



Culture, Perceptions of Healthcare Mistreatment, and Cancer Screening

Sarah Ormseth, BA¹, Hector Betancourt, PhD^{1,2}, & Patricia Flynn, PhD, MPH¹
¹Loma Linda University; ²Universidad de La Frontera, Chile

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INTRODUCTION

The IOM report *Unequal Treatment* indicates that differences in quality of healthcare partially account for disparities in a variety of health outcomes among racial, ethnic and socioeconomic groups. Patients' perceptions of quality of care have been found to influence breast and cervical cancer screening and continuity of care. Moreover, recent research has identified variations in perceived quality of care among various ethnic populations. Some Latin American (Latino) populations report lower quality of care than non-Latino Whites (Anglo Americans). This suggests that quality of care and perceptions of mistreatment may be a function of cultural differences between diverse patients and their health professionals.

The U.S. healthcare system is largely based on Anglo American cultural assumptions. The cultural divide between health professionals and the diverse patients they serve is likely to influence the behaviors of both healthcare professionals and their patients. The socially shared experience of lower quality of care and perceived mistreatment among members of an ethnic or low SES community may in turn result in socially shared beliefs about health professionals. According to theoretical considerations regarding (Betancourt & Flynn, 2009), these shared beliefs become part of the culture and influence the behavior of individuals of that community.

Recent research has identified several cancer-relevant cultural beliefs among Latino and Anglo American women, including that of negative cultural beliefs about health professionals. While most identified cultural beliefs directly influenced cancer screening behavior, in some cases the influence was through psychological factors. This suggests that the impact of cultural beliefs about healthcare professionals may be associated with perceptions of mistreatment and related emotions. Since aspects of culture do not always directly influence behavior it is crucial to also investigate the mediating role of psychological processes. Interventions based on research that does not simultaneously consider cultural and psychological factors may overlook the important role of cultural beliefs as indirect determinants of behavior, diminishing the effectiveness of these efforts.

The purpose of this research is to investigate Latino and Anglo women's perceptions of interpersonal healthcare mistreatment on the part of health professionals performing breast and cervical cancer screening and their influence on cancer screening continuity of care. Since socially shared cultural beliefs are also likely to influence behavior as well as mediating psychological processes, the direct as well as indirect influence of cultural beliefs about healthcare professionals on continuity of cancer screening care will also be tested through mediating perceptions of healthcare mistreatment and subsequent mistreatment-related emotions.

HYPOTHESES

1. Perceptions of healthcare mistreatment would negatively influence continuity of cancer screening care for both Latino and Anglo women, directly and/or through mistreatment-related emotions.
2. Continuity of care would be influenced by negative beliefs about healthcare professionals, both directly and through the influence of those beliefs on mistreatment related psychological processes.
3. The structure of relations among population categories, culture, psychological processes, and continuity of cancer screening care would be similar for both Latino and Anglo women. However, the magnitude of some of the hypothesized relations were expected to vary for individuals of different ethnic backgrounds.

METHODS

Participants

The final sample included 263 Latino ($n=140$) and Anglo ($n=123$) women from Southern California recruited from diverse settings. Participants were compensated \$20 for their time.

Measures

Ethnicity
 Participants self-identified as either Latino or Anglo.
Socioeconomic Status (SES)
Education was based on five groups: < 12 years, 12 years, 1-2 years of college, 3-4 years of college, and > 4 years of college.
Income was based on five categories: <\$15,000, \$15,000-24,999, \$25,000-39,999, \$40,000-59,999, and \$60,000+ annually.
Cultural Beliefs about Healthcare Professionals
 Assessed using five items of the negative beliefs about health professionals subscale from the Cultural Cancer Screening Scale (Betancourt, Flynn, Riggs, & Garberoglio, 2009).
 Items were based on a 7-point Likert scale.
 The reliability was adequate (Latino $\alpha=.759$; Anglo $\alpha=.742$).

Perceptions of Healthcare Mistreatment
 Composed of 11 items of instances of healthcare mistreatment as reflected by a lack of respect and communication issues. If participants indicated they had experienced the incident during routine cancer screening exams they rated the extent to which the incident was a problem on a 7-point Likert scale. Reliability was strong for Latinos ($\alpha=.935$) and Anglos ($\alpha=.899$). 'Intensity' of perceived mistreatment was based on the rating of the incident identified as most problematic for the participant. 'Cumulative exposure' was based on a ratio score: The numerator was the total number of incidents perceived as mistreatment. The denominator the total number of incidents experienced, regardless of whether mistreatment was perceived.

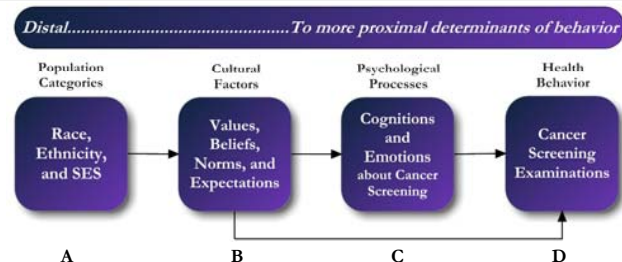
Mistreatment-Related Anger at Healthcare Professional
 Participants indicated the extent they felt anger towards their health professional as a result of mistreatment experiences. This item was placed on a 7-point Likert scale.

