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Cultural Beliefs and Mental Health Treatment Preferences of Ethnically Diverse Older Adult Consumers in Primary Care

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Abstract

Background—Beliefs concerning the causes of mental illness may help explain why there are significant disparities in the rates of formal mental health service use among racial/ethnic minority elderly as compared with their Caucasian counterparts. This study applies the Cultural Influences on Mental Health framework to identify the relationship between race/ethnicity and differences in: (1) beliefs on the cause of mental illness; (2) preferences for type of treatment; and (3) provider characteristics.

Method—Analyses were conducted using baseline data collected from participants who completed the Cultural Attitudes toward Healthcare and Mental Illness Questionnaire, developed for the PRISM-E (Primary Care Research in Substance Abuse and Mental Health for the Elderly) study, a multi-site randomized trial for older adults (65+) with depression, anxiety, or at-risk alcohol consumption. The final sample consisted of 1257 non-Latino Whites, 536 African-Americans, 112 Asian-Americans, and 303 Latinos.

Results—African-Americans, Asian-Americans, and Latinos had differing beliefs regarding the causes of mental illness when compared to Non-Latino Whites. Race/ethnicity was also associated with determining who makes healthcare decisions, treatment preferences, and preferred characteristics of healthcare providers.

Conclusions—This study highlights the association between race/ethnicity and health beliefs, treatment preferences, healthcare decisions, and consumers' preferred characteristics of healthcare providers. Accommodating the values and preferences of individuals can be helpful in engaging racial/ethnic minority patients in mental health services.

Keywords

race/ethnicity; health beliefs; older adults

Racial/ethnic minorities constitute the fastest growing segment of the elderly population. Projections for the year 2050 predict that approximately 40% of the elderly population will belong to a racial or ethnic minority (1). Regardless of age, racial/ethnic minorities display

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disproportionate rates of mental disorders as compared to non-Latino Whites (2) and receive a lower quality of care (3). As a result, racial/ethnic minorities experience a greater burden of unmet mental health needs (4), due, in part, to patient, provider, and health care system barriers (5-8, 4).

An array of evidence-based mental health services have been developed to overcome some of the barriers experienced by older adults (9, 10,11); yet racial/ethnic minorities remain underserved and drop out at a greater rate compared to non-Latino White elderly (12). These differences in mental health care persist even when controlling for these individual (i.e. language) and macro-level factors (poverty, education), thus indicating the presence of other, psychological barriers to mental health service use (12-15).

Culturally associated health beliefs may provide additional insight as to why these disparities exist as well as provide information on how to provide culturally appropriate services to racial/ethnic minority older adults. Different cultural beliefs about mental illness may influence the type of treatment that is sought and how mental illness is addressed and managed. The purpose of this study is to identify cultural beliefs about the causes of mental illness and treatment preferences, among four different racial/ethnic groups.

The *Cultural Influences on Mental Health* (CIMH) framework is a useful approach to characterizing cultural factors in the relationship that develops between the patient and the mental health care system (2). This model suggests that various cultural influences contribute to the etiology and development of mental illness and affect how one personally defines his symptoms and illness. For example, cultural differences may contribute to the prevalence of mental disorders, influence beliefs about the causes of mental illness and subsequently impacts treatments and interventions. Even prior to engaging in mental health care, preferences are developed regarding the type and role of the health care clinician or alternative provider addressing mental health issues. Racial/ethnic minorities may have treatment preferences that shape the manner in which they seek help.

The current study applies the CIMH model to identify cultural attitudes toward healthcare and mental illness among various racial/ethnic minority older adults with common mental health problems including depression, anxiety disorders, or at-risk alcohol use. Specifically, this study examines to what extent race/ethnicity is associated with differences in: (1) beliefs on the cause of mental illness; (2) preferences for type of treatment; and (3) provider characteristics. It is hypothesized that African-Americans, Asian-Americans, and Latinos will have differing beliefs regarding the causes of mental illness when compared to Non-Latino Whites. Also, race/ethnicity will be associated with determining who makes healthcare decisions, treatment preferences, and preferred characteristics of healthcare providers.

