Adherence to HIV Prevention During & After Pregnancy in Urban Zambia: The Neglected Role of Intimate Partner Violence

Karen M. Hampanda, PhD, MPH
Department of Community and Behavioral Health
Colorado School of Public Health
University of Colorado Denver | Anschutz Medical Campus

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The **Prevention of Mother-to-Child Transmission (PMTCT) Cascade of Care**

- ART during pregnancy
- ART postpartum for mother
- Infant prophylaxis
- Exclusive breastfeeding to six months
- Pediatric HIV testing

HIV Transmission reduced to <5%

*(WHO, 2010)*
Intimate Partner Violence

• Negative health outcomes:
  • Unwanted pregnancy
  • Sexual HIV transmission to women
  • Decreased HIV testing among women
  • Non-adherence to antiretroviral therapy for women’s own health

(Boy & Salihu, 2004; Lawoko, et al., 2008; Garcia-Moreno et al., 2007; Maman, Campbell, Sweat, & Gielen, 2000; Maman, Mbwambo, Hogan, Kilonzo, & Sweat, 2001)
Study Setting

• Zambia
  • 13% adult HIV prevalence
  • 78,000 HIV-positive pregnant women annually
  • 15% transmit virus to their child
  • PMTCT coverage >75%

• Lusaka
  • Women HIV prevalence: 19%

Methods

• Cross-sectional clinic-based survey
  • N=320 HIV-positive married postpartum women
  • Dependent variables: Self-reported adherence to protocols across the PMTCT cascade
  • Independent variables: Intimate partner violence in the current relationship
  • Analysis: Multivariable logistic regression
## Adherence & Intimate Partner Violence

<table>
<thead>
<tr>
<th></th>
<th>ART Pregnancy (n=271) aOR (95% CI)</th>
<th>ART Postpartum (n=285) aOR (95% CI)</th>
<th>Infant Prophylaxis (n=303) aOR (95% CI)</th>
<th>Exclusive Breast-feeding (n=320) aOR (95% CI)</th>
<th>Child Tested for HIV (n=296) aOR (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experienced any IPV</td>
<td>0.25* (0.07 - 0.87)</td>
<td>0.11* (0.02 - 0.59)</td>
<td>0.09*** (0.03 - 0.34)</td>
<td>0.36*** (0.21 - 0.61)</td>
<td>0.46* (0.22 - 0.96)</td>
</tr>
<tr>
<td>Number of IPV Events</td>
<td>0.81* (0.67 - 0.98)</td>
<td>0.70** (0.55 - 0.85)</td>
<td>0.68*** (0.57 - 0.80)</td>
<td>0.86* (0.76 - 0.98)</td>
<td>0.87 (0.77 - 1.05)</td>
</tr>
</tbody>
</table>

* p<0.10  ** p<0.05  *** p<0.01  ****p<0.001

Adjusting for HIV status disclosure, age, infant age, parity, PMTCT knowledge, education, wealth, and PMTCT regimen.
## Adherence & Specific Types of Violence

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<td><strong>Emotional IPV</strong></td>
<td>0.41+ (0.17-1.01)</td>
<td><strong>0.10</strong>* (0.03-0.37)</td>
<td><strong>0.10</strong>* (0.04-0.26)</td>
<td><strong>0.55</strong>* (0.34-0.90)</td>
<td><strong>0.36</strong> (0.19-0.70)</td>
</tr>
<tr>
<td><strong>Physical IPV</strong></td>
<td>0.91 (0.37-2.25)</td>
<td>0.65 (0.24-1.74)</td>
<td><strong>0.38</strong> (0.18-0.80)</td>
<td>0.75 (0.44-1.27)</td>
<td>0.54+ (0.28-1.07)</td>
</tr>
<tr>
<td><strong>Sexual IPV</strong></td>
<td><strong>0.34</strong> (0.14-0.82)</td>
<td><strong>0.26</strong> (0.10-0.72)</td>
<td><strong>0.34</strong> (0.16-0.71)</td>
<td><strong>0.48</strong> (0.29-0.79)</td>
<td>0.88 (0.44-1.75)</td>
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Adjusting for HIV status disclosure, age, infant age, parity, PMTCT knowledge, education, wealth, and PMTCT regimen
Conclusions

• IPV adversely affects PMTCT adherence
  • Dose-response relationship
  • Different forms of IPV more detrimental

• Recommendations:
  • Need for IPV screening in PMTCT
  • Couples-based/family-centered interventions
  • Improving women’s empowerment
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Thank you. Questions?