Women’s Knowledge, Attitudes, Beliefs & Decisions about HIV/AIDS: A Cross National Comparison

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Background

- Globally, pregnant and parenting women of African heritage suffer the greatest burdens of HIV/AIDS.
- 64% of the 126,964 women living with HIV/AIDS in the US are AA. (www.cdc.gov)
- The rates of new HIV infections and the consequences of AIDS is increasing most rapidly among women of African heritage.
- HIV/AIDS contributes significantly to infant and maternal mortality among women of African heritage.
Background

- Recent findings suggest that young Caribbean women are 2.5 times more likely to be infected than young men (http://womenandaids.unaids.org/ Retrieved 2/16/06)

- Few studies have simultaneously compared the women of African heritage from different National or International settings

- Cross national comparison among women with similar heritage are critical to examine differences and similarities important in risks or aspects of living with HIV/AIDS that may contribute to effective and sustainable evidenced based care
Purposes

The purposes of this multisite pilot study comparing pregnant and parenting women of African heritage in Baltimore and USVI at risk or living with HIV/AIDS were:

1. Describe and examine the relationships among knowledge, attitudes, beliefs, depression, self-esteem, and abuse.

2. Compare HIV/AIDS status, abuse, knowledge, attitudes, and beliefs among women in Baltimore and USVI.

3. Describe how knowledge, attitudes, beliefs, feelings, and abuse may influence decisions about participating in voluntary testing and counseling, disclosing disease status to family and friends, and decisions related to parenting.
Methods

- Conceptual Model
  - Nola Pender’s (2006) Health Promotion Model (HPM)

- Design
  - Mixed methods – Quantitative/Qualitative
    - Descriptive Correlational
    - Descriptive phenomenological method

- Setting
  - USA: Baltimore, Maryland
  - US Virgin Islands: St. Thomas, St. John
Methods

• Sample
  ○ AA pregnant (medically diagnosed) and parenting women (infants up to 6-months)
  ○ Afro Caribbean pregnant or parenting women
  ○ USA Sample sites:
    ✷ HIV Perinatal Services
    ✷ Transitional Housing
  ○ US Virgin Islands
    ✷ Public health clinics- Prenatal/Postpartum
    ✷ Non Profit Prenatal-Post partum HIV Services
Methods

Data Collection Methods

- **Questionnaires** (quantitative)
  - Abuse Assessment Screen (AAS)
  - Rosenberg Self Esteem Scale (RSE)
  - CES-D10 Depression Scale (CES-D10)
  - HIV/AIDS Knowledge, Attitudes, Beliefs Patient Questionnaire (HAKABPQ)

- **Medical Records Review**
Results

- Total of 66 women of African heritage
  - 30 African American; 36 African Caribbean women
- Age ranged from 18 to 40 years
- Gestational age ranged from 15 to 39 weeks
- Baltimore City had a higher number of participants with HIV/AIDS diagnosis than those in the USVI
- There were significant differences between HIV status and research sites
HIV Status by Research Site

USVI

- HIV negative: 4
- HIV positive: 32

BC

- HIV negative: 17
- HIV positive: 13

X2 = 15.51; df = 2; p < .001
Reproductive History: N= 66

- Term pregnancies: 71.2%
- Pre-term babies: 43.9%
- Abortions: 16.7%
## Comparison of Demographic Characteristics  N = 66

<table>
<thead>
<tr>
<th></th>
<th>USVI: n = 36</th>
<th>Baltimore: n = 30</th>
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<tbody>
<tr>
<td><strong>Age</strong>  M (SD)</td>
<td>26.4 (5.6)</td>
<td>27.3 (6.3)</td>
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<tr>
<td><strong>Gravida (median)</strong></td>
<td>2.0</td>
<td>3.0</td>
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<tr>
<td><strong>Parenting status: N (%)</strong></td>
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<tr>
<td>Pregnant</td>
<td>25 (69.4)</td>
<td>24 (80)</td>
</tr>
<tr>
<td>Parenting</td>
<td>11 (30.6)</td>
<td>6 (20)</td>
</tr>
<tr>
<td><strong>Education  M (SD)</strong></td>
<td>12.2 (2.7)</td>
<td>12.5 (2.3)</td>
</tr>
<tr>
<td><strong>Employment</strong></td>
<td>17 (47.2)</td>
<td>13 (43.3)</td>
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<tr>
<td><strong>Marital status</strong></td>
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<tr>
<td>Single</td>
<td>23 (63.9%)</td>
<td>17 (56.7%)</td>
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<tr>
<td>Married</td>
<td>7 (19.4%)</td>
<td>7 (23.3%)</td>
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</table>
Statistical Analysis