Methods

The Primary Care Research in Substance Abuse and Mental Health for the Elderly (PRISM-E) is a multisite randomized trial that compared two specific interventions; an integrated care model and enhanced referral model (16, 17) for older persons with depression, anxiety, or at-risk alcohol consumption. In the PRISM-E study, all patients aged 65 years and older were initially seen by or referred to the study by their primary care clinician, and those eligible for the study were subsequently randomized to treatment into either the integrated care model or the enhanced referral model. The integrated model provided mental health/substance abuse services in the primary care clinic by a mental health provider. The enhanced referral model provided mental health/substance abuse services in a specialty setting that was physically separate and designated as a mental health/substance abuse clinic.

A total of 24,930 older adults aged 65 and above were screened at primary care clinics or practices across the United States. Participants who were excluded failed to meet criteria for a target diagnosis, were ineligible for the study because of incomplete data, and were ineligible because they had hypomania or psychosis.

Six thousand, four hundred thirty patients screened positive for one of the three target conditions (depression, anxiety, or at-risk alcohol use). Of these, 3,225 refused to participate in the baseline assessment interview. Those who chose not to participate were more likely to be Caucasian males with lower mean General Health Questionnaire score (indicating less severe distress); and more reported drinks per week (18). The final study sample consisted of 2,244 participants who completed the baseline diagnostic interviews, agreed to participate, and were enrolled in the study.

Patients were recruited from six Veterans Administration (VA) Medical Centers, three community health centers and two hospital networks, thus representing a diversity of clinical settings and patient demographics. A detailed description of the study methods is provided elsewhere (19). Data from a variety of psychological instruments were collected at pre-determined intervals.

Participants

The baseline sample of the PRISM-E was used in this study. Of those who screened eligible for the PRISM-E study, only those participants who completed the Cultural Attitudes toward Healthcare and Mental Illness measure at baseline (prior to participation in any of the interventions being evaluated) were included in these analyses ($N = 2208$). The final sample consisted of 1257 non-Latino Whites, 536 African-Americans, 112 Asian-Americans, and 303 Latinos were included in the analyses. Interviews were conducted in Spanish and Chinese to accommodate those participants that did not speak English.

Measures

The baseline assessment included a sociodemographic questionnaire, diagnostic assessments, a service use questionnaire, a stigma questionnaire, and a cultural beliefs and preferences questionnaire. Because the current study seeks to identify cultural attitudes toward healthcare and mental illness as well as cultural sensitivity desired from the healthcare system from a cross-sectional perspective, only baseline data are presented.

Sociodemographic Characteristics—The following sociodemographic data pertinent to the current study were gathered: age; country of birth (United States or outside the United States); years in the United States; years of formal education; and marital status (married or unmarried).

Cultural Attitudes toward Healthcare and Mental Illness Questionnaire—In order to measure cultural attitudes toward healthcare and mental illness as well as to assess cultural sensitivity desired from the healthcare system, a measure was specifically developed for PRISM-E. PRISM-E investigators developed the questionnaire with specific interest in multicultural mental health. Since this is the first study in which the measure has been used, psychometric properties of the measure have yet to be studied. However, the measure was translated into Spanish and Chinese. The authors went through a translation and back translation process to ensure the linguistic validity. Each item was developed and reviewed using a consensus process. This questionnaire asks four questions: (1) “Nobody knows for sure what causes mental health problems such as depression, but people have many different ideas about what the causes might be. What do you think causes depression?” (2) “If you had a mental health problem, what do you think would help you get better?” (3) “Who

would you talk to if you had a mental health problem?” (4) “Who makes most of the decisions about your health care?”

Answers to these questions are categorical in nature (see tables 2-6), and the respondents were allowed to choose more than one response for each question. The questionnaire also asked respondents to rate the importance of their health care provider having certain characteristics (e.g. speaking the same language; being of the same racial/ethnic group; being the same gender; being the same age; being open to different treatment options; and understanding the respondent's culture). Answers for this set of questions were scored on a 5-point Likert scale ranging from 0 (Not important at all) to 4 (Very Important).

