Patient–Provider Cancer Communication among HIV–Positive Women
Donna L. Richter, EdD, FAAHB

Abstract (#292537) Title:
"Healthcare provider sharing/explaining and HIV–positive women's understanding of cancer health information about abnormal pap test results"

ни/NCI
◦ Center to Reduce Cancer Health Disparities (Community Networks Program)
◦ "Administrative Supplements for Community-Engaged Research on HIV/AIDS-Related Cancers Among Underserved Populations" – U01CA114601-05S4 (PI:Hébert/Project Leader:Wigfall)
◦ Cancer Training Branch (Established Investigator Award in Cancer Prevention and Control)
◦ K05CA136975 (PI:Hébert)

Abbreviations:
NIH – National Institutes of Health
NCI – National Cancer Institute
PI – Principal Investigator

By the end of this presentation, you will able to describe:
◦ Healthcare provider sharing of cancer health information with HIV–positive women following an abnormal Pap test result.
◦ HIV–positive women’s understanding of cancer health information based on sociodemographic characteristics (including health literacy).

Presenter Disclosures
Donna L. Richter, EdD, FAAHB
“No relationships to disclose”
HIV Infection & Cervical Cancer

- Oncogenic HPV infection → cervical cancer
  - Highly prevalent STI
- Primary Risk Factor: Immunosuppression
  - ↓ Body's ability to clear HPV infection
  - ↑ Cervical cancer risk
- HIV-positive women's cervical cancer risk (↑ 5 times)
- Other Risk Factors...
  - Aging: ↑ susceptibility to STI; ↓ immunity
  - Smoking: ↓ immunity
- HAART has not ↓ cervical cancer incidence
  - ↓ Kaposi sarcoma & ↓ Non-Hodgkin lymphoma incidence

Cervical Cancer Screening

- HIV-positive women are...
  - Screened more frequently
    - Twice initial year of diagnosis
    - Annually thereafter
  - More likely to have an abnormal Pap test history
- Pap tests may be a more effective screening tool than HPV DNA testing
- Cervical cancer is preventable
  - Early detection & treatment

Study Objectives

- To examine healthcare providers' sharing/explaining of cancer health information with/to HIV-positive women following an abnormal Pap test result.
- To examine HIV-positive women's understanding of the cancer health information that was shared/explained.
- Role of health literacy and social networks in health communication will also be explored.

Conceptual Model

<table>
<thead>
<tr>
<th>Sociodemographics</th>
<th>Mediators/Moderators</th>
<th>Health Communication Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>Health Literacy</td>
<td>Patient-Provider Comm.</td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td>Social Networks</td>
<td>Information Seeking</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Information Processing</td>
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</tbody>
</table>

Adapted from the Structural Influence Model (SIM) of Communication Inequality
**Study Design/Setting**
- Cross-sectional
- Clinical/Non-Clinical
  - Ryan White–funded clinics
  - Community–based, AIDS service organizations
- Urban/Rural

**Response Rate/Non–Participants**
- **Response Rate = 86.3% (145/168)**
- Main reasons for non–participation (n=23)
  1. 4.3% (1) I don’t feel well enough
  2. 0.0% (0) I don’t have time
  3. 39.1% (9) I’m not interested
  4. 0.0% (0) I don’t trust researchers
  5. 4.3% (1) I’m in another research study
  6. 52.2% (12) Other

**Study Participants**
- **Sample Selection**: Abnormal (ABN) Pap test
  - “Have you ever been told by a doctor, nurse or other health care provider that your Pap test results were not normal?”
  - Response Options: Yes/No
  - 69% ABN Pap Test (n=100/145)
- **Sociodemographics**:
  - Age (years):
    - 45.5±10.4 (mean)
    - 45.5 (median)
    - 20–68 (range)
  - Race/Ethnicity: 85% (n=85/100) Non–Hispanic Black

