Patient-Provider Cancer Communication among HIV-Positive Women

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

Presenter Disclosures

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

Learning Objectives

▸ 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).

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

NCI Fact Sheet: "HIV Infection and Cancer Risk" available at
http://www.cancer.gov/cancertopics/factsheet/Risk/hiv-infection

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

Heard 1 (2009) & Massad LS, et al. (2008)

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

Sociodemographics	Mediators/ Moderators	Health Communication Outcomes
Age	Health Literacy	Patient-Provider Comm.
Race/Ethnicity	Social Networks	Information Seeking
		Information Processing

Adapted from the Structural Influence Model (SIM) of Communication Inequality

Viswanath, Ramanadhan & Kontos (2007)

Study Design/Setting

- Cross-sectional
- Clinical/Non-Clinical
  - Ryan White-funded clinics
  - Community-based, AIDS service organizations
- Urban/Rural

Bynum SA, et al. (2013)

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

Bynum SA, et al. (2013)

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)

Bynum SA, et al. (2013)

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

Bynum SA, et al. (2013)

Information Seeking/Processing

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

Information Seeking: p=0.273	High HL	Low HL
Read information	63.8% (44/69)	(23.2%) 16/69
Did not read information	7.2% (5/69)	5.8% (4/69)

Information Processing: p<0.0001	High HL	Low HL
Understood information that was explained a lot	48.7% (37/76)	9.2% (7/76)
...some	14.5% (11/76)	13.2% (10/76)
...a little	3.9% (3/76)	10.5% (8/76)
...not at all	0%	0%

Information Seeking/Processing

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

Information Seeking: p=0.067	ABN Pap Test	No ABN Pap Test
Read information	47.8% (33/69)	39.1% (27/69)
Did not read information	2.9% (2/69)	10.1% (7/69)

Information Processing: p=0.266	ABN Pap Test	No ABN Pap Test
Understood information that was explained a lot	28.9% (22/76)	28.9% (22/76)
...some	15.8% (12/76)	11.8% (9/76)
...a little	3.9% (3/76)	10.5% (8/76)
...not at all	0%	0%

Logistic Regression Models

Exposures	Information Seeking Model=Read (Yes)		Information Processing Model=Understood (A Lot)	
	COR	AOR	COR	AOR
Health Literacy (HL)				
High HL	2.2 (0.5, 9.2)	2.3 (0.5, 9.6)	5.3 (2.0, 13.8)	5.6 (2.1, 14.9)
Low HL	1.0 (Ref)	1.0 (Ref)	1.0 (Ref)	1.0 (Ref)
Social Networks: ABN Pap Test History				
ABN Pap Test	4.3 (0.8, 22.3)	4.3 (0.8, 22.4)	1.4 (0.6, 3.2)	1.4 (0.6, 3.2)
No ABN Pap Test	1.0 (Ref)	1.0 (Ref)	1.0 (Ref)	1.0 (Ref)

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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