Statistical Analyses

Racial/ethnic group differences on sociodemographic variables were tested using a one-way analysis of variance (ANOVA) for continuous variables and chi-square analyses for categorical variables. For “Years in the US” variable, a Fisher's exact test was used since there were too many cells with expected frequencies less than 5 to make a chi-square reasonable. For the main outcomes, Chi-square, pairwise comparisons were used to answer each of the four questions in the Cultural Attitudes toward Healthcare and Mental Illness questionnaire. Since the non-Latino Whites were the referent group, their responses were compared to those of each ethnic minority group. ANOVA comparisons of group means for each item on preferred characteristics of health care provider (dependent variable) and racial/ethnic group affiliation (independent variable) were used. Since significant overall group differences were found for race/ethnicity, subsequent pairwise comparisons between non-Latino Whites and each race/ethnicity were conducted. Due to the multiple comparisons, only those results with a p value less than or equal to .01 were interpreted.

Results

Sociodemographic and Immigration Characteristics

Table 1 examines sociodemographic and immigration characteristics among non-Latino white, African-American, Asian-American, and Latino elderly participants in PRISM-E. Asian-Americans were significantly younger than non-Latino Whites. A greater proportion of Latinos and Asian-Americans reported less than 12 years of education as compared to non-Latino whites. The majority of Latinos and Asian-Americans reported living in the U.S. 10 years or longer. African-Americans, Asians, and Latinos had significantly greater rates of depression than non-Latino Whites. Rates of anxiety did not differ by ethnicity. Non-Latino Whites exhibited greater rates of at-risk drinking compared to the other ethnic groups. African-Americans had significantly greater rates of dual diagnosis than non-Latino Whites.

Cultural Attitudes toward Healthcare and Mental Illness

Nobody knows for sure what causes mental health problems such as depression, but people have different ideas about what the causes might be. What do you think causes depression?—African-Americans tended to view mental illness as caused by stress and loss. They viewed the loss of family friends, stress over money, and stress or worry, in general, as causes of mental illness more than non-Latino Whites. A greater proportion of Asian-Americans than non-Latino Whites believed that family issues, medical illness and cultural differences caused mental illness. In comparison to non-Latino Whites, Latinos stated that mental illness was caused by the loss of family and friends, family issues, and moving to a different place. Details are presented in Table 2.

If you had a mental health problem, what do you think would help you get better?—As shown in Table 3, compared to non-Latino Whites, a greater proportion of

African-Americans said they would seek spiritual advice to help them with a mental health problem. There was no single treatment modality that the Asian-Americans preferred more than the non-Latino Whites. However, Latinos were more likely to endorse a preference for medications.

Who would you talk to if you had a mental health problem?—Table 4 shows that African-Americans were more likely to speak to a family member living with them (non-spouse) but were less willing to speak to psychiatrists or psychologists when compared to non-Latino Whites. Asian-Americans were unwilling to speak to anyone when compared to non-Latino Whites. Latinos were more likely to speak to a psychologist and less likely to speak to a medical doctor than the non-Latino Whites.

Who makes most of your health care decisions?—As shown in Table 5, the majority of participants in all racial/ethnic groups stated that it was they (on their own as individuals), who make most health care decisions. Since, the respondents were allowed to choose more than one response; the majority of African-Americans also stated that their doctors also were most likely to make healthcare decisions. Asian-Americans and Latinos were less likely than the non-Latino Whites to report that their doctors made health care decisions for them.

Preferred characteristics of health care provider—Table 6 shows that African-Americans expressed a greater degree of preference for their health care providers to understand their culture compared to non-Latino Whites. Asian-Americans indicated a greater preference for their health care providers be of the same racial/ethnic group compared to non-Latino Whites.

