Double Vulnerabilities: Violence Against Women and HIV in South And Southeastern Brazil

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• Research Participants
HIV and Violence in Brazil

- Brazil ranks 5th in world in femicide – >13 million women survivors violence
- Brazil has the most people living with HIV in LAC region (n~830,000; 2016) – High HIV prevalence & rates in the South & Southeastern regions
- VAW is associated with 2-8x of being HIV+
Study Objective

1) To classify typologies of violence experienced by women over their life course in Brazil
   a) Understand how HIV-status and violence are associated

2) To identify associated risk/protective factors at each social ecological levels for each violence typology
METHODS
Study Design - Stratified Random Sample

- **HIV+ women** – HIV/STD clinic list
- **HIV- women** – Primary health care center list

**Southern Region**
- **Porto Alegre**
  - **(n= 1,324)**
    - **HIV-** (n= 640)
    - **HIV+** (n= 684)

**Southeastern Region**
- **São Paulo**
  - **(n= 1,965)**
    - **HIV-** (n= 1,003)
    - **HIV+** (n= 962)

**Total women**
- **(n= 3,289)**
Latent Class Analysis (LCA)

- Identifies distinct typologies of women with unique violence profiles based on response to measures

- poLCA from R software to estimate maximum likelihood estimates of the latent class parameters

- Model-fit statistics (BIC, AIC, Likelihood ratio test, & entropy) and the Scree-Plot were used to assess the best class solution

- Conditional probabilities for class membership based on each variable considered in the LCA
# Typologies of Violence

<table>
<thead>
<tr>
<th>Measures</th>
<th>Frequency</th>
<th>Life course timing</th>
<th>Perpetrator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Violence &amp; Sexual Violence</td>
<td>Never; once or twice; several times</td>
<td>Childhood/adolescence; within the past 12 months</td>
<td>Intimate partner; family member; friend/coworker/other family member</td>
</tr>
<tr>
<td>HIV-Related Violence:</td>
<td>---------------------------</td>
<td>------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Verbal abuse OR Physical Assault for being HIV+</td>
<td>---------------------------</td>
<td>------------------------------</td>
<td>Intimate partner; step-/father or step-/mother; health professional; coworker/boss/friend/stranger/other family member</td>
</tr>
</tbody>
</table>
SAMPLE DESCRIPTION
Socio-demographic Characteristics

- Completed High School
- Has Personal Income
- >5 lifetime sexual partners
- White Race
- Black Race
- Mixed Race
- São Paulo HIV-
- São Paulo HIV+
- Porto Alegre HIV-
- Porto Alegre HIV+

Average Age
Physical Violence

<table>
<thead>
<tr>
<th>Location</th>
<th>HIV-Negative</th>
<th>HIV-Positive</th>
</tr>
</thead>
<tbody>
<tr>
<td>São Paulo</td>
<td>68% Never</td>
<td>56% Never</td>
</tr>
<tr>
<td></td>
<td>19% Once or Twice</td>
<td>13% Once or Twice</td>
</tr>
<tr>
<td></td>
<td>12% Several Times</td>
<td>13% Several Times</td>
</tr>
<tr>
<td>Porto Alegre</td>
<td>67% Never</td>
<td>61% Never</td>
</tr>
<tr>
<td></td>
<td>21% Once or Twice</td>
<td>26% Once or Twice</td>
</tr>
<tr>
<td></td>
<td>12% Several Times</td>
<td>13% Several Times</td>
</tr>
</tbody>
</table>
Perpetrator Relationship – Physical Violence

**HIV-Negative**
- São Paulo:
  - Intimate Partner: 50%
  - Family Member: 32%
  - Friend/Coworker: 10%
  - >1 Perpetrator: 9%
- Porto Alegre:
  - Intimate Partner: 38%
  - Family Member: 31%
  - Friend/Coworker: 21%
  - >1 Perpetrator: 10%

**HIV-Positive**
- São Paulo:
  - Intimate Partner: 52%
  - Family Member: 24%
  - Friend/Coworker: 9%
  - >1 Perpetrator: 15%
- Porto Alegre:
  - Intimate Partner: 54%
  - Family Member: 13%
  - Friend/Coworker: 13%
  - >1 Perpetrator: 21%
Sexual Violence

HIV-Negative
- São Paulo: 91%
- Porto Alegre: 88%

HIV-Positive
- São Paulo: 80%
- Porto Alegre: 82%

Colors:
- Blue: Never
- Yellow: Once or Twice
- Green: Several Times
Perpetrator Relationship – Sexual Violence

São Paulo

- HIV-Negative
  - Intimate Partner: 64%
  - Family Member: 16%
  - Friend/Coworker: 8%
  - Stranger: 10%
  - >1 Perpetrator: 3%

