-item measure for general health status.³ Scored from 0-100. **Higher** scores = **better** health status.

Methods: In this analysis... (cont'd)

- **Primary Explanatory Variable: Perceived WCC:**

“Overall, I think that the care I have received from my HIV clinic has been women-centred.” > **AGREE** (S/SA) vs **DISAGREE** (N/D/SD)

- Provided standardized definition to participants

“... supports women living with HIV to achieve the best health and well-being as defined by women... addresses women’s unique health and social concerns, and recognizes that they are connected... is flexible and takes the different needs of women into consideration.”

- ‘Agree’ correlated with features of WCC we would expect from theory

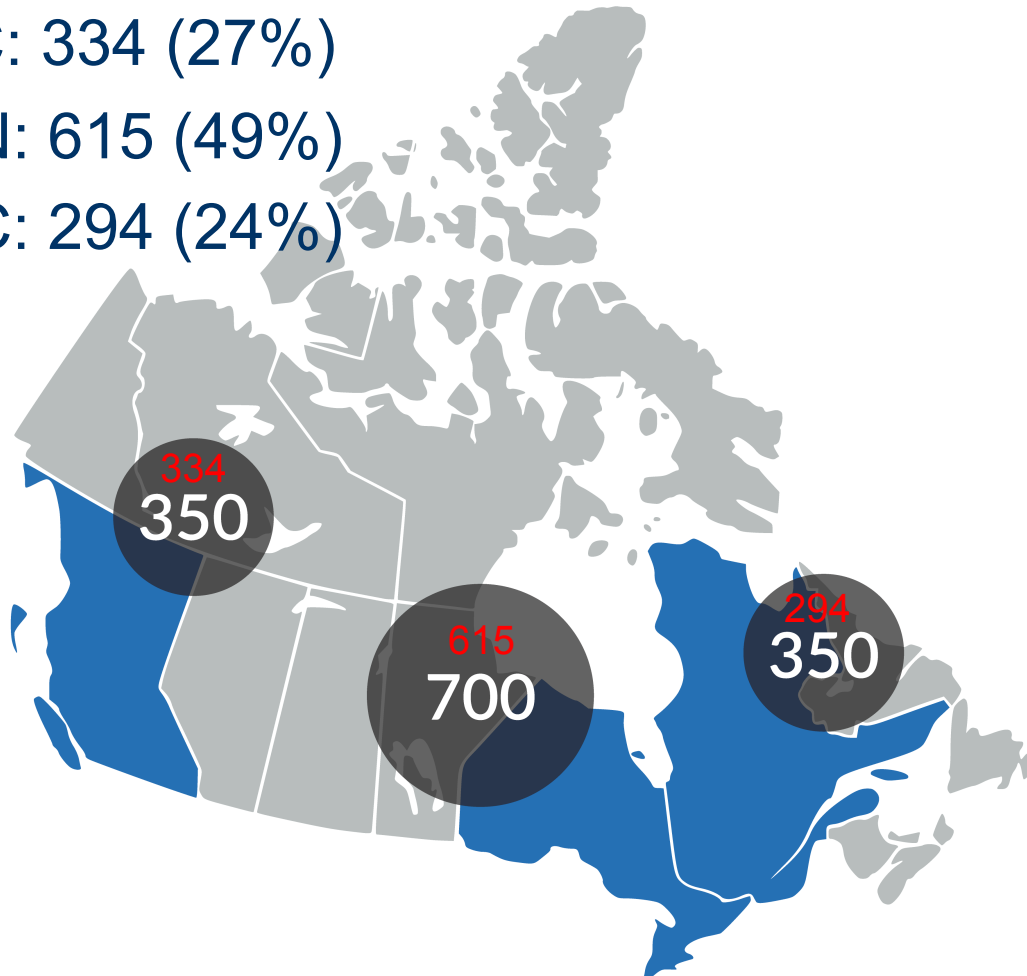
Women who AGREE are more likely to say that their HIV clinic is a place where they feel: the care is gender-sensitive, safe, multiple services offered onsite, and opportunities to connect with other HIV-positive women.

- **Statistical Analyses:** Multivariable linear regression examined the relationship between perceived WCC and QoL, adjusting for confounders.