Discussion

The results of this study confirm that there are racial/ethnic differences among older adults with mental illness with respect to their treatment preferences, perspective on the roles of health care providers in decision-making, and preferred characteristics of providers. We found that African-Americans, Asian-Americans, and Latinos had differing beliefs regarding the causes of mental illness. Furthermore, race/ethnicity was associated with differences in preferences for type of treatment and preferred provider characteristics. This study adds to the growing literature that show how cultural values of African-Americans, Asian-Americans, and Latinos influence beliefs on the cause of mental illness, preferences for type of treatment, and provider characteristics (20, 21).

In our study, African-Americans viewed the loss of family and friends, stress over money, and general stress or worry as primary causes of mental illness. Intergenerational family support and support from the extended family is a common element contributing to health care in the African American community (22). African-Americans commonly view a strong social network as a protective factor against mental health problems as well as provide help in a time of need (22). This may help explain why African-Americans appear to be more likely to attribute disruptions in social support to developing a mental illness. The belief in a relationship between financial stress and mental illness may reflect perceived consequences of living in poverty for African-Americans. African-American respondents with lower incomes are significantly more likely to be diagnosed with a substance abuse disorder in their lifetimes than those with higher incomes (24, 25).

African-Americans in our study were willing to see and speak with family and a medical doctor, but expressed a distrust of conventional mental health professionals. This is consistent with previous research that has shown that African-Americans tend to mistrust

mental health professionals (7, 26) and preferentially seek treatment for mental health concerns in primary care (4, 27). This mistrust of the mental health providers is associated with perceived mistreatment, racism, stereotyping, and bias by mental health providers and institutions (28-31, 7).

In our study, Asian-Americans expressed the belief that mental illness is caused by medical illness, cultural differences and family issues. This is consistent with reports that Asian-Americans are less likely to report distress in psychological terms and instead are more likely to express distress through somatic symptoms (32). The expression of psychiatric problems through physical symptoms may be more congruent with Asian-American cultural beliefs and values. Asian-Americans have been described as less willing to speak to anyone about mental illness, perhaps due to mental illness being highly stigmatized and the need to preserve a sense of dignity (33). It may also be due to the importance placed on social harmony. Asian-Americans are also less likely to seek social support because they are more cautious about potentially disturbing their social network (34). This guarded approach to seeking treatment may help in understanding why Asian-Americans report being unwilling to speak to anyone regarding mental health concerns and why they tend to place more importance on their healthcare providers being of the same race/ethnicity. The belief that mental illness is borne out of a disruption in the family is a theme that cuts across racial/ethnic lines for the three racial/ethnic minority groups in this study. For the Asian-Americans and the Latinos, however, the narrative of family disruption or loss of family may have its roots in migration.

Latinos in our study expressed the belief that mental illness is caused by the loss of family and friends, family issues, and moving to a different place. Migration and relocation involve a series of stressful experiences, and these experiences of migration can shape individuals' perceptions of reality (35). While the act of migration may only take a relatively short amount of time, its effects can be profound and long lasting. The experience of migration transcends the actual physical move. Relocation is a transitional experience that affects the individuals' behaviors, feelings, values, and cognitions, and it is a pervasive condition that influences the family system and generations after (36). Migration can play a critical role in the culture and influences health beliefs. For example, a subgroup of Latinos believes that dementia is a result of migrating to a new country (37). The effect of the scattering of family members on family structure and relationships is believed to be traumatic and can lead to poor health (38).

Our finding that Latinos were willing to speak to psychologist and to use medications was surprising, as it is contrary to prior research reporting that Latinos have a mistrust of health care professionals and are concerned about the effects of psychotropic medications (39). This inconsistency may be related to the sampling approach used in our study in which all participants were drawn from primary care. Latinos who are seeking treatment may be more willing to use other forms of treatment. Furthermore, the study participants consist of older primary care patients who have consented to be in a research study in which they are randomized to integrated mental health treatment or referral to specialty mental health care. Hence, participants may not be representative of older adults who are reluctant or unwilling to accept mental health services.

