

# Preliminary findings of cultural health beliefs and practices that shape health literacy and cancer screening behaviors in four populations

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## Introduction

> Health literacy refers to the ability to understand and act on a physician's instructions

> Health literacy is related to morbidity and mortality from a variety of conditions, including cancer (Davis et al 2001).

> Specific aims of research include:

- To assess variation in health literacy among native and non-native English speakers;
- To identify factors associated with health literacy;
- To use a prospective multi-method research design to explore the impact of health literacy on chronic disease outcomes and cancer screening behaviors, knowledge and attitudes;
- To identify effective ways to combine qualitative and quantitative research methods to further our knowledge of low health literacy;
- To develop recommendations for primary care providers on cancer screening and chronic disease management for ethnically diverse patients with low health literacy.

## The Influence of Culture on Patient Health and Health Care

- What is the cause of your disease or illness?
- What do you think is an appropriate treatment?
- How do you care for yourself and others?
- How do you prevent disease?
- How does your body work?
- What is appropriate doctor and patient conduct?
- How do you perceive your symptoms?



## Recommendations

Considerations for health literacy research with low-income/ethnic minority populations:

- > Stigma associated with low health literacy makes rapport between interviewer and participant even more essential
- > Community-Based Participatory Research (CBPR) ensures greater acceptability of instrument to diverse participant groups
- > Qualitative methods collect linguistically and culturally relevant concepts and terms

Recommendations for health care providers caring for diverse, low literate populations:

- > Express respect for patients' health practices and beliefs
- > Explore reasons for non-adherence to provider recommendations for treatment and cancer screening
- > Recognize diverse health beliefs as a critical aspect of health literacy
- > Provide education materials (videos and brochures) for lower literacy patients
- > Practice active listening: Check in with the patient to determine her understanding of medical recommendations
- > Ensure availability of trained medical interpreters

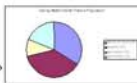
## Methods

> Community-based participatory research design

- Screening methods were developed in response to input from clinical staff (medical assistants and medical interpreters)
- Staff identified methods to protect participant confidentiality and promote trust

> Research site: Caring Health Center (CHC), Springfield, MA.

- Section 330 federally qualified health center
- CHC serves low to no income, uninsured or underinsured, immigrants and ethnic minority groups.
- More than 50% of CHC's adult patients require translation services.
- Pilot study results revealed (N=122):
  - 89% of Latino participants were Puerto Rican
  - 55% spoke Spanish at home
  - 48% had middle school or less education
  - 64% were unemployed
  - 89% rated their health as fair to poor
  - 54% described themselves as disabled



> Multi-method design combining qualitative and quantitative approaches to data collection

	Sample Size and Resolutions (N=400)			
	White (n=100)	African American (n=100)	Latino (n=100)	Vietnamese (n=100)
Cancer Knowledge, Beliefs, Attitudes	(n=50)	(n=50)	(n=50)	(n=50)
Diabetes	(n=50)	(n=50)	(n=50)	(n=50)
Hypertension	(n=50)	(n=50)	(n=50)	(n=50)

> Community health center patients tend to have higher rates of hypertension and diabetes than comparable (ethnically- and economically-matched) populations in the U.S. (Poltzer et al. 2001: 239).

## Stage I: Survey development and preliminary findings

Survey covers demographics, acculturation, health status, personal care behaviors, health care access, cancer screening, diabetes and hypertension-specific questions, health literacy (TOFHLA, REALM, SAHLSA), and patient perceptions of health care.

- Compiled a 90-minute survey from a variety of existing instruments.
  - Cancer screening questions developed from CDC's BRFSS survey (2006), Champion's Health Belief Model Scale (1995).
- Conducted formative interviews and focus groups
  - Assessed cultural relevance of survey vis-à-vis nutrition, physical activity, adherence, acculturation, and mindfulness
  - Modified survey based on focus group results
- Pilot tested survey
  - Consulted with providers to ensure accuracy and appropriateness of survey
  - Piloted survey with staff for timing, flow, and understanding
  - Piloted English-language survey with sample of English-speaking Latino, Vietnamese, African American, and White patients
- Translated the survey into Spanish and Vietnamese

## Formative Research Findings

- Clarified acculturation scale items for African Americans, Latinos, and Vietnamese.
- Spanish-language focus group identified selected barriers to health care:
  - appointments are rushed;
  - time in the waiting room is wasted, and
  - communication is difficult because a lot of information is lost in translation.
- Difficulty adapting REALM (Rapid Estimate of Adult Literacy in Medicine) for Spanish-speaking participants. Replaced REALM with SAHLSA (Short Assessment of Health Literacy in Spanish-speaking Adults).
- Currently exploring, researching, consulting to figure out how best to measure health literacy among the Vietnamese sample.
- Initial survey administration reveals patients are aware of the most common breast, prostate, and colorectal cancer screening exams.

## Methods Timeline



## Literature cited

- Centers for Disease Control  
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2001 Inequality in America: The contribution of health centers in reducing and eliminating disparities in access to care. *Med Care Res Rev* 58(2):234-48.

## For further information

Please contact [jarmine@u.arizona.edu](mailto:jarmine@u.arizona.edu). More information about this project can be obtained at <http://anthropology.arizona.edu/cultureandhealthliteracy/>. Our Web site also contains a list of resources regarding the intersection of culture and health.

Poster presentation: The 2007 American Academy for Cancer Research (AACR) Conference on Cancer Health Disparities

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