• Analysis
  • Zero-order correlations were computed to determine relationships among self-esteem, depression, knowledge, attitudes, and beliefs
  • Adjusting for multiple variables using Bonferroni procedure
  • Correlations must be < .005 to be considered significant

• Results
  • No significant associations were found between demographic characteristics and the variables
  • Lifetime and Perinatal abuse were higher in BC vs. USVI
    • BC – Lifetime = 50% (n=15/30) Perinatal = 23.3% (n=7/30)
    • USVI - Lifetime = 30.6% (n=11/36) Perinatal = 8.3% (n=3/36)
Correlation of Variables

Positive Correlations (p<.005)

- **BC**
  - **Knowledge** with Attitudes; Social Beliefs; Cultural Beliefs
  - **Attitudes** with Social Beliefs
  - **Social Beliefs** with Cultural Beliefs

- **USVI**
  - **Knowledge** with Cultural Beliefs
  - **Attitudes** with Cultural Beliefs
  - **Social Beliefs** with Cultural Beliefs
Results: Abuse

- Lifetime Abuse (physical & sexual) = 39.4% (26)
- Perinatal Abuse (physical & sexual) = 84.8% (n = 56)
- 3% (n = 2) reported being afraid of their partner/ex-partner/father of the baby
- Women in BC reported more severe lifetime abuse and perinatal abuse than women in the USVI
- No significant differences were found between HIV status and lifetime and perinatal abuse
- Significant differences were found between HIV+ & HIV- women reporting being afraid of their partner/ex-partner/father of the baby
## Abuse and HIV status

<table>
<thead>
<tr>
<th>Physical &amp; sexual abuse during pregnancy (3 &amp; 5)</th>
<th>HIV positive: n = 21</th>
<th>HIV negative: n = 43</th>
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<tbody>
<tr>
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<td>4 (19.1%)</td>
<td>6 (14%)</td>
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</table>

<table>
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<tr>
<th>Physical and sexual lifetime abuse (1, 2, &amp; 4)</th>
<th>HIV positive: n = 21</th>
<th>HIV negative: n = 43</th>
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<tr>
<td></td>
<td>10 (47.6%)</td>
<td>16 (37.2%)</td>
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</table>
Severity of abuse was computed as the total number of times women responded “yes” to abuse items.

Significant differences were found:

1. Depressive symptoms (CES-D) was positively & moderately correlated with lifetime abuse (.327; p = .01); and not during pregnancy

2. Self Esteem (RSE) was negatively and moderately correlated with abuse during pregnancy (-.350; p = .01); but not with lifetime abuse
“Faith, Courage, and Prayer”: Pregnant & Parenting Women’s HIV, Interpersonal, and Intimate partner Violence Experiences
Purpose

The qualitative study explored the experiences of HIV-infected women related to decisions about HIV testing, status disclosure, adhering to treatment, and pregnancy/parenting decisions.
Methods

- In-depth interviews using open ended questions were used to ask about women’s:
  - Demographic characteristics
  - Pregnancy health history
  - Decision-making about HIV testing
  - Disclosure of test results
  - Behaviors and changes in their relationships related to test results and disclosure
  - Partner relationships
Methods

- The individual interviews:
  - Took approximately 60 minutes
  - Were transcribed and analyzed informed by the descriptive phenomenological method (Koch, 1995; Lopez & Willis, 2004) to gain better insight into the experiences of the women
  - Were re-read multiple times to ensure methodological rigor and trustworthiness of data interpretation
Results

- Sample (N= 21)
  - Pregnant = 16
  - Parenting = 5

- HIV/AIDS diagnosis at time of interview
  1. 1 month to 9 years
  2. Average was 2.5 years since diagnosis
  3. 3 women acquired HIV through vertical transmission

- 6 themes were identified from the interviews with related sub-themes
Themes

1) Perceived vulnerability to be infected with HIV
2) Decision to get tested for HIV
3) Women’s behaviors after HIV diagnosis
4) Disclosure of HIV status
5) Women’s HIV experiences: Positive, strength, resilience
6) Women’s experiences with physical and sexual violence.
<table>
<thead>
<tr>
<th>Theme</th>
<th>Sub-theme</th>
<th>Exemplar</th>
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<tbody>
<tr>
<td>1. Perceived vulnerability to be infected with HIV</td>
<td>Acknowledged her own and partner’s risky behaviors</td>
<td>“I was mentally prepared because I know I was at risk. My partner then was an IV drug user. I was not surprised because at the time I was living a mostly risky and unhealthy lifestyle and I got it from another partner.”</td>
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<tr>
<td></td>
<td>Seemed unaware of her vulnerability</td>
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<tr>
<td>2. Decision to get tested for HIV</td>
<td>Voluntary decision – benefit to baby and/or pregnancy</td>
<td>“… more concerned about the baby versus me. Didn’t want baby to be infected…”</td>
</tr>
<tr>
<td></td>
<td>Protect pregnancy and health of baby</td>
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<td></td>
<td>Part of routine prenatal care.</td>
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## Qualitative Analysis