Caution is warranted in interpreting the results of this report due to several limitations associated with the sample, study methods, and design. First, the participants who took part in this study were older primary care patients with a diagnosis depression, anxiety disorder, or at-risk alcohol use. As such, the results do not necessarily apply to community residing older adults with other mental health disorders, or individuals who do not have primary health care providers. Most importantly, participants had all consented to be in a study in

which they were willing to be randomized to two different models of mental health treatment, consisting of either integrated or referral substance abuse or mental health services. As such, this group of individuals represents a select subgroup and conclusions drawn cannot be generalized to the population at large. However, our final study sample 2,244 participants had relatively minor differences when compared to the larger primary care population represented by 24,930 outpatients screened. Those who chose not to participate were more likely to be non-Latino White, male, had less severe psychological distress, (a lower mean General Health Questionnaire score); and more reported drinks per week (18). Therefore, it is likely that our results are representative of primary care older patients from minority racial/ethnic groups who have significant mental health care needs, though the results are less likely to apply to primary care elderly with severe alcohol use disorders.

Second, the Latinos and Asian-Americans in this study were treated as homogeneous groups, when they actually comprise different subgroups of varying nationalities. Combining these individuals into broad categories (i.e., Latino or Asian) may make comparisons easier and elicit meaningful results, it is important to note that the participants who make up these groups come from vastly different cultures. Third, multiple comparisons were conducted, introducing the potential for Type II error. However, interpreting results with a p value less than or equal to .01 reduces the potential of committing a Type II error. Fourth, levels of formal education vary by ethnicity in this sample and could be a potential confounder since education level influenced has been shown to influence health beliefs in ethnic minority adults (40, 41). In sum, the present study had limitations that may potentially reduce the generalizability of the findings.

While these results should be viewed with some caution, they suggest potential directions for further inquiry. An epidemiological study measuring health beliefs and patient preferences would be able to determine if mental health beliefs or care preferences are related to a history of receiving services, disease severity, or treatment engagement. The effect of formal education on health beliefs is another potential direction for future research. Very pronounced differences were observed between the ethnic minority groups (e.g. loss of family / friends was endorsed by 44% of Latinos but only 19% of Asian Americans). These differences provide a foundation for future research to examine health beliefs and preferences between ethnic minority groups. In addition, further research is indicated that addresses differences that may be present in health beliefs and treatment preferences among the various sub-ethnic groups within the Latino and Asian-American population. Valuable information may be gained by disaggregating these populations (42). Researchers may be able to acquire useful knowledge about the elderly from the various Latino and Asian ethnic groups by comparing health beliefs and preferences between these subgroups.

This study provides preliminary findings that may help to inform how patients with a psychiatric illness or substance abuse from different cultures view mental illness. By understanding patients' health beliefs, clinicians may be in a position to address the needs of their patients in a culturally sensitive manner. Accommodating the values and preferences of individuals facilitates shared health care decision-making and ongoing participation in treatment. This can be especially helpful in engaging minority patients that have historically underutilized mental health services. By not taking into account these cultural values, the healthcare system are likely to perpetuate pre-existing health disparities, among racial/ethnic minority older adults comprising the fastest growing segment of the elderly population.

