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Examining Racial/Ethnic Minority Treatment Experiences with Specialty Behavioral Health Service Providers

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Abstract This study investigated whether satisfaction and helpfulness of treatment by mental health service provider is related to race/ethnicity and psychosocial factors. Data from the National Co morbidity Survey-Replication study, which administered mental health service use questions for the past 12-months (1332), was analyzed. Data were stratified by service provider and analyzed with multiple logistic regressions. Racial/ethnic minorities were generally more likely to be satisfied with services provided by specialty mental health providers compared to white respondents. Racial/ethnic minorities generally perceived the services provided by specialty mental health providers as more helpful than did other racial/ethnic groups. Those who reported high cultural identity were more likely to find their treatment experience less satisfying and less helpful. Greater attention to specialty referrals for racial/ethnic minority groups may fruitfully contribute to improve help-seeking for these groups. The role culture plays in shaping the mental health treatment experience needs to be further investigated.

Keywords Race · Ethnicity · Mental health · Help-seeking · Disparities · Treatment barriers

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Introduction

Several national household studies have been conducted that document the prevalence of mental disorders and the extent to which mental health treatment needs are being met (Alegria et al. 2004; Kessler et al. 1994; Kessler and Merikangas 2004; Jackson et al. 2004; Regier et al. 1984). The prevalence of any mental disorder (e.g., major depression, anxiety disorders) in the past 12 months has been estimated to be 26% among those 18 years and older (American Psychiatric Association 1994; Kessler et al. 2005a b). This translates into more than 50 million people suffering from a mental health problem, with associated cost of treatment in the billions (National Institute of Mental Health 2005).

Unfortunately, there is ample evidence that most people who are in need of mental health treatment do not seek help, a particularly troubling situation for persons suffering from severe mental illness (Kessler et al. 2005a b; Wang et al. 2005). The Surgeon General's Report on Mental Health in 1999 highlighted this treatment gap in mental health services among the general population, but particularly among racial and ethnic minorities, where it identified a great "burden of unmet need" of mental health services (US Department of Health Human Services 1999; USDHHS 2001). This is particularly problematic because among people diagnosed with a mental illness, the disease persists for longer periods among minority populations when compared to whites (Breslau et al. 2005; Neighbors 1984).

Despite our growing awareness of potential concerns about limited mental health treatment received by racial/ethnic minorities, the literature on mental health help-seeking behaviors in these populations is sparse (Ronzio et al. 2006; Atdjian and Vega 2005; Chow et al. 2003).

Factors that may contribute to disparities in treatment in different racial/ethnic groups may include a general distrust for health/mental health services because of past experiences with this sector (Snowden 2001; Dancy et al. 2005; Williams et al. 2003) irregularities in referral rates to specialty mental health care, cultural factors, level of problem severity, and the reliance on informal methods of help such as strong social networks, community resources, or spiritual guidance (Alegria et al. 2001; Keefe 1982; Neighbors and Jackson 1984; Neighbors 1984; Peifer et al. 2000; Snowden 2001). The Surgeon General's supplemental report clearly suggests that more information is needed to understand the factors underlying racial/ethnic disparities in mental health treatment (USDHHS 2001).

One way to understand mental health help-seeking behaviors among racial/ethnic minorities is to further examine their treatment experiences. In this study we utilize data from the NCS-R to examine the treatment experiences of racial/ethnic minorities.

Methods

Sample and Procedure

Data are from the National Co morbidity Survey-Replication study (NCS-R) (Kessler et al. 2004). The NCS-R, a lay administered household interview survey, was administered to a national representative sample of 9282 English-speaking respondents aged 18 and older who reside in the coterminous United States from 2001 to 2003. A detailed description of the sampling methods has been published elsewhere (Kessler et al. 2004).

Measures

There are two parts to the NCS-R. Part I is a diagnostic assessment based on the World Health Organization Composite International Diagnostic Interview (WHO-CIDI) diagnostic schedule interview which combines the WHO International Classification of Diseases (ICD-10) and the DSM-IV diagnoses. Part II assesses risk factors for psychiatric disorders and service utilization. For the purposes of this study, we were interested in data from part II of the NCS-R, particularly focusing on mental health services utilization.

Dependent Variables

All NCS-R respondents were asked to identify if they had seen a professional for problems with their emotions, nerves, or their use of alcohol or drugs during the past 12 months. Those who answered affirmatively were asked which professionals they had ever seen from a list of ten (i.e., psychiatrists, general practitioner, other mental health professionals, minister, and other healers). Respondents who indicated they had seen a professional in the past year were asked about the extent to which they were satisfied with the treatment they received and believed treatment was helpful in the past 12 months. In this study, we report findings for the five mental health/health care service providers most commonly sought out by the U.S. population: psychiatrist, medical doctor, psychologist, social worker, and counselor. Our key dependent variables of interest were respondent's satisfaction with the treatment they received in the past 12 months and the extent to which they believed the treatment was helpful.