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<tr>
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<th>Exemplar</th>
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<tr>
<td>3. Women’s behaviors after HIV diagnosis</td>
<td>Initial shock and disbelief</td>
<td>“I am going to die. I am going to leave my kids - who am I going to leave them with? [It is] just about my kids.”</td>
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<td></td>
<td>Adherence to treatment</td>
<td>“… sleep a lot, eat a lot, walk a lot, talk to baby a lot. Try to be positive and just enjoy life.”</td>
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<td></td>
<td>Adopting healthy lifestyle</td>
<td>“it was detrimental to me. They ostracized me and my kids and told my kids I was going die.”</td>
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<td></td>
<td></td>
<td>“… Before I was positive, it was bad. I was going to leave him. There were a lot of financial problems. … Bad things make things okay. Now he is behaving like a husband. Very caring and willing to do what I tell him.”</td>
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<tr>
<td>4. Disclosure of HIV status</td>
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## Qualitative Analysis

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<tbody>
<tr>
<td>5. Women’s HIV experience: Positive, strength, resilience</td>
<td>Positive HIV experience – strength through reliance on faith, spirituality, and God</td>
<td>“It is scary but at the same time you have to have faith, believe in yourself; have courage and pray.”</td>
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<td></td>
<td>Positive HIV experience – through positive thinking and positive outlook and attitude toward life</td>
<td>“… actually, I was thinking I could not have any more babies. … how can I have babies? But the doctor opened to me to have the baby and that was wonderful.”</td>
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<td></td>
<td>Childhood victimization</td>
<td>“When I was younger, I had a dysfunctional family. I got raped at 8 years. “</td>
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<td>Intimate Partner violence in partner relationships</td>
<td>“… He freaked out [after learning my HIV status] like he went to the bathroom 2 or 3 hours. … If he was negative he would have penalized me for that.”</td>
</tr>
<tr>
<td></td>
<td>Intimate partner violence after disclosure of HIV status</td>
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Limitations

- Self report instruments were used, so women may have failed to divulge important information about their HIV status and abuse experiences.
- Convenience sampling limits external validity – women were already receiving health care and HIV testing was part of their routine care.
- The sample size was small reducing, statistical power to find an effect, but the descriptive findings and summary statistics suggest that most women experienced lifetime abuse and abuse during pregnancy.
Conclusions

- Perceived risks of disclosure, such as being ostracized and afraid, prevented women from disclosing.

- Women infected with HIV were more willing to disclose if they had someone they trusted.

- Married women immediately disclosed their HIV status to their husbands. Results are similar with Peltzer & colleagues (2008), who found highest disclosure with partners (51.7%; n=116).
Conclusions

- Women’s perception of benefits such as keeping their baby healthy motivated their decision to get tested. Same was found in other studies (Kirshenbaum & colleagues, 2004; Minnie & colleagues, 2008; Ransom, 2005)

- When asked about their confidence in parenting, most women reported that taking their medications & caring for themselves will ensure that their baby stays healthy
Conclusions

- Of the 21 women who were HIV positive, only one (1) found out when she was pregnant and wanted to continue with the pregnancy. In contrast to a previous study (Suryavanshi & colleagues, 2008)

- Women were knowledgeable about HIV transmission including vertical transmission & preventive behaviors
Implications

- There is a critical need for structured counseling and educational services in practice settings to increase pregnant/parenting women’s willingness to disclose HIV status.

- There is a need for clinicians to offer focused counseling to assist women’s decisions about current pregnancy, future pregnancies as well as parenting.

- Clinicians could provide opportunities for women to actively participate in community HIV and violence prevention initiatives.
Implications

- Clinicians and school nurses need to integrate HIV & violence prevention in school curricula to address prevention efforts during the early years.

- There is a need to implement comprehensive opt-out testing recommendation in mainstream health care settings in addition to prenatal clinics.
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- Tyra DeCastro, Administrative Assistant; and Lorna Sutton, Program Administrator
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