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Table 1

Sociodemographic Characteristics

Sociodemographic Variables	Non-Latino White (n = 1257)			African-American (n = 536)			Ethnicity			Latino (n = 303)			Significant Difference	
	M	SD	%	M	SD	%	M	SD	%	M	SD	%	F	p
Age	74.1	6.2		72.9	6.0		70.5*	5.0		72.7	5.8		13.2	<.01
Years of Education ^a													χ^2	p
Less than 8 th grade	73	5.8%		111	20.7%*		60	53.6%*		204	67.3%*		779.8	<.01
Less than 12 th grade	262	20.8%		183	34.1%*		14	12.5%*		30	9.9%*			
High School Graduate/GED	339	27%		119	22.2%		13	11.6%*		32	10.5%*			
Some College	300	23.9%		94	17.5%		2	1.8%*		24	7.9%*			
College Graduate	144	11.4%		17	3.2%*		21	18.8%		8	2.6%*			
Graduate School	120	9.5%		11	2.1%*		2	1.8%*		4	1.3%*			
Marital Status													183.4	<.01
Married	732	58.2%		190	35.4%*		75	67%*		108	35.6%*			
Separated	22	1.8%		53	9.9%*		2	1.8%		36	11.9%*			
Divorced	168	13.4%		104	19.4%		4	3.6%*		52	17.2%			
Widowed	262	20.8%		149	27.8%		29	25.9%		84	27.7%			
Never Married	61	4.9%		39	7.3%		2	1.8%		21	6.9%			
Place of Birth ^b													1684.3	<.01
US	1188	94.5%		533	99.4%		3	2.7%*		29	9.6%*			
Outside US	52	4.1%		3	0.6%		106	94.6%*		274	90.4%*			
Years in the US													81.7	<.01
Less than 1 year	0	0%		0	0%		0	0%		3	.01%			
1-5 years	0	0%		0	0%		18	16.1%*		7	2.3%			

Sociodemographic Variables	Ethnicity												Significant Difference				
	Non-Latino White (n = 1257)				African-American (n = 536)				Asian-American (n = 112)				Latino (n = 303)		F	p	
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD					
6-9 years	2	.16%	0	0%	26	23.2%*	8	2.6%									
10+ years	48	3.8%	3	.56%	63	56.3%*	235	77.6%*									
Psychiatric Illness ^c																	
Depression	825	65.6%	433	80.8%*	105	93.8%*	286	94.4%*					143.5			<.01	
Anxiety Disorder	325	25.9%	132	24.6%	29	25.9%	64	21.1%					3.5			.48	
At-risk Drinking	458	36.4%	142	26.5%*	4	3.6%*	20	6.6%*					148.7			<.01	
Dual Diagnosis	88	7.0%	49	9.1%*	3	2.7%	7	2.3%*					19.1			<.01	

Note: Differences in Age (DF= 3, 2204) were calculated using ANOVA

Differences in Years of Education (DF = 15), Marital Status (DF = 12), Place of Birth (DF = 3), Rates of Psychiatric Illness (DF = 9) were calculated using Chi-Square

Differences in Years in the US (DF = 9) were calculated using Fisher's Exact Test

DF: degrees of freedom

SD: standard deviation

^a21 participants (19 non Latino Whites, 1 African-American, 1 Latino) did not report their years of formal education.

^b20 participants (17 non Latino Whites, 3 Asian-Americans) did not report their birth country.

^cTotals may not add up to 100% since diagnostic categories were not mutually exclusive.

^dDual Diagnosis is defined as diagnosis of at risk drinking + diagnosis of depression and/or anxiety.