Continuity of Cancer Screening Care
 Assessed by two questions of participants' intentions to maintain contact with their health professional or facility. Items were placed on a 7-point Likert scale. Reliability of this scale was strong (Latino $\alpha=.916$; Anglo $\alpha=.914$).

Statistical Analyses

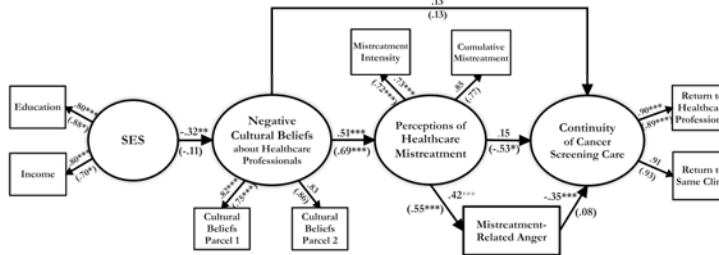
Structural equation models were assessed EQS 6.1. Adequacy of fit was assessed with χ^2 fit statistic, χ^2/df , CFI, and RMSEA. Modifications were results from the Lagrange Multiplier test. Multigroup analyses were used after separate baseline models were established for each ethnic group.
Tests of Invariance Across Ethnicity
 Configural invariance was determined by testing if the number of factors and the loading pattern were similar across groups. To test measurement invariance, equality constraints were imposed on factor loadings. To test structural invariance across ethnicity, equality constraints were imposed on structural paths. If the constrained structural model showed a decrement in fit (sig. $\Delta\chi^2$ or $\Delta CFI \geq .01$), the LM Test of equality constraints was examined. Constraints were considered noninvariant and released if doing so dramatically improved the model fit.

BETANCOURT'S MODEL OF CULTURE AND BEHAVIOR



According to the Model for the Study of Culture and Behavior, aspects of culture (B) are expected to influence screening (D) both directly and indirectly through mediating psychological processes (C).

FINAL MODEL FOR LATINO (ANGLO) SUBGROUPS



TESTS OF INVARIANCE ACROSS ETHNICITY

Model	χ^2	df	CFI	RMSEA	Model A Comparison	$\Delta\chi^2$	Δdf	ΔCFI
Model 1 Configural No constraints	47.78	44	.995	.018	—	—	—	—
Model 2 Measurement Model (factor loadings constrained across ethnicity)	47.99	49	1.00	.000	2 vs. 1	0.02	5	.005
Model 3 Structural Model (constrained factor loadings and 5 structural paths)	70.32	55	.981	.033	3 vs. 2	22.33**	6	-.019
Model 4 Structural Model (constrained factor loadings and 4 structural paths, released Mistreatment→Continuity)	62.51	54	.990	.025	4 vs. 2	14.52*	5	-.010
Model 5 Structural Model (constrained factor loadings and 3 structural paths, released Mistx→Continuity; Anger→Continuity)	55.99	53	.996	.015	5 vs. 2	8.00	4	-.004

DEMOGRAPHIC CHARACTERISTICS

Variable	Latino n (%)	Anglo n (%)
Income		
<\$14,999	35 (25.00)	23 (18.70)
\$15-24,999	22 (15.71)	14 (11.38)
\$25-39,999	29 (20.71)	20 (16.26)
\$40-59,999	22 (15.71)	20 (16.26)
> \$60,000	32 (22.86)	46 (37.40)
Education*		
Less than high school	40 (28.57)	8 (6.50)
High school	29 (20.71)	26 (21.14)
1-2 yrs college	39 (27.86)	38 (30.89)
3-4 yrs college	16 (11.43)	15 (12.20)
> 4 yrs college	16 (11.43)	36 (29.27)
Marital Status		
Single	34 (24.29)	20 (16.26)
Married	76 (54.29)	70 (56.91)
Divorced	23 (16.43)	22 (17.89)
Widowed	6 (4.29)	11 (8.94)
Health insurance coverage*	106 (75.14)	115 (93.50)
Usual place of health care*		
ER/county hospital	41 (29.29)	12 (9.76)
Private doctor or hospital	99 (70.71)	111 (90.24)
Normally see same doctor	103 (73.57)	98 (79.68)
Ethnic concordance*	20 (14.29)	46 (37.40)
Spanish survey language *	41 (29.29)	0 (0.00)
	M (SD)	M (SD)
Age in years*	39.7 (13.08)	47.7 (15.56)
Frequency of care past 2 years	6.10 (11.04)	6.30 (6.00)

SUMMARY and IMPLICATIONS

- Culture influenced continuity of cancer screening through perceptions of mistreatment and anger in both Latino and Anglo women.
- Latinos had greater average negative cultural beliefs about health professionals as compared to Anglos.
- Latinos reported greater levels of perceiving the negative incident as mistreatment overall
- Latinos also had higher average intensity rating for negative interpersonal incidents
- Findings support previous research that indicates emotions influence behavior more for Latinos.
- Since cancer screening is not a onetime event improving continuity of care is critical to maintain cancer screening behaviors in all women.