The Canadian HIV Women’s Sexual and Reproductive Health Cohort Study:
An evaluation of women-centred HIV care

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Conflicts of Interest Disclosure

No conflicts of interest to declare.
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CHIWOS would like to acknowledge all of the traditional territories of the Duwamish, Suquamish, Muckleshoot, Snoqualmie, Tulalip, and Puyallup Nations on which we have gathered.
Background

2011 presentation by Dr. Monica Ghandi at the 1st International on HIV & Women Workshop summarized cohorts of HIV-positive women and girls

**Women’s Interagency HIV Study (WIHS)**

*Only exclusively women’s HIV cohort – established in 1993*

- HIV+ women (74%) and HIV- controls (26%)
- 3,500 participants at 1994/95, 2001/2 and 2011/12

While global cohorts have enrolled large numbers of women, women-only national cohort studies on HIV are limited.
In Canada → Women-only HIV Cohort

CHIWOS = Canadian HIV Women’s Sexual and Reproductive Health Cohort Study

- Five-year, national, multi-site, inter-disciplinary, community-based research (CBR) longitudinal cohort study

Why?

- Epidemiological research has pointed to the increasing feminization of the epidemic
- Critical health research regarding the care and health outcomes of women with HIV is only now emerging
Primary CHIWOS objectives

- To determine the proportion, distribution and patterns of women-centred HIV care (WCC) among women with HIV in British Columbia (BC), Ontario (ON) and Quebec (QC)

- To determine the correlates of WCC and impact on overall, mental, sexual and reproductive health outcomes (FUTURE)
Dimensions of Women’s Health
Determinants of Women’s Health
Pillars of women-centred HIV care

Carter et al. JIAS 2013
Operational definition of WCC:

“WCC supports women living with HIV to achieve the best health and well-being as defined by women. This type of care recognizes, respects, and addresses women’s unique health and social concerns, and recognizes that they are connected. Because this care is driven by women’s diverse experiences, WCC is flexible and takes the different needs of women into consideration.”
Methods – Study Population & Design

• Enrolling 1,400

• Inclusion criteria:
  • Self-identified women (transgender inclusive)
  • Living with HIV (self-report)
  • ≥ 16 years
  • Living in BC, ON, and QC, Canada*

• Longitudinal
  • Baseline visit
  • 18-month follow-up visit

*82% of HIV+ women live in these provinces
Methods – Sampling & Recruitment

- Non-random purposive sampling
- Hired & trained Peer Research Associates (PRAs)
- Participants complete a PRA-administered consent & web-based survey:
  - Medical history
  - Use of clinical and social services and WCC
  - Health outcomes
  - Substance use
  - Experiences of violence
  - Stigma and discrimination
  - Food and housing security, and other social determinants of health
Methods – Outcome of interest

A WCC scale was developed by our research team to measure the primary outcome of interest across three constructs:

1. basic competency of care
2. person-centredness
3. gender responsiveness

Factor analysis is being undertaken to finalize the scale (long form 60 items) & model

A simple perceived WCC scale:

<table>
<thead>
<tr>
<th>WCC is dichotomized such that Strongly agree/Agree = WCC</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither agree or disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>Prefer not to answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall, I am satisfied with the care I have received from my HIV clinic.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Overall, I think that the care I have received from my HIV clinic has been women-centred.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Overall, I am satisfied with the care I have received from my HIV Doctor.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Overall, I think that the care I have received from my HIV Doctor has been women-centred.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Overall, women-centred care is important to me.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
Methods – Analyses

- Summary statistics of socio-demographic and clinical characteristics and perceptions of WCC usage
  - medians and IQRs for continuous variables
  - frequencies and proportions for categorical variables
    - total
    - by province (BC, ON, QC) and;
    - ANOVA and Chi-square for comparisons between provinces
Results – as of February 13th, 2015

National Total = 1285 Participants

Current Study Provinces

Future Study Provinces

Ontario 685 (53%)

British Columbia 320 (25%)

Quebec 280 (22%)
## Results - Demographics

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Total (n=1285)</th>
<th>BC (n=320)</th>
<th>ON (n=685)</th>
<th>QC (n=270)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Median Age [IQR]</strong></td>
<td>42 (35-50)</td>
<td>44 (36-51)</td>
<td>40 (34-49)</td>
<td>46 (37-53)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td><strong>Gender Identity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Woman</td>
<td>96%</td>
<td>97%</td>
<td>96%</td>
<td>96%</td>
<td>0.648</td>
</tr>
<tr>
<td>Trans woman/2-spirit/Queer</td>
<td>4%</td>
<td>3%</td>
<td>4%</td>
<td>4%</td>
<td></td>
</tr>
<tr>
<td><strong>Sexual orientation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heterosexual</td>
<td>88%</td>
<td>85%</td>
<td>88%</td>
<td>92%</td>
<td>0.014</td>
</tr>
<tr>
<td>LGBTQ</td>
<td>12%</td>
<td>15%</td>
<td>12%</td>
<td>8%</td>
<td></td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indigenous –First Nations, Métis &amp; Inuit</td>
<td>23%</td>
<td>47%</td>
<td>20%</td>
<td>3%</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>African, Caribbean, Black</td>
<td>29%</td>
<td>6%</td>
<td>32%</td>
<td>45%</td>
<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td>39%</td>
<td>35%</td>
<td>38%</td>
<td>46%</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>9%</td>
<td>12%</td>
<td>10%</td>
<td>6%</td>
<td></td>
</tr>
<tr>
<td><strong>Ever incarcerated</strong></td>
<td>38%</td>
<td>65%</td>
<td>29%</td>
<td>30%</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td><strong>Injection drug use history</strong></td>
<td>31%</td>
<td>65%</td>
<td>18%</td>
<td>26%</td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>
## Results - Clinical