**ABN Pap Test History**
- 69% (100/145) had an abnormal Pap test
  - 27% had 3+ abnormal Pap tests within past 5 years
  - 29% had back–to–back abnormal Pap tests
  - 42% had an abnormal Pap test <1 year ago
### Social Networks
- 45% (45/100) other women w/ABN Pap test
  - **Familial Relationships:**
    - Sister (n=8), Mother (n=5), Aunt (n=4), Daughter (n=3), Grandmother (n=1), Cousin (n=1), Niece (n=1)
  - **Personal Relationships:**
    - Friend(s) (n=26)
    - Lesbian Partner (n=1)
    - Spiritual Sister (n=1)
  - **Professional Relationships:**
    - Co-Worker (n=1)
    - Other: Consultant (n=1)

### Patient-Provider Communication
- Among the 100 HIV–positive women in our study that had an ABN Pap test result within the past 5 years...
  - 69% received information to read about abnormal Pap test results from their doctor, nurse or other health care provider
  - 78% had a doctor, nurse or other health care provider explain (or have someone else explain) to them what an abnormal Pap test result meant

### Information Seeking/Processing
#### Exposure #1: Health Literacy (HL)
- 65% High HL (N=65/100)

<table>
<thead>
<tr>
<th>Information Seeking</th>
<th>High HL</th>
<th>Low HL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Read information</td>
<td>61.8% (44/69)</td>
<td>23.2% (16/69)</td>
</tr>
<tr>
<td>Did not read information</td>
<td>7.2% (5/69)</td>
<td>5.8% (4/69)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Information Processing</th>
<th>High HL</th>
<th>Low HL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understood information that was explained a lot</td>
<td>48.7% (37/76)</td>
<td>9.2% (7/76)</td>
</tr>
<tr>
<td>...some</td>
<td>14.5% (11/76)</td>
<td>13.2% (10/76)</td>
</tr>
<tr>
<td>...a little</td>
<td>3.9% (3/76)</td>
<td>10.5% (8/76)</td>
</tr>
<tr>
<td>...not at all</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

#### Exposure #2: Social Network ABN Pap Test
- 45% (n=45/100)

<table>
<thead>
<tr>
<th>Information Seeking</th>
<th>ABN Pap Test</th>
<th>No ABN Pap Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Read information</td>
<td>47.8% (33/69)</td>
<td>39.1% (27/69)</td>
</tr>
<tr>
<td>Did not read information</td>
<td>2.9% (2/69)</td>
<td>10.1% (7/69)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Information Processing</th>
<th>ABN Pap Test</th>
<th>No ABN Pap Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understood information that was explained a lot</td>
<td>28.9% (22/76)</td>
<td>28.9% (22/76)</td>
</tr>
<tr>
<td>...some</td>
<td>15.8% (12/76)</td>
<td>11.8% (9/76)</td>
</tr>
<tr>
<td>...a little</td>
<td>3.9% (3/76)</td>
<td>10.5% (8/76)</td>
</tr>
<tr>
<td>...not at all</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>
Logistic Regression Models

<table>
<thead>
<tr>
<th>Exposures</th>
<th>Information Seeking Model—Read Test</th>
<th>Information Processing Model—Understood (A Lot)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OR (95% CI)</td>
<td>OR (95% CI)</td>
</tr>
<tr>
<td>Health Literacy (HL)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High HL</td>
<td>2.2 (0.5, 9.2)</td>
<td>5.3 (2.0, 13.8)</td>
</tr>
<tr>
<td>Low HL</td>
<td>1.0 (Ref)</td>
<td>1.0 (Ref)</td>
</tr>
<tr>
<td>Social Networks: ABN Pap Test History</td>
<td>4.3 (0.8, 22.3)</td>
<td>1.4 (0.6, 3.2)</td>
</tr>
<tr>
<td>No ABN Pap Test</td>
<td>1.0 (Ref)</td>
<td>1.0 (Ref)</td>
</tr>
</tbody>
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After controlling for age and race/ethnicity

Conclusions

- HIV-positive women with high HL were better able to understand cancer health information.
- HIV-positive women with high HL may still have difficulty understanding cancer health information.
- Having other women with an abnormal Pap test history in their social networks did not have a significant influence on HIV-positive women’s information seeking/processing.
- Effective cancer health communication strategies are needed for this high cancer risk group of women.

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