Results: Participant Characteristics

1243 participants were included in this analysis

- BC: 334 (27%)
- ON: 615 (49%)
- QC: 294 (24%)



Results: Participant Characteristics

	Overall (n=1243)	BC (n=334)	ON (n=615)	QC (n=294)	p- value
Median Age [IQR]	43 (36-51)	44(37-51)	41(35-50)	47(38-53)	<0.001
Gender identity, n (%)					
Cis Woman	1196 (96)	322 (96)	594(97)	280(95)	
Trans woman	37 (3)	9 (3)	15(2)	13(4)	
Two-spirited/Gender Queer/Other	9 (1)	<5 (1)	5(1)	<5(0.3)	0.608
Ethnicity, n (%)					
Caucasian	2503 (41)	120 (36)	244 (40)	139 (47)	
Aboriginal	61 (21)	148 (44)	107 (17)	6 (2)	
African / Caribbean / Black Canadian	344 (28)	18 (5)	195 (32)	131 (45)	
Other	70 (6)	15 (5)	39 (6)	16 (5)	
Mixed	64 (5)	33 (10)	29 (5)	<5 (1)	<0.001
Injection drug use, n (%)					
Currently (past 3 months)	105 (8)	68 (20)	23 (4)	14 (5)	
Not currently but previously	285 (23)	142 (43)	84 (14)	59 (20)	
Never	833 (67)	124 (37)	491 (80)	218 (74)	<0.001
Household income <\$20,000, n (%)	831 (67)	258 (77)	383 (62)	190 (65)	<0.001
Sexual orientation, n (%)					
Heterosexual	1071 (86)	272 (81)	529 (86)	270 (92)	
Lesbian/Gay/Queer/Two-spirited	45 (4)	13 (4)	27 (4)	5 (2)	
Bisexual	101 (8)	38 (11)	46 (7)	17 (6)	
Other/Questioning/Don't Know	25 (2)	11 (3)	12 (2)	<5 (1)	0.006
Relationship Status, n (%)					
Married / Common Law / In a Relationship	391 (31)	113 (34)	190 (31)	88 (30)	
Single	595 (48)	156 (47)	325 (53)	114 (39)	
Separated / Divorced / Widowed	239 (19)	53 (16)	96 (16)	90 (31)	<0.001

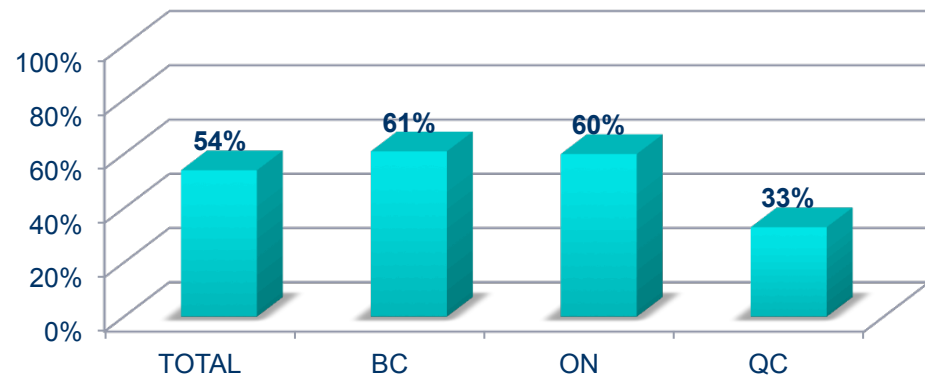
Results: QoL and perceived WCC

Recall: Higher score = better health

- **Mental health score, mean (SD): 43.9 (14.4)**
 - vs. 49.7 (general female Cdn pop'n)⁴ and 45.4 (other HIV-positive cohorts)⁵
- **Physical health score, mean (SD): 41.7 (14.2)**
 - vs. 50.9 (general female Cdn pop'n)⁴ and 42.9 (other HIV-positive cohorts)⁵
- **By province:**

	BC (n=334)	ON (n=615)	QC (n=294)	p-value
Physical QoL, mean (SD)	39.6 (15.7)	45.6 (13.0)	45.2(14.7)	<0.001
Mental QoL, mean (SD)	39.6 (13.7)	43.2 (14.4)	40.9 (13.9)	<0.001

- **Perceived WCC:**
 - % agree HIV clinic is women-centred



Results: Bivariate Analyses

Recall: Higher score = better health

	Physical QoL Mean (SD)	p-value	Mental QoL Mean (SD)	p-value
Perceived women-centred <u>HIV clinic</u>				
Agree	44.62 (14.06)		43.76 (14.08)	
Disagree	43.04 (14.72)	0.070	39.35 (13.91)	<0.001
Age at interview				
16-29	50.02 (10.49)		43.97 (13.98)	
30-39	48.34 (11.95)		42.68 (15.14)	
40-49	42.33 (14.34)		39.80 (13.23)	
50+	39.05 (15.78)	<0.001	42.17 (13.97)	0.003
Relationship Status				
Married/Common Law/Relationship	44.63 (14.42)		42.86 (14.01)	
Single	44.23 (14.09)		41.98 (14.64)	
Separated / Divorced / Widowed	41.38 (14.85)	0.012	39.42 (12.92)	0.003
Income				
>=\$20,000	46.63 (13.95)		44.04 (13.76)	
<\$20,000	42.62 (14.40)	<0.001	40.63 (14.26)	<0.001
Injection drug use				
Currently (past 3 months)	40.38 (14.59)		32.97 (14.07)	
Not currently but previously	40.08 (14.84)		41.03 (13.53)	
Never	41.80 (15.74)	0.424	39.41 (13.96)	<0.001