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Total (n=1285)</th>
<th>BC (n=320)</th>
<th>ON (n=685)</th>
<th>QC (n=270)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>HCV</td>
<td>32%</td>
<td>58%</td>
<td>21%</td>
<td>31%</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>HBV</td>
<td>9%</td>
<td>14%</td>
<td>5%</td>
<td>10%</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Median years living with HIV [IQR]</td>
<td>10 (5-16)</td>
<td>12 (6-17)</td>
<td>9 (5-15)</td>
<td>12 (7-18)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Received HIV-related medical care in the last year</td>
<td>93%</td>
<td>98%</td>
<td>89%</td>
<td>98%</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Currently taking ART</td>
<td>82%</td>
<td>89%</td>
<td>74%</td>
<td>95%</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Undetectable viral load (self-report)</td>
<td>76%</td>
<td>80%</td>
<td>70%</td>
<td>87%</td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>
## Results – Perceived WCC of HIV clinic and HIV doctor*

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Total (n=1200)</th>
<th>BC (n=320)</th>
<th>ON (n=685)</th>
<th>QC (n=270)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfied with the care received from HIV clinic</td>
<td>92%</td>
<td>91%</td>
<td>93%</td>
<td>94%</td>
<td>0.36</td>
</tr>
<tr>
<td>Perceive care at HIV clinic to be women-centred</td>
<td>54%</td>
<td>61%</td>
<td>61%</td>
<td>32%</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Satisfied with the care I have received from my HIV doctor</td>
<td>92%</td>
<td>91%</td>
<td>92%</td>
<td>94%</td>
<td>0.55</td>
</tr>
<tr>
<td>Perceive care provided by HIV doctor to be women-centred</td>
<td>58%</td>
<td>67%</td>
<td>64%</td>
<td>34%</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>WCC is important to me</td>
<td>81%</td>
<td>83%</td>
<td>83%</td>
<td>72%</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>My satisfaction with the care I receive depends on how women-centre it is</td>
<td>61%</td>
<td>59%</td>
<td>69%</td>
<td>46%</td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>

*Restricted to n=1200 women who received HIV-related medical care in the past year.

** Responses indicate Strongly Agree/Agree vs. Neutral/Disagree/Strongly Disagree
Discussion

- A large scale CBR cohort study is possible: investing in community relationships, training, and support - is key
- Women are, in general, satisfied with the care from their HIV clinic and doctor; the degree of their HIV care being women-centred varied by province
- Discrepancies between how important WCC was to them and the above two results
  - Requires further investigation
Acknowledgments

We would like to thank everyone involved for their invaluable contributions to the study. Thank you to...

All the women living with HIV involved in this study;
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The Coordinators and all the co-investigators and collaborators;
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Our funders: the CIHR, CTN, OHTN and Ontario MoH;
Our affiliated studies: CANOC & OSC
Acknowledgments - British Columbia Sites

• AIDS Vancouver Island,
• BC Centre for Excellence in HIV/AIDS
• Cool Aid Community Health Centre
• Downtown Community Health Clinic
• Keys Housing and Health Solutions (Positive Haven)
• Living Positive Resource Centre
• Oak Tree Clinic, Positive Living Fraser Valley
• Positive Women's Network
• Positive Living North
• Vancouver Island Persons with AIDS Society
Acknowledgments- Ontario Sites

**CBOs and ASOs**
- 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/AIDS Network
- Positive Living Niagara
- Prisoners with AIDS Support Action Network

- Réseau Access Network
- Toronto PWA Foundation
- Women’s Health in Women’s Hands

**Clinics and Hospitals**
- 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
Acknowledgments- Québec Sites

• ACCM
• L’ARCHE de l’Estrie
• ASTT(e)Q
• BLITS
• BRAS-Outaouais
• CACTUS
• CASM
• Centre Sida Amitié
• Corporation Félix Hubert d’Hérelle
• COCQ_SIDA
• Fondation d’Aide Directe-SIDA Montréal
• GAP-VIES
• GEIPSI

• M.A.I.N.S-Bas St-Laurent
• Maison Plein Coeur
• Maison Dominic
• Maison du Parc
• Maison Re-Né
• MIELS-Québec
• Le MIENS Chicoutimi
• Portail VIH/sida du Québec
• Sidaction Mauricie
• Sida-Vie Laval
• Stella, l’amie de Maimie
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