The Cedar Project

Exploring the role of residential transience in HIV vulnerability among young Aboriginal people who use illicit drugs.

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Mohawk Peoples

Mentor: Vicky Thomas (Wuikinuxv Nation).

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The Cedar Project
The Cedar Project Partnership

Prince George Native Friendship Centre
Carrier Sekani Child and Family Services
Splatsin-Secwepmc Nation
Adams Lake Indian Band
Neskonlith Indian Band
Positive Living North
Healing Our Spirit
Red Road Aboriginal AIDS Network
Canadian Aboriginal AIDS Network
Vancouver Native Health Society
Central Interior Native Health
All Nations Hope
Background
Historical context of housing status among Aboriginal people

“The narrative of Indigenous homelessness has to start at the beginning, that is with the historical truth of the original and ongoing dispossession of Indigenous people and of its consequences for the first peoples.” (Murray, 2010)
Current housing status among Aboriginal people

Core housing need:

40% of off-reserve status Indians who rent in BC lived in housing that did not meet Canadian standards for affordability, suitability, adequacy (CMHC, 2006).

Homelessness:

66% of Prince George’s homeless population and 36% of Vancouver’s homeless population are Aboriginal (Kraus, 2010 and Kutzner, 2010).

Residential mobility:

45% of unstably housed Aboriginal people in Prairie cities had lived in 3+ places in the past six months (Distasio, 2005).
HIV and Aboriginal people

Canada:
Aboriginal people account for 3.8% of the population and 8% of people in Canada living with HIV (PHAC, 2010).

12.5% of new infections are among Aboriginal people, 3.6 times the rate of non-Aboriginal people (PHAC, 2010).

BC:
14.9% of HIV cases diagnosed in 2011 were among Aboriginal people (BCCDC, 2011).

Vulnerable groups:
Women, people who use injection drugs, youth
HIV and housing

Drug-related vulnerability:

“The physical environments in which drug injecting occurs can determine access to clean injecting equipment as well as the capacity of [people who use injection drugs] to maintain safer injection routines without disruption” (Rhodes, 2005)

Sexual vulnerability:

“Particularly important for understanding relationships between housing and HIV is the extent to which access to housing structures intimate relationships” (Aidala, 2007).
Research question

What role does residential transience play in shaping vulnerability to HIV infection?
Methods
The Cedar Project

The Cedar Project is a community-based prospective cohort study of 14 to 30 year old Aboriginal youth who use injection or non-injection drugs and reside in Vancouver or Prince George, British Columbia.

All participants self-identified as Aboriginal and used illicit drugs, other than marijuana, in the month before enrolment (confirmed using saliva screens).

Between October 2003 and July 2005, 605 young people were recruited by word of mouth, posters, and street outreach and provided informed consent.

Aboriginal interviewers administered baseline and follow-up questionnaires every six months. Trained nurses drew blood samples for HIV and HCV antibodies and provided pre- and post-test counselling.
Data and analysis

Study sample:

\[ n = 260 \]

Data collection:

Every 6 months between 2005-2010, 7 follow-ups in total.

Key measure:

Highly transient in the past 6 months
(defined as: slept in 6+ places vs. slept in >5 places)

Analysis:

Bivariant and multivariable generalized linear mixed models
Results & Discussion
Table 1: Selected baseline characteristics of Cedar Project participants by city (2005).

<table>
<thead>
<tr>
<th></th>
<th>Prince George (n= 134)</th>
<th>Vancouver (n= 146)</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age at baseline (median) (range=15-33)</td>
<td>23</td>
<td>26</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Female gender</td>
<td>56.7</td>
<td>50.0</td>
<td>0.261</td>
</tr>
<tr>
<td>At least one parent attended residential school</td>
<td>68.7</td>
<td>83.9</td>
<td>0.003</td>
</tr>
<tr>
<td>Ever taken from biological parents</td>
<td>68.7</td>
<td>69.2</td>
<td>0.925</td>
</tr>
<tr>
<td>Experienced sexual abuse prior to age 13</td>
<td>49.6</td>
<td>50.3</td>
<td>0.904</td>
</tr>
<tr>
<td>Consistent condom use (p6m)a</td>
<td>41.1</td>
<td>45.7</td>
<td>0.500</td>
</tr>
<tr>
<td>Participated in sex work (p6m)</td>
<td>27.1</td>
<td>23.9</td>
<td>0.552</td>
</tr>
<tr>
<td>Experienced sexual assault (p6m)</td>
<td>3.8</td>
<td>3.6</td>
<td>0.943</td>
</tr>
<tr>
<td>Injected drugs (p6m)b</td>
<td>75.8</td>
<td>79.7</td>
<td>0.564</td>
</tr>
<tr>
<td>Presence of antibodies to Hepatitis C virus (HCV)</td>
<td>32.3</td>
<td>37.3</td>
<td>0.403</td>
</tr>
<tr>
<td>Presence of antibodies to HIV</td>
<td>7.9</td>
<td>16.8</td>
<td>0.030</td>
</tr>
</tbody>
</table>
**Table 2: Housing patterns of Cedar Project participants by city at baseline (2005).**

