

Communication Inequalities and HPV: Understanding the effects of communication barriers among Black women

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Goals for Today

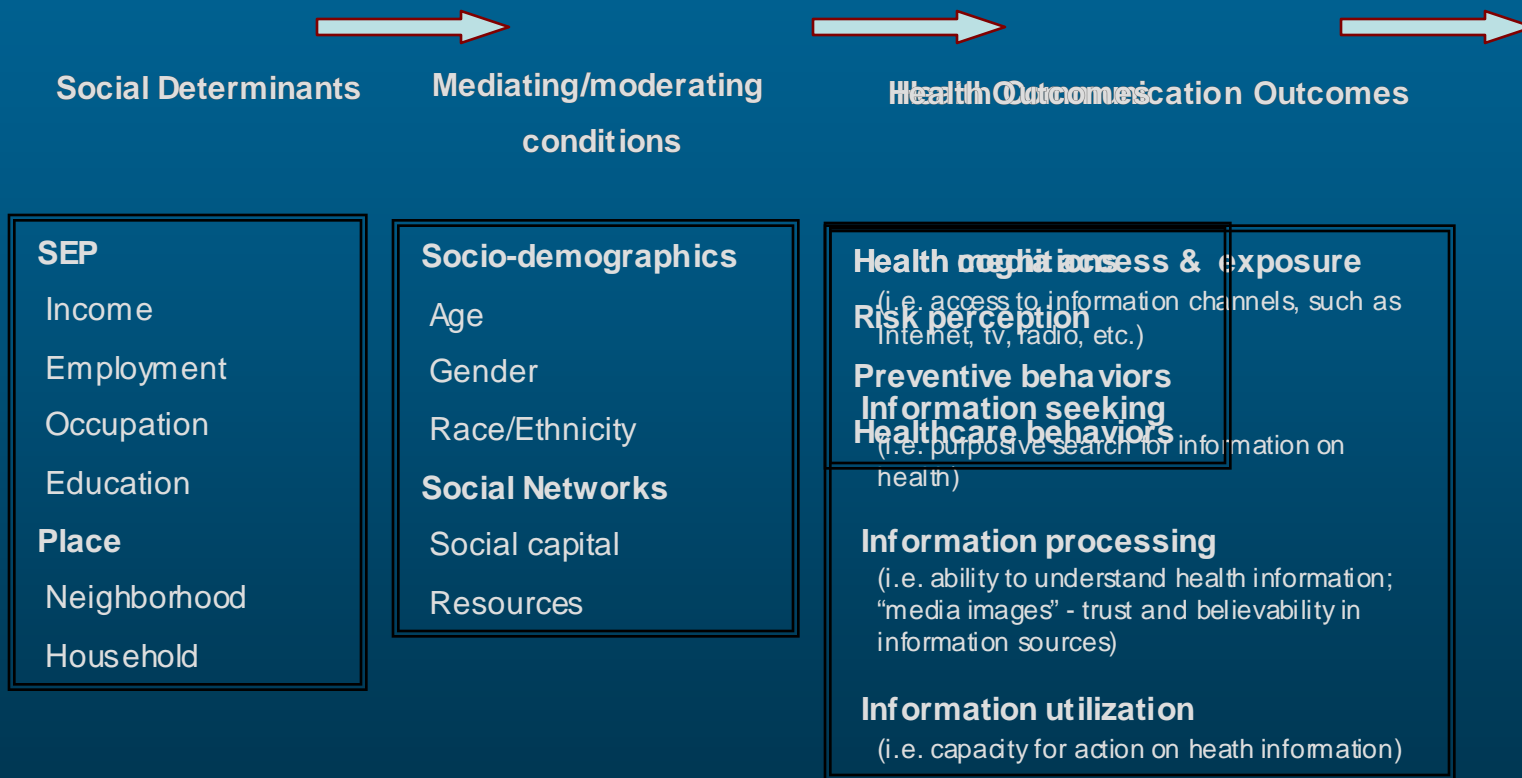
- Outline theoretical model for understanding the effects of HPV communication inequalities on high-risk communities
- Describe communication barriers affecting Black women's awareness and cognitions of HPV
- Present media and community-based considerations for research and policy

Background and Motivation: HPV Awareness

- Low levels of HPV awareness noted among the **general public (1), nursing students (2), college students (3-5), men (6), women (7,8), and racial/ethnic minorities in the U.K. (9).**
- Increased HPV awareness associated with: **past history of STI's, genital warts, or having had an abnormal pap smear, after controlling for other factors (8).**
- Qualitative research suggests that minority communities are particularly concerned with a lack of information about HPV in their communities (9, 10).