Satisfaction with mental health treatment received was measured by asking individuals who received treatment in the last 12 months from the corresponding service provider the question: "How satisfied were you with the treatment you received from _____? for each of these professionals—psychiatrist, medical doctor, psychologist, social worker, and counselor. Response categories were 1 = very satisfied, 2 = satisfied, 3 = neither, 4 = dissatisfied, 5 = very dissatisfied. For purposes of this study, satisfaction was collapsed into a dichotomized response of '1 = yes satisfied' (those who said they were very satisfied or satisfied) versus '0 = not satisfied (those who said they were neither, dissatisfied, or very dissatisfied). Not being satisfied is the reference category.

Treatment helpfulness from each professional was assessed by asking how helpful treatment was when seen by a psychiatrist, medical doctor, psychologist, social worker, or a counselor. Respondents were asked to respond on a 4-point Likert scale as to how helpful the recommended course of treatment really was for each corresponding professional. The possible responses were 1 = very helpful, 2 = somewhat helpful, 3 = a little helpful and 4 = not at all helpful. For purposes of this study, helpfulness was collapsed into a dichotomized response of '1 = helpful' (those who said treatment was very helpful or somewhat helpful) '0 = not helpful' (those who said treatment was a little helpful or not at all helpful). Not helpful was the reference category.

Independent Variables

Race/Ethnicity

In the NCS-R, race/ethnicity was measured by asking individuals to self-identify their racial/ethnic background based on a selection of categorical choices. For purposes of this study the categorical choices are: White = 1, African Americans = 2, Hispanic = 3, and Other = 4. Individuals

of other racial/ethnic backgrounds were aggregated because the sample sizes for the various groups were too small to permit separate analyses.

Gender

Gender was a dummy coded variable based on respondent's self-report, with females being the reference category.

Employment

Employment was a categorical variable coded as follows: Working = 1, Student = 2, Homemaker = 3, Retired = 4, Other = 5. For purposes of this study, employment was collapsed into a dichotomized response of '1 = employed' (those who indicated they were working) versus '0 = unemployed (those who indicated they were a student, homemaker, retired or other) with unemployed being the reference category.

Income

Participants were asked to indicate their income based on a continuum of responses. Individuals whose income ranged from 0 to $30,000 were coded as 'low' with higher incomes coded as the reference category.

Education

Participants were asked to indicate their education level based on categorical variables. Responses were dichotomized into those with a high school education or less and those with more than a high school education. The latter group was the reference category.

Health Insurance

Participants were asked to report the type of health insurance they currently held by the following question: "Do you currently have health insurance through ____?" Response categories were: Military, employment/job, Medicare, Medicaid, and private insurance. We dichotomized the responses to these questions. Those who answered yes to any of theses questions were considered to be insured and those who answered no to all of the questions were considered to be uninsured. Uninsured responses were used as the reference category.

Social Support

Social support was measured by asking participants to answer several questions about their relationships with relatives, friends and acquaintances considered to be in their social networks. For example, participants were asked: "how much can you rely on relatives who do not live with you for help if you have a serious problem?" Responses ranged from: 1 = a lot, 2 = some, 3 = a little to 4 = not at all. Participants were also asked: "how often do you get together with relatives who live outside the home?" Responses ranged from: 1 = most everyday, 2 = a few times a week, 3 = few times a month, 4 = once a month to 5 = less than once a month. Participants were also asked how comfortable they were with opening up to relatives about their worries and concerns, the responses for this question were similar to the above mentioned examples. Responses from the social network questions were aggregated to create a dichotomous "social support" variable. Responses that indicated strong social network relations with family, friends and acquaintances (a lot, most everyday,) were coded as high social support, those whose responses indicated weak social networks (some, a little, few times a week, few times a month, once a month, not at all) were coded as low social support. Low or weak social support was the reference category.

Cultural Identity

Respondents were asked a series of six questions aimed at measuring how close they felt towards their own race or ethnic background, including having similar feelings or ideas as those in the same racial/ethnic group, the amount of time spent with members from their own racial/ethnic group and about how comfortable they would feel marrying outside their own racial/ethnic group. For example, a few of the questions read as follows: "How closely do you identify with other people who are of the same racial and ethnic decent as yourself?" Possible responses were: very close, somewhat close, not very close, and not at all. Responses from the questions were aggregated to create a dichotomous "cultural identity" variable. Responses that indicated strong cultural identity (very close) were dichotomized as high and those whose responses indicated weak cultural identity (somewhat close, not very close, and not at all) were dichotomized as low. Low cultural identity was the reference category.