Results: Linear Regression Analyses

- Receipt of perceived WCC from an HIV clinic was associated with higher mental health QoL scores after covariate adjustment*

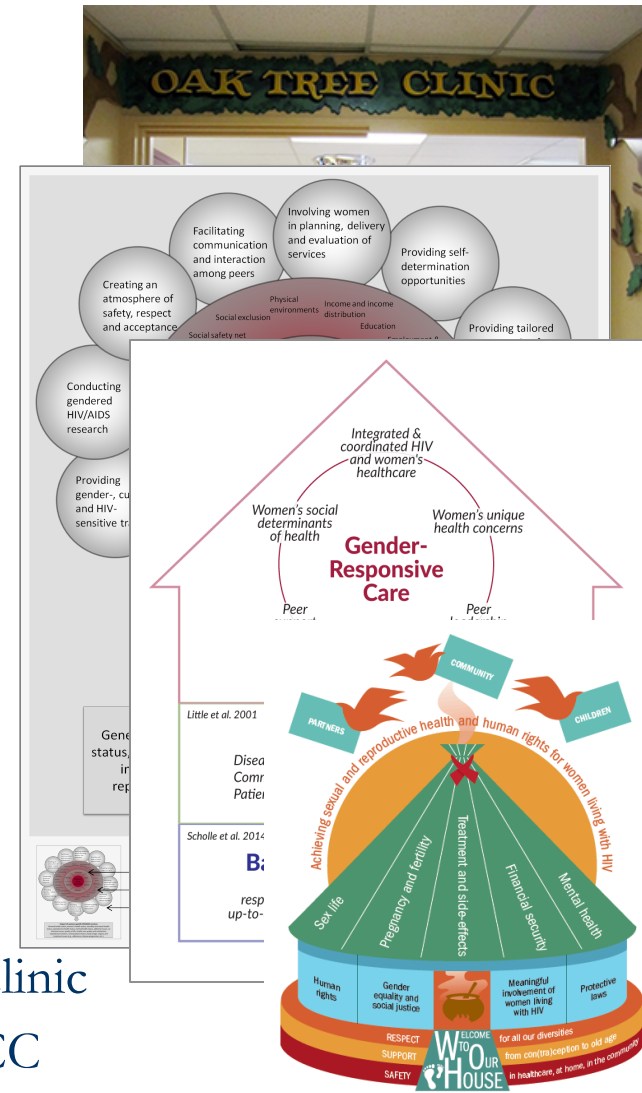
	Univariate β (95% CI)	Multivariate β (95% CI)*	p-value
Perceived WCC from <u>HIV clinic</u> (Agree vs. Disagree)	4.41 (2.84 to 5.97)	3.18(1.60 to 4.75)	<0.001

*Adjusted for age, gender, sexual orientation, relationship status, ethnicity, income, and injection drug use history.

- No significant association observed between perceived WCC and physical health QoL scores.

Discussion / Limitations: A note on the underlying theory & measurement of WCC

- Lack of a gold standard measure
- Real-world examples
 - E.g., Oak Tree Clinic⁶
- Emerging conceptual models:
 - Carter et al. (2013)⁷ – literature review
 - O'Brien et al. (unpublished)¹ – focus groups
 - Kaida et al. (unpublished)⁸ – survey data
 - Salamander Trust (2014)²
- Informed patient-level measure of women-centredness in our survey
 - Exp. variable in this analysis = her perception
 - Other measures in survey: services & features of clinic
 - Working towards a more objective measure of WCC



Conclusions

- Mental and physical QoL was lower than estimates for general population of Canadian women⁹ and other HIV populations¹⁰.
- Receipt of perceived WCC was associated with higher mental health QoL,[§] but not physical.
- **Next steps for CHIWOS:**
 - To develop and validate an objective measure of WCC
 - To investigate impact of WCC on sexual, reproductive, mental & women's health outcomes among women living with HIV in Canada

§Independent of drug use and other characteristics



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Thank you! Questions?

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