- HIV-Positive
  - Intimate Partner: 50%
  - Family Member: 17%
  - Friend/Coworker: 14%
  - Stranger: 12%
  - >1 Perpetrator: 7%

Porto Alegre

- HIV-Negative
  - Intimate Partner: 52%
  - Family Member: 22%
  - Friend/Coworker: 4%
  - Stranger: 2%
  - >1 Perpetrator: 20%

- HIV-Positive
  - Intimate Partner: 46%
  - Family Member: 21%
  - Friend/Coworker: 12%
  - Stranger: 9%
  - >1 Perpetrator: 12%
HIV-Related Violence

Verbal Abuse for HIV+
- Porto Alegre: 24%
- São Paulo: 28%

Physical Assault for HIV+
- Porto Alegre: 2%
- São Paulo: 3%
LATENT CLASS ANALYSIS (LCA) RESULTS
### São Paulo HIV+ Group

<table>
<thead>
<tr>
<th></th>
<th>Class 1: No Violence</th>
<th>Class 2: HIV-Related Violence</th>
<th>Class 3: Physical &amp; HIV-Related Violence</th>
<th>Class 4: Sexual, Physical, &amp; HIV-Related Violence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical violence – several times</td>
<td>0</td>
<td>0</td>
<td>.66</td>
<td>.57</td>
</tr>
<tr>
<td>Perpetrator – intimate partner</td>
<td>0</td>
<td>0</td>
<td>.58</td>
<td>.60</td>
</tr>
<tr>
<td>Life course timing – child/adolescence</td>
<td>0</td>
<td>0</td>
<td>.38</td>
<td>.28</td>
</tr>
<tr>
<td>Sexual violence – several times</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>.45</td>
</tr>
<tr>
<td>Perpetrator – intimate partner</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>.56</td>
</tr>
<tr>
<td>Life course timing – child/adolescence</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>.36</td>
</tr>
<tr>
<td>HIV-related verbal abuse</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perpetrator – intimate partner</td>
<td>0</td>
<td>.25</td>
<td>.09</td>
<td>.08</td>
</tr>
<tr>
<td>Perpetrator – coworker, boss, friend, stranger, family member</td>
<td>0</td>
<td>.64</td>
<td>.26</td>
<td>.26</td>
</tr>
</tbody>
</table>
## Porto Alegre HIV+ Group

<table>
<thead>
<tr>
<th></th>
<th>Class 1: No Violence</th>
<th>Class 2: Physical Violence</th>
<th>Class 3: Sexual Violence</th>
<th>Class 4: Physical &amp; Sexual Violence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical violence – several times</td>
<td>0</td>
<td>.62</td>
<td>0</td>
<td>.80</td>
</tr>
<tr>
<td>Perpetrator – intimate partner</td>
<td>0</td>
<td>.60</td>
<td>0</td>
<td>.70</td>
</tr>
<tr>
<td>Life course timing – child/adolescence</td>
<td>0</td>
<td>.43</td>
<td>0</td>
<td>.48</td>
</tr>
<tr>
<td>Sexual violence – several times</td>
<td>0</td>
<td>0</td>
<td>.35</td>
<td>.54</td>
</tr>
<tr>
<td>Perpetrator – intimate partner</td>
<td>0</td>
<td>0</td>
<td>.38</td>
<td>.60</td>
</tr>
<tr>
<td>Life course timing – child/adolescence</td>
<td>0</td>
<td>0</td>
<td>.48</td>
<td>.47</td>
</tr>
<tr>
<td>HIV-related verbal abuse</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perpetrator – intimate partner</td>
<td>.03</td>
<td>.07</td>
<td>.10</td>
<td>.02</td>
</tr>
<tr>
<td>Perpetrator – coworker, boss, friend, stranger, family member</td>
<td>.11</td>
<td>.24</td>
<td>.23</td>
<td>.36</td>
</tr>
</tbody>
</table>
Summary of Findings

• HIV+ experience more cumulative violence than HIV-, especially sexual violence

• São Paulo: HIV+ women have unique latent violence profiles
  – ↑ HIV-related violence
  – Physical, sexual, & HIV-related violence hang together in one typology

• Porto Alegre:
  – HIV+ women greater LCA conditional probabilities of experiencing both physical & sexual violence
Study Limitation & Strengths

**LIMITATIONS**

- Secondary analysis
  - limits ability to examine relation between timing violence & HIV-diagnosis
- Richer measures of violence

**STRENGTHS**

- Large groups to compare nuances in violence & HIV by city
- Latent class analysis utilizes the entire data structure versus just sums or means to understand synergy
Study Implications & Next Steps

• Improve violence assessments in
  – Brazil’s National Health Care System
  – HIV Specialized Care Service clinics

• Integrate HIV & violence services

• Education around gender-based violence

• Reduce HIV stigma

• Facilitate violence reporting
Thank you!

Questions?
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References


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