Conceptual Framework

Structural Influence Model of Communication



For more on this model see: Viswanath, Ramanadhan, and Kontos, 2007

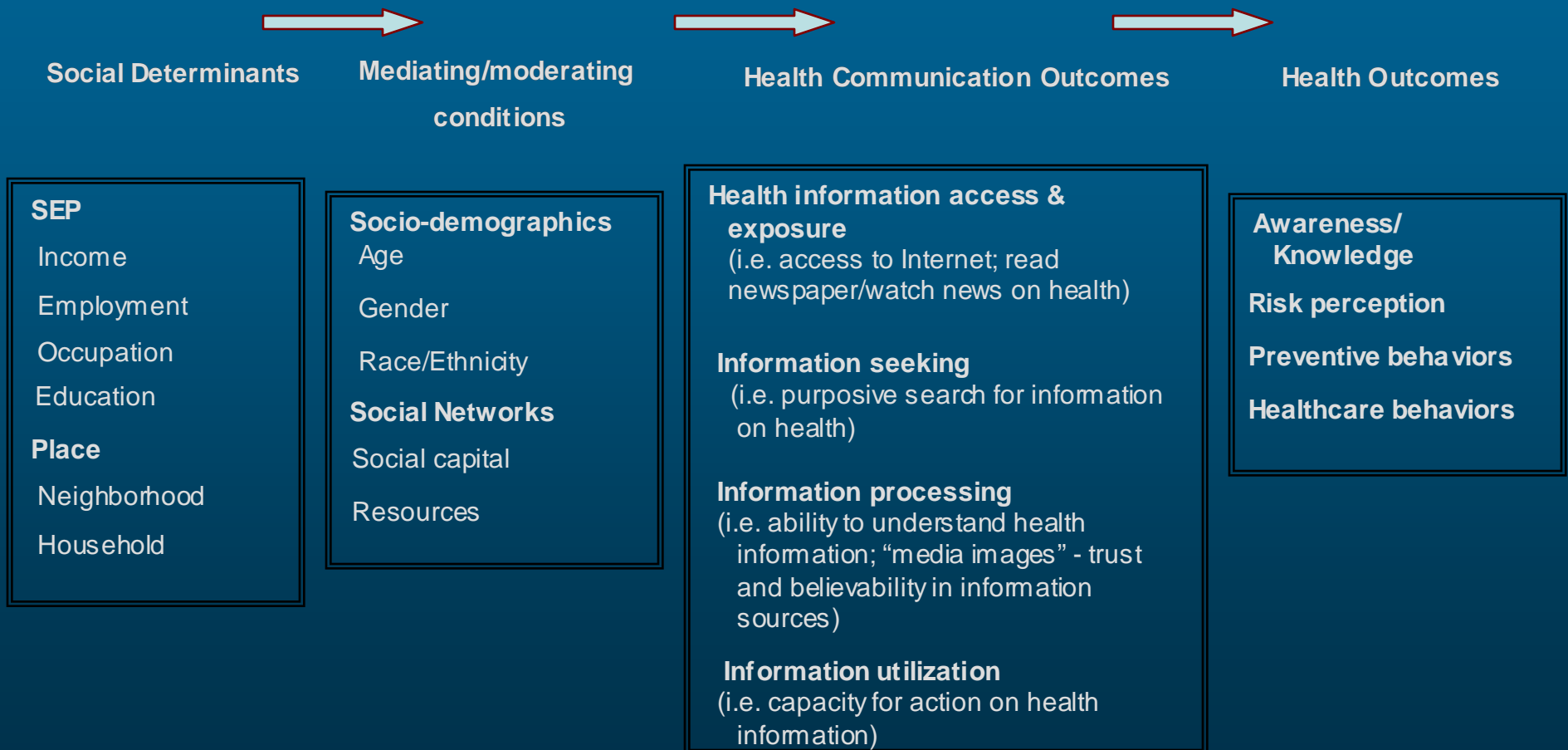
Quantitative Analysis

Health Information National Trends Survey (HINTS) 2005

- Provides updates on changing patterns, needs, and information opportunities in health
- Identifies changing communications trends and practices
- Assesses cancer information access and usage
- Provides information about how cancer risks are perceived
- Offers a test bed to researchers to test new theories in health communication
- Sample Size: N= 5586
- Response Rate: 34.0%

Quantitative Analysis – HINTS

Structural Influence Model of Health Communication Inequality



Summary

HINTS Analysis

Not having heard of HPV among **all women** was significantly associated with being:

- Black
- Older than 55

...and having:

- Lower than college education
- Few friends/family to talk with about health
- No access to the Internet
- Lower likelihood of reading the newspaper

Among **Black women**, HPV awareness was significantly associated with:

- Lower than college education
- No access to the Internet

Logistic Stepwise Regression: SEP, SD, and Communication Factors Associated with HPV Awareness