* Signifies difference with Non-Latino Whites

Table 2

Causes of Mental Illness by Ethnicity

Item	Percentage endorsing the item				Significant Difference	
	Non-Latino White (N = 1257)	African-American (N = 536)	Asian-American (N = 112)	Latino (N = 303)	χ^2	p
	% (n)	% (n)	% (n)	% (n)		
Causes for Mental Illness						
Stress/Loss						
Loss (e.g. family, friends)	34.9% (439)	41.6% (223)*	18.8% (21)*	44% (133)*	29.7	<.01
Loss or lack of pleasurable activities	27.4% (344)	25.7% (138)	9.8% (11)*	25.7% (78)	17.1	<.01
Family issues	29% (364)	30.2% (162)	45.5% (51)*	47.2% (143)*	45.6	<.01
Money issues	29.9% (376)	37.1% (199)*	35.7% (40)	30.4% (92)	9.6	.05
Political stress	5.3% (66)	5.8% (31)	.9 (1)*	2.3% (7)*	10.4	.03
Safety issues	6% (76)	6.9% (37)	2.7% (3)	7.3% (22)	3.4	.50
Stress or worry	33.1% (416)	43.7% (234)*	36.6% (41)	22.4% (68)*	41.0	<.01
Medical						
Medical illness	35.4% (445)	37.3% (200)	56.3% (63)*	63.7% (193)*	96.1	<.01
Infectious disease	8% (100)	7.3% (39)	.9% (1)*	7.9% (24)	7.7	.10
Nutritional deficiency	7.7% (97)	5.8% (31)	2.7% (3)*	5% (15)	7.5	.11
Chemical imbalance	14.4% (181)	7.5% (40)*	.9% (1)*	5.6% (17)*	44.0	<.01
Genetic	13.5% (170)	8.2% (44)*	3.6% (4)*	3.6% (11)	37.5	<.01
Spirit/Psyche						
Disturbance of body, mind and spirit	9% (113)	9.7% (52)	3.6% (4)*	16.5% (50)*	20.8	<.01
Something you did wrong in the past	7.2% (90)	8.4% (45)	0% (0)*	1.7% (5)*	55.2	<.01
Supernatural (e.g., witchcraft, hexes)	.95% (12)	3.5% (19)*	0% (0)	1.3% (4)	20.7	<.01
Environment/Culture						
Moving to a different place	9.1% (115)	8% (43)	8% (9)	38.3% (116)*	203.2	<.01

Item	Percentage endorsing the item				Significant Difference	
	Non-Latino White (N = 1257)	African-American (N = 536)	Asian-American (N = 112)	Latino (N = 303)	χ^2	p
Cultural differences	% (n) 6.5% (82)	% (n) 6.5% (35)	% (n) 21.4% (24)*	% (n) 3.3% (10)*	43.3	<.01
Adjusting to a different culture	% (n) 6.6% (83)	% (n) 4.7% (25)	% (n) 9.8% (11)	% (n) 6.3% (19)	5.9	.20

Note: Chi-Square was used to detect differences in response patterns

Degrees of Freedom = 3

* Signifies difference with Non-Latino Whites

Table 3

Treatment Preferences by Ethnicity

Item	Percentage endorsing the item				Significant Difference	
	Non-Latino White (N = 1257)	African-American (N = 536)	Asian-American (N = 112)	Latino (N = 303)	χ^2	p
What do you think would be better for you?	% (n)	% (n)	% (n)	% (n)		
Pills or medications	35% (440)	39.6% (212)	23.2% (26)*	45.5% (138)*	22.6	<.01
Herbal remedies	9.4% (118)	12.5% (67)	6.3% (7)	5.6% (17)*	12.8	.01
Private counseling	48.8% (614)	50.9% (273)	21.4% (24)*	45.5% (138)	35.5	<.01
Group counseling	30.8% (387)	31.7% (170)	3.6% (4)*	16.2% (49)*	66.0	<.01
Alternative therapies (acupuncture, massage, etc.)	13.1% (165)	13.6% (73)	3.6% (4)*	4% (12)*	31.3	<.01
Spiritual advice	25.4% (319)	32.5% (174)*	1.8% (2)*	9.6% (29)*	88.3	<.01

