

The relationship of health literacy to knowledge, beliefs and attitudes about cancer screening in four ethnic groups

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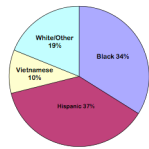
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RESEARCH SITE: CARING HEALTH CENTER (CHC) SPRINGFIELD, MA

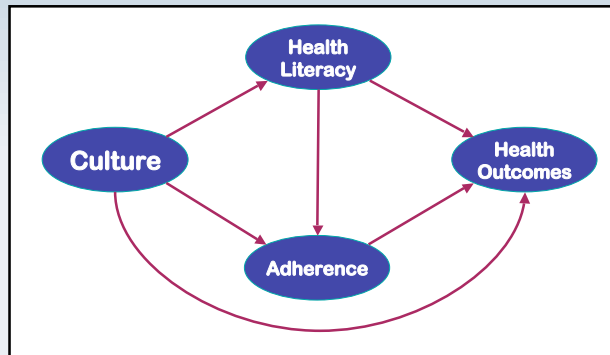
- Section 330 federally-qualified health center
- >50% of CHC's adult patients require translation services
- Participants from 4 ethnic groups with hypertension and/or diabetes
- Preliminary results (N=116):
 - 82% of Latino (PR) participants speak Spanish at home
 - 29% of all participants had ≤8th grade education
 - 69% rated their health as fair to poor
 - 63% are disabled
 - 64% estimate their household income between \$400-1,200/mo.

	White (n=100)	African-American (n=100)	Latino (n=100)	Vietnamese (n=100)
Cancer Knowledge, Beliefs, Attitudes				
Diabetes	(n=50)	(n=50)	(n=50)	(n=50)
Hypertension	(n=50)	(n=50)	(n=50)	(n=50)

Caring Health Center Patient Population



CONCEPTUAL MODEL



INSTRUMENT DEVELOPMENT

- We adapted existing scales for health literacy and acculturation for use in four ethnic groups (African-American, white, Latino, and Vietnamese) by:
 - conducting focus groups with members of each ethnic group to generate culturally relevant terms
 - translating existing scales into Spanish and Vietnamese
 - pre-testing revised scales with members of the target populations.
- The TOFHLA and REALM scales (Test of Functional Health Literacy in Adults; Rapid Estimate of Adult Literacy in Medicine) have not been normed or validated for Vietnamese-speakers (both) or Latinos (the REALM)
- We used SAHLSA (Short Assessment of Health Literacy for Spanish Adults) to address translation issues for medical terms in the REALM

FINDINGS: HEALTH LITERACY

- Significant variation in health literacy by ethnicity, due especially to the large difference between African-American and Latino TOFHLA numeracy means.
- Health Literacy is positively, but not consistently, correlated with education level
 - No association between health literacy & education among African-Americans
 - Strong association among Vietnamese immigrants

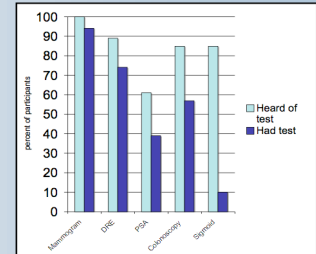
Ethnic Group	REALM Mean p<.008	TOFHLA Mean p<.003
White	44.31	11.69
Black	58.29	14.79
Vietnamese	N/A	11.03
Latino	N/A	10.46

Pearson Correlations between Education Level and TOFHLA Numeracy Score

Overall:	0.525*	p=.000, N=120
African-American:	.215	p=.313, N=24
Vietnamese:	.712*	p=.000, N=34
Latino:	.397*	p=.005, N=49

FINDINGS: CANCER SCREENING KBAs

- While breast cancer screening has achieved nearly complete coverage, significantly fewer men had heard of (61%) or had (39%) a PSA test.
- Despite its accessibility, DRE has achieved less complete coverage in this primary care clinic.
- 22% of 36 women who were recommended to have sigmoid/colonoscopy did not receive the test.



- Overall, **Latinos** had fewest positive (e.g., don't worry about cancer) and most negative (e.g., painful, expensive) beliefs about all cancer screenings
- Vietnamese** had most positive beliefs (e.g., will decrease my chances of dying from breast cancer) about all cancer screenings
- Latinos had the lowest average health literacy scores of the 4 ethnic groups surveyed. Due to small sample size in each ethnic group, we are not yet able in most cases to show significant associations between health literacy and cancer screening knowledge and beliefs.

"50-50": GETTING A COLONOSCOPY

A: Fifty percent one and fifty percent the other, go or not? After I heard the doctor mention it, I wanted to go. But I heard from other people that the test was painful. So I was like, fifty percent... go or not.
 Q: What kinds of things did you hear from other people who had gone to have the test?
 A: [sigh] Okay, they're talking, talking and then they sleep. And when they're done, they don't know what happened. Something like that. Some people told me the test was painful. Other people said they were put to sleep, so they didn't know anything.
 Q: When your doctor recommended a colonoscopy... what did he or she tell you about it?
 A: They said when I get old- over 50- we must go do the test because it happens to old ladies and old men.
 Q: Did the doctor tell you much about the test and how it would work?
 A: I can't remember what they said. *- From a Vietnamese focus group*

RECOMMENDATIONS FOR PROVIDERS

- Follow-up with patients regarding completion of screening referrals (CRC, mammogram)
- Assure availability of medical interpretation for screening referrals
- Address Latino patients' negative beliefs and attitudes about cancer screenings (expense, pain, embarrassment)
- Address health insurance barriers to screenings.

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For more information:
 Contact shaws@email.arizona.edu or visit <http://anthropology.arizona.edu/culturehealthliteracy/>

METHODS

- Community-based participatory research
- Multi-method research design
- Longitudinal survey with 400 patients from 4 ethnic groups
 - African-American, Latino, Vietnamese, white
 - Administered orally by bilingual/bicultural interviewers
- Medical Chart Abstraction at baseline and 12 months
- Formative focus groups for instrument development
- In-depth interviews (10 per ethnic group)
- Home visits (5 per ethnic group)
- Chronic disease diaries (5 per ethnic group)