WHERE 1= Have heard of HPV	Step 1 Logistic	Step 2 Logistic	Step 3 Logistic	Step 4 Logistic	Step 5 Logistic
Predictor	n=3,400 OR (CI 95%)	n=3,400 OR (CI 95%)	n=3,389 OR (CI 95%)	n=2,923 OR (CI 95%)	n=2,923 OR (CI 95%)
Race/Ethnicity (White)					
Latina	1.92 (1.35-2.73)**	1.57 (1.03-2.40)**	1.42 (.90-2.23)	1.18 (.72-1.92)	1.12 (.68-1.85)
Black	1.51 (1.11- 2.05)**	1.46 (1.04-2.04)**	1.42 (1.01-1.99)**	1.66 (1.11-2.48)*	1.65 (1.09-2.48)*
Age (55+)					
18-24		.41 (.28-.60)**	.39 (.26-.57)**	.41 (.25-.67)**	.41 (.26-.67)**
25-44		.44 (.34-.56)**	.43 (.33-.55)**	.48 (.36-.64)**	.48 (.36-.64)**
45-54		.47 (.35-.64)**	.47 (.35-.63)**	.54 (.37-.78)**	.54 (.37-.78)**
Education (College Grad)					
<HS Grad		6.14 (4.08-9.22)**	5.62 (3.66-8.63)**	4.31 (2.52-7.35)**	4.34 (2.53-7.45)**
HS Grad/Some College		2.45 (1.95-3.07)**	2.30 (1.80-2.94)**	2.03 (1.55-2.65)**	2.04 (1.55-2.67)**
Membership in Community Organizations (None)					
One			.85 (.66-1.09)	.97 (.73-1.29)	.97 (.73-1.29)
Two			.79 (.60-1.03)	.90 (.66-1.23)	.90 (.66-1.24)
Three-Four			.86 (.58-1.27)	1.03 (.69-1.54)	1.04 (.69-1.55)
Five+			.57 (.32-1.00)	.76 (.41-1.40)	.76 (.41-1.40)
Friends/Family to talk with about health (None)					
			.57 (.43-.78)**	.69 (.51-.94)**	.70 (.51-.94)*
Watched Health Segments on Local News (No)					
				.82 (.57-1.17)	.82 (.57-1.17)
Have access to the Internet (No)					
				.54 (.42-.70)	.54 (.42-.70)**
Read Health Info in the Newspaper (No)					
				.51 (.37-.72)**	.52 (.37-.72)**
US Born (No)					
					.91 (.55-1.50)

Logistic Regression –

SD, SEP, and Communication Factors Associated with
Black Women's HPV Awareness

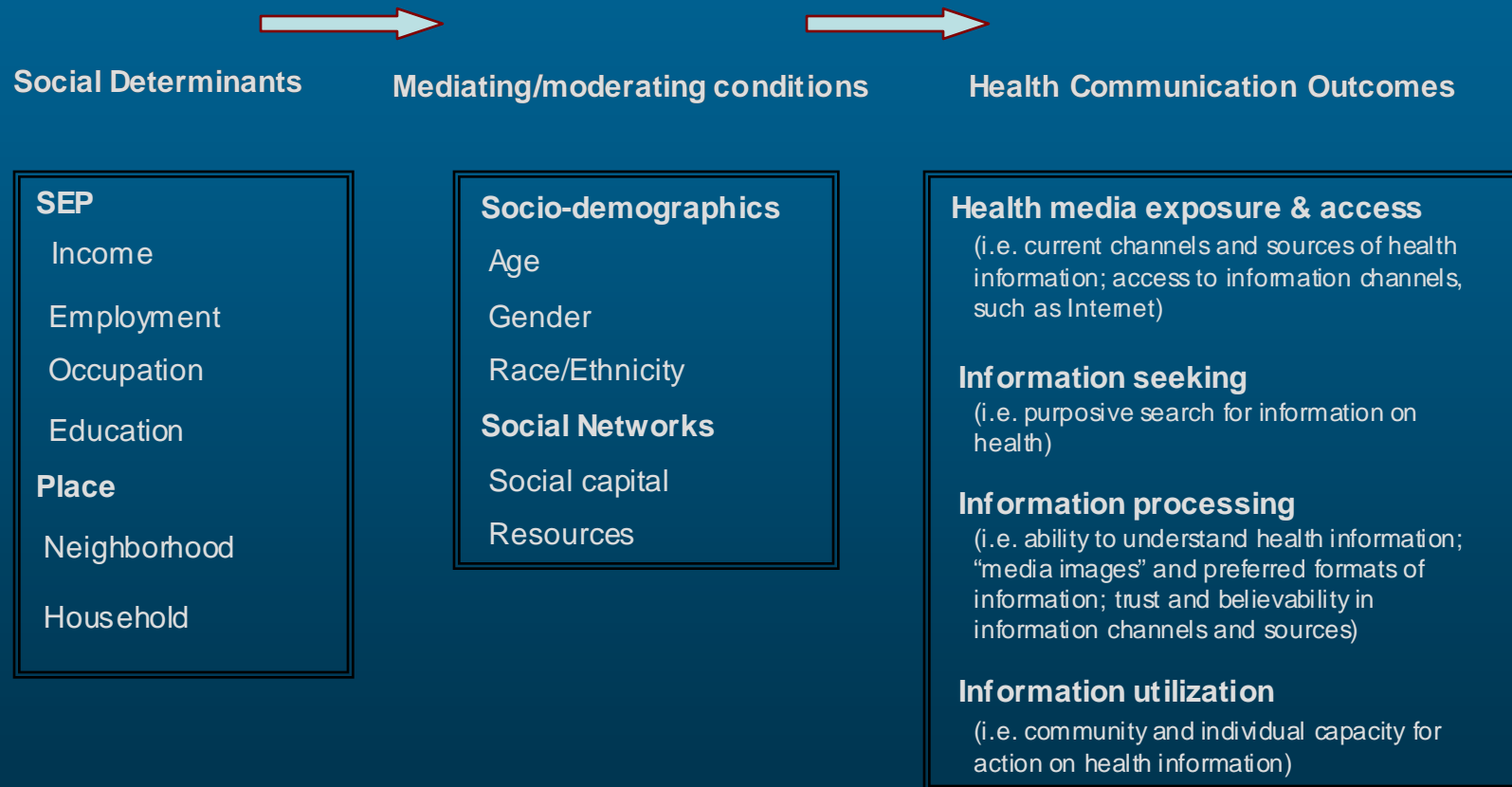
Logistic Regression WHERE 1- Have heard of HPV	Black Women n=253 OR (CI 95%)
Age (55+)	p≤.7527
Education	p≤.0022
<HS Grad	19.97 (3.38-117.95)**
HS Grad/Some College	5.67 (1.89-17.06)**
Membership in community organization (None)	p≤.1.064
Friends/Family to talk with about health (None)	p≤.3521
Watched health segments on local news (No)	p≤.3985
Have access to the Internet (No)	p≤.32 (.11-.94)*
Read health info in the newspaper (No)	p≤.7562