Note: Chi-Square was used to detect differences in response patterns

Degrees of Freedom = 3

* Signifies difference with Non-Latino Whites

Table 4

Who Would you Talk to about Mental Health by Ethnicity

Item	Percentage endorsing the item				Significant Difference	
	Non-Latino White (N = 1257)	African-American (N = 536)	Asian-American (N = 112)	Latino (N = 303)	χ^2	p
	% (n)	% (n)	% (n)	% (n)		
Who would you talk to about mental health/substance abuse issues?						
Spouse or sig. other	27.1% (341)	20% (107)*	33% (37)	15.5% (47)*	31.4	<.01
Family member living with you	6.4% (81)	12.3% (66)*	10.7% (12)	18.2% (55)*	43.4	<.01
Family member not living with you	20.2% (255)	21.5% (115)	13.4% (15)	24.8% (75)	7.5	.11
Friend	14.2% (178)	18.1% (97)*	15.2% (17)	8.9% (27)*	15.6	<.01
Healer	.95% (12)	.93% (5)	0% (0)	.7% (2)	1.4	<.01
Psychiatrist	12.7% (160)	9.5% (51)*	3.6% (4)*	12.5% (38)	11.7	<.01
Medical Doctor	49.5% (622)	53.9% (289)	3.6% (4)*	34.3% (104)*	121.5	<.01
Social Worker	5.6% (70)	5.4% (29)	.9% (1)	6.6% (20)	7.7	.10
Psychologist	8.5% (107)	4.9% (26)*	1.8% (2)*	13.2% (40)*	24.9	<.01
12 step program	4.2% (53)	3.4% (18)	0% (0)*	1.7% (5)*	14.6	<.01
Someone from church	6.7% (84)	11.6% (62)*	0% (0)*	4% (12)	30.3	<.01
Religious/spiritual leader	1.8% (23)	3% (16)	0% (0)	1% (3)	7.2	.127
Alternative care provider (massage, acupuncture, etc.)	.87% (11)	1.3% (7)	0% (0)	0% (0)	11.9	.02
No one	5.2% (65)	5.8% (31)	29.5% (33)*	6.6% (20)	98.2	<.01

Note: Chi-Square was used to detect differences in response patterns

Degrees of Freedom = 3

* Signifies difference with Non-Latino Whites

Table 5

Who Makes Health Care Decisions by Ethnicity

Item	Percentage endorsing the item				Significant Difference	
	Non-Latino White (N = 1257)	African-American (N = 536)	Asian-American (N = 112)	Latino (N = 303)	χ^2	p
Who makes health care decisions?	% (n)	% (n)	% (n)	% (n)		
You	73.8% (928)	79.3% (425)	71.4% (80)	77.6% (235)	5.4	.25
Spouse or Sig. other	20% (251)	7.8% (42)*	13.4% (15)	11.2% (34)*	49.8	<.01
Doctor	44.9% (565)	56% (300)*	17.9% (20)*	15.2% (46)*	166.6	<.01
Family member other than spouse	5.6% (71)	8.2% (44)*	7.1% (8)	12.9% (39)*	19.0	<.01
Someone else	.72% (9)	1.7% (9)	0% (0)	1% (3)	4.9	.30

Note: Chi-Square was used to detect differences in response patterns

Degrees of Freedom = 3

* Signifies difference with Non-Latino Whites

Table 6
Preferred Characteristics of Health Care Provider by Ethnicity

Item	Percentage endorsing the item				Significant Difference	
	Non-Latino White (N = 1257)	African-American (N = 536)	Asian-American (N = 112)	Latino (N = 303)	F	p
Importance of health care provider:						
Speaking same language	M (SD) 4.24 (1.35)	M (SD) 4.69 (.93)*	M (SD) 4.78 (.86)*	M (SD) 4.23 (1.34)	16.5	<.01
Being same racial/ethnic group	M (SD) 1.56 (1.12)	M (SD) 1.52 (1.19)	M (SD) 3.70 (1.65)*	M (SD) 1.79 (1.39)*	80.7	<.01
Being same gender	M (SD) 1.47 (1.02)	M (SD) 1.62 (1.26)*	M (SD) 1.30 (.90)*	M (SD) 1.51 (1.10)	3.2	.01
Being same age	M (SD) 1.36 (.83)	M (SD) 1.38 (.98)	M (SD) 1.25 (.72)	M (SD) 1.3 (.87)	.71	.58
Being open to different treatments (acupuncture, massage, etc.)	M (SD) 2.47 (1.44)	M (SD) 2.66 (1.56)*	M (SD) 2.13 (1.38)*	M (SD) 1.93 (1.33)*	14.2	<.01
Understanding of your culture	M (SD) 2.81 (1.53)	M (SD) 3.57 (1.60)*	M (SD) 3.38 (1.39)*	M (SD) 3.34 (1.62)*	25.5	<.01

Note: ANOVA used to show mean differences
Degrees of Freedom = 3, 2204

* Signifies difference with Non-Latino Whites