Postpartum Retention in HIV Care among HIV-infected Women in the South

Kelly A. Smith, Jodie Dionne-Odom, Inmaculada Aban, Martin Rodriguez, Marsha Sturdevant, Mirjam-Colette Kempf
Disclosure

• Relevant Financial Relationship(s):
  None
Background
Women and HIV in the US

- Women represent 25% of HIV infections in the US, with Women of color being disproportionally affected.

- 1.49% of Black Women in the US (18-49yrs old) are HIV positive (22 times the rate of White Women).

- Heterosexual sex accounts for 84% of HIV infections among Black Women.

- Majority of HIV-positive women (81%) are infected during childbearing ages (13-44 years).

Story of Success: Perinatally acquired AIDS cases, 1985-2005

Ref: Centers for Disease Control and Prevention
Background
HIV and Pregnancy (US)

- 5,000-6,000 HIV-infected women give birth annually with 3-4 % of infants HIV-infected

- Attention has mainly been focused on antenatal services to prevent MTC transmission

- Few resources allocated to implement retention strategies for women after delivery

Background

HIV and Postpartum Care

- Postpartum ART discontinuation is common (71.5%).

- Changes in healthcare providers following pregnancy and competing demands (child care, work, etc.) cause women to neglect their own health.

- Mortality rates in women increased in comparison to men (HR, 1.62; P=.002)

Objectives

To investigate the continuum of pregnancy and post-partum care with regards to clinical outcomes among HIV-infected women residing in the Southeastern US.
Methods

• Retrospective medical chart review

• HIV-infected pregnant women seeking care at 5 outpatient clinics located in Alabama between 1998-2008

• Inclusion Criteria:
  • Female
  • Antiretroviral therapy treatment during pregnancy ≤14 days
  • HIV+ and pregnancy diagnosis
Analysis

- Socio-demographic, lab and clinical factors associated with antenatal and post-partum care

- Data collected once for each interval of prenatal and postpartum care: pre-pregnancy, 1\textsuperscript{st} trimester, 2\textsuperscript{nd} trimester, 3\textsuperscript{rd} trimester, 6 months-, 12 months-, 18 months-, 24 months-, 30 months- and 36 months postpartum care

- Availability of CD4 counts or HIV viral load (VL) values were used as a surrogate marker for retention in HIV care

- A threshold of $<400$ VL copies/ml was defined as HIV VL suppression
## Results

### Patient Characteristics (N=266)

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age (yrs)</strong></td>
<td>26.6 (mean)</td>
<td>6.1 (STD)</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>207</td>
<td>81.2</td>
</tr>
<tr>
<td>White</td>
<td>44</td>
<td>17.3</td>
</tr>
<tr>
<td><strong>HIV Transmission</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heterosexual Transmission</td>
<td>238</td>
<td>93.8</td>
</tr>
<tr>
<td>Sex with Female</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>IV Drug Use</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>Blood Transfusion</td>
<td>4</td>
<td>1.6</td>
</tr>
<tr>
<td>Unknown</td>
<td>12</td>
<td>4.7</td>
</tr>
</tbody>
</table>
## Results

### Patient Characteristics (N=266)

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Years since HIV dx (yrs)</strong></td>
<td>2.5 (mean)</td>
<td>3.2 (STD)</td>
</tr>
<tr>
<td><strong>First prenatal care visit</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1\textsuperscript{st} Trimester</td>
<td>111</td>
<td>48.2</td>
</tr>
<tr>
<td>2\textsuperscript{nd} Trimester</td>
<td>78</td>
<td>34.0</td>
</tr>
<tr>
<td>3\textsuperscript{rd} Trimester</td>
<td>41</td>
<td>17.8</td>
</tr>
<tr>
<td><strong>Number of living Children</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>99</td>
<td>42.3</td>
</tr>
<tr>
<td>1</td>
<td>71</td>
<td>30.3</td>
</tr>
<tr>
<td>2</td>
<td>40</td>
<td>17.1</td>
</tr>
<tr>
<td>3</td>
<td>12</td>
<td>5.1</td>
</tr>
<tr>
<td>4</td>
<td>6</td>
<td>2.6</td>
</tr>
<tr>
<td>≥5</td>
<td>6</td>
<td>2.6</td>
</tr>
</tbody>
</table>
Average CD4 Count – Pregnancy and Postpartum

Prenatal and Postpartum Care Visits

<table>
<thead>
<tr>
<th>Pre Pregnancy</th>
<th>1st Trimester</th>
<th>2nd Trimester</th>
<th>3rd Trimester</th>
<th>6m Postpartum</th>
<th>12m Postpartum</th>
<th>18m Postpartum</th>
<th>24m Postpartum</th>
<th>30m Postpartum</th>
<th>36m Postpartum</th>
</tr>
</thead>
<tbody>
<tr>
<td>523</td>
<td>480</td>
<td>463</td>
<td>536</td>
<td>608</td>
<td>588</td>
<td>597</td>
<td>550</td>
<td>531</td>
<td>503</td>
</tr>
<tr>
<td>14</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>20</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

CD4 count per µl
Percent Viral Load Suppression during Pregnancy and Postpartum

Percent VL Suppression (<400 copies/ml)

- Pre pregnancy: 39
- 1st Trimester: 22
- 2nd Trimester: 42
- 3rd Trimester: 63
- 6m postpartum: 43
- 12m postpartum: 34
- 18m postpartum: 32
- 24m postpartum: 32
- 30m postpartum: 32
- 36m postpartum: 27

Prenatal and Postpartum Care Visits
Engagement in HIV Care
Pregnancy and Postpartum

Number of Women with VL or CD4 count measure

Prenatal and Postpartum Care Visits

- pre pregnancy
- 1st Trimester
- 2nd Trimester
- 3rd Trimester
- 6m postpartum
- 12m postpartum
- 18m postpartum
- 24m postpartum
- 30m postpartum
- 36m postpartum

Values:
- Prepregnancy: 77
- 1st Trimester: 117
- 2nd Trimester: 183
- 3rd Trimester: 205
- 6m postpartum: 160
- 12m postpartum: 129
- 18m postpartum: 110
- 24m postpartum: 113
- 30m postpartum: 95
- 36m postpartum: 95
Conclusions

• While efforts to prevent perinatal transmission are successful, adherence and retention in HIV care postpartum are less than optimal among HIV-infected women in the Southeast.

• Efforts need to be made to stress the continuum of perinatal and postpartum care among HIV-infected mothers to improve clinical outcomes.
Summary - what can we do?

- Trustful patient/provider relationships important for retention-in-care of HIV+ women
- Organizational structure and lack of resources of clinics can impede access to care mediated through transportation and opportunity costs (e.g. childcare)
- Opportunity during pregnancy to stress importance of HIV care postpartum
- Stigma is still alive after 30 years into the HIV epidemic - coping strategies for stigma and discrimination need to be incorporated into primary care
Thanks

- K. Anne Smith
- Jodie Dionne-Odom
- Chichi Aban
- Martin Rodriguez
- Marsha Sturdevant
- Jane Mobley
- Wick Many
- Laurie Dill
- Jim Raper

- Students (abstracting charts)
- HIV care providers and staff at participating clinics