Focus Groups on Health Communication Inequalities

- Data collected from four (4) focus groups in two (2) Massachusetts communities, October 2006
- Participants screened for low-SEP (including: incomes \leq 200% FPL; high school graduates or less)
- Over-sample of racial/ethnic minorities and women
- Two (2) groups conducted in Spanish

Qualitative Analysis – Focus Groups

Structural Influence Model of Health Communication Inequality



Internet Access and Processing: Challenges

Access to Internet

- Not enough access to Internet (“Digital Divide”)

Information Processing on Internet

- Too much information on-line
- Internet difficult to navigate (“Digital Inequality”)
- Medical terminology too difficult to understand
- “Media images” and distrust in biased information sources (i.e. pharmaceutical and profit-driven interests)

Internet Processing and Utilization: Opportunities

***Providing a specific URL**, to which individuals can go for information can be one way to resolve 'overwhelming' Internet searches...*

*“Because there’s so much information out there. And I had my surgeon say to me, ‘Please stop looking on all these sites.’...She asked...she really did, she asked me NOT to do that. And **she gave me two specific sites** that were ok to...to look at. [...] Just so that, you know, it keeps you focused. [...] It **keeps you on-base**, because you could get out there and get *lost in all of that*. You know, and cause yourself to have... a mental breakdown!”*

Opportunities for HPV Messaging in Black Communities



Considerations for Increasing Information Access: Non-media and Traditional Media Use

Community gatherings, churches, and 'health fairs' were named among trusted channels of communities' health information...

"Health fairs that go on through the community. That's definitely a good way you know, but ...it seems to always take an incentive to draw the people out. You know?...But, it is a good way to really bring people, and try to make them knowledgeable..."

"Well, of course, you know, it's always gonna be, the inner cities are not gonna have it (information). But, I think...what goes on, in inner cities that people don't realize is that there's a human connection, where word of mouth gets around. Um, the churches is very, very popular..."

Local newspapers and community circulars were widely trusted channels of health information...

"But what I find is that, when we're lookin' at us, as minorities, lookin' for certain information that pertain to us, we have *The Banner*."

"You know, but I think ... when we start lookin' at issues that pertain to us, I feel that we get a more truer story about us from our paper –*The Banner*– and, and...us, and that's what I truly believe."

Summary of Considerations: Reducing Communication Inequalities among Black Women

- Libraries and community centers may be venues to increase Internet access
- Providing specific websites may reduce navigation issues
- “Plain language” and video formats are preferred forms of messaging
- Media images that represent ‘people like me’ are particularly important
- Non-media and traditional media remain important channels of health information for Black women

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