<table>
<thead>
<tr>
<th></th>
<th>Prince George (n= 133) %</th>
<th>Vancouver (n= 147) %</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slept on the street 3+ nights in the past 6 months</td>
<td>26.9</td>
<td>42.4</td>
<td>0.007</td>
</tr>
<tr>
<td>Type of housing right now - stable or unstable</td>
<td></td>
<td></td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Unstable</td>
<td>34.4</td>
<td>60.4</td>
<td></td>
</tr>
<tr>
<td>Stable</td>
<td>65.6</td>
<td>39.6</td>
<td></td>
</tr>
<tr>
<td>Transience: No. places slept in the past 6 months</td>
<td></td>
<td></td>
<td>0.004</td>
</tr>
<tr>
<td>Low: 1 place in the past 6 months</td>
<td>10.1</td>
<td>26.0</td>
<td></td>
</tr>
<tr>
<td>Medium: 2-5 places in the past 6 months</td>
<td>69.8</td>
<td>57.3</td>
<td></td>
</tr>
<tr>
<td>High: 6+ places in the past 6 months</td>
<td>20.2</td>
<td>16.8</td>
<td></td>
</tr>
</tbody>
</table>
Housing patterns

Key Finding:

A majority of Cedar Project participants are extremely mobile, particularly participants living in Prince George.

Recommendations:

Further research about the nature of housing transitions.

Culturally safe programs informed by young Aboriginal people that respond to moments of transition to help them stabilize and avoid increased vulnerability.
Table 3: Generalized linear mixed model unadjusted and adjusted relationships between sex- and drug-related HIV vulnerabilities and experiencing high transience over the past six months (2005-2010).

<table>
<thead>
<tr>
<th></th>
<th>UOR</th>
<th>95%CI</th>
<th>AOR*</th>
<th>95%CI</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sexual Vulnerabilities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consistent condom use</td>
<td>1.00</td>
<td>0.67, 1.48</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Participated in sex work</td>
<td>3.57</td>
<td>2.09, 6.09</td>
<td>3.52</td>
<td>2.06, 6.05</td>
</tr>
<tr>
<td>Experienced sexual assault</td>
<td>2.49</td>
<td>1.27, 4.89</td>
<td>2.48</td>
<td>1.26, 4.86</td>
</tr>
<tr>
<td><strong>Drug-Related Vulnerabilities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Injected drugs&lt;sup&gt;a&lt;/sup&gt;</td>
<td>4.83</td>
<td>2.93, 7.97</td>
<td>4.54</td>
<td>2.71, 7.61</td>
</tr>
<tr>
<td>Daily or more opiate injection&lt;sup&gt;b&lt;/sup&gt;</td>
<td>0.94</td>
<td>0.53, 1.68</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Daily or more methamphetamine injection&lt;sup&gt;b&lt;/sup&gt;</td>
<td>0.43</td>
<td>0.13, 1.35</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Daily or more cocaine injection&lt;sup&gt;b&lt;/sup&gt;</td>
<td>1.98</td>
<td>1.15, 3.42</td>
<td>2.16</td>
<td>1.26, 3.72</td>
</tr>
<tr>
<td>Need help injecting&lt;sup&gt;b&lt;/sup&gt;</td>
<td>1.65</td>
<td>0.95, 2.88</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Needle sharing&lt;sup&gt;b&lt;/sup&gt;</td>
<td>2.17</td>
<td>0.98, 4.83</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Injected in public&lt;sup&gt;b&lt;/sup&gt;</td>
<td>2.85</td>
<td>1.64, 4.96</td>
<td>2.87</td>
<td>1.65, 5.00</td>
</tr>
</tbody>
</table>

*adjusted for city, sex and age; <sup>a</sup>among those who ever injected drugs (n=242); <sup>b</sup>among those who injected in the past six months (n=187)
Transience and drug-related HIV vulnerability

Key Finding:

Strong link between residential transience and high frequency drug injection – 2 times greater odds of high frequency cocaine injection.

Moving frequently may play an important role in determining injection practices – nearly 3 times greater odds of injecting in public.

Recommendations:

In the absence of adequate housing, young Aboriginal people need access to alternative safe places to inject.

Housing First programs may be an appropriate response to housing instability among young Aboriginal people.
Transience and sex-related HIV vulnerability

Key Finding:

Being highly transient was associated with nearly 4 times the odds of participating in sex work.

Participants who were highly transient were nearly 2.5 times as likely to have been sexually assaulted in the prior six months.

Recommendations:

Support for young Aboriginal people, especially women, to exit the sex trade.

Importance of safe spaces where young Aboriginal people can practice sex work with fewer risks.
Limitations

Attaining a probabilistic sample.

Use of self-reported data.

Limits of indicators of historical trauma.

Unable to determine temporality or causality.
Conclusion