Analysis

First, we documented the 12-month prevalence of seeking treatment among participants for each of the five mental health service providers, psychiatrist, medical doctor, psychologist, social worker, and counselor, separately for each of the four racial/ethnic groups of interest. Second, for both dependent variables under investigation (treatment satisfaction and treatment helpfulness) we conducted

bivariate analyses to measure the associations between independent and dependent variables. Third, we conducted multivariate logistic regression analyses to test for adjusted associations between the independent variables, including sociodemographic variables (gender, employment, income, education, and health insurance) and psychosocial variables (cultural identity and social support) and satisfaction and helpfulness.

All analyses are weighted based on the sample weight measure to allow generalizations to the U.S. population. Standard errors reflect the recalculation of variance using the study's complex design. These analyses were conducted using the proc survey command in SAS 9.1 which uses the Taylor expansion approximation technique for calculating the complex design based estimates of variance (SAS Institute 2005).

Results

These analyses were restricted to those NCS-R respondents who reported receiving any professional treatment for mental health in the past 12 months ($N = 1332$). This sample includes 1,105 Whites, 102 African Americans, 40 Hispanics, and 85 individuals of other racial/ethnic backgrounds. A total of 502 men and 830 women sought treatment in the past 12 months. As shown in Table 1, overall, in the past 12 months, a greater number of individuals sought help from medical doctors, followed by psychiatrists, psychologists, counselors, and social workers. (see Table 1).

Treatment Satisfaction and Helpfulness by Service Provider

Table 2 presents the results for bivariate and multivariate analyses predicting treatment satisfaction and helpfulness for seeing each, a medical doctor, psychiatrist, psychologist, counselor and a social worker. Differences in treatment satisfaction and helpfulness from counselors were examined by race/ethnicity. These findings are described below by service provider.

Medical Doctor

In bivariate analyses, satisfaction with treatment received from a medical doctor did not differ among racial/ethnic groups. Respondents with lower education ($P = 0.05$) and higher social support ($P = 0.03$) reported greater satisfaction with treatment from a medical doctor. The results of the multivariate analyses show that when all independent variables were included in the analyses, the observed

Table 1 Past 12-month mental health service utilization and satisfaction in the U.S. by race/ethnicity and type of professional

Professional treatment	Total *N*	White						African American						Hispanic						Other					
		Past year[a]		Satisfied[b]		Helped[c]		Past year[a]		Satisfied[b]		Helped[c]		Past year[a]		Satisfied[b]		Helped[c]		Past year[a]		Satisfied[b]		Helped[c]	
		N	%	*n*	%	*n*	%	*N*	%	*n*	%	*n*	%	*N*	%	*n*	%	*n*	%	*N*	%	*n*	%	*n*	%
Medical doctor	431	364	84.5	268	73.6	271	74.5	27	6.3	17	63.0	20	74.1	14	3.3	11	78.6	10	71.4	25	5.8	20	80.0	21	84.0
Psychiatrist	341	281	82.4	212	75.4	226	80.4	31	9.1	17	54.8	21	67.7	9	2.6	7	77.8	7	77.8	20	5.87	11	55.0	13	65.0
Psychologist	236	199	84.3	158	79.4	161	80.9	14	5.9	9	64.3	11	78.6	8	3.4	8	100.0	8	100.0	15	6.36	10	66.7	11	73.3
Counselor	222	180	81.1	138	76.7	144	80.0	23	10.3	18	78.3	20	87.0	6	2.7	5	83.3	5	83.3	15	6.76	11	73.3	13	86.7
Social worker	101	81	80.2	58	71.6	64	79.9	7	6.9	7	100.0	7	100.0	3	3.0	3	100.0	3	100.0	10	9.9	9	90.0	10	100.0

Note: 'Past year' column represents number of White, African American, Hispanic, and Other individuals who sought mental health treatment by profession. The denominator for columns labeled 'Satisfied' and 'Helped' is 'Past year *N*'

[a] Represents the number of people by racial group who saw a particular profession in the past 12-months

[b] Represents the number of people by race/ethnicity who were satisfied with treatment by a given profession

[c] Represents the number of people by race/ethnicity who believed treatment helped by a given profession

bivariate differences in treatment satisfaction became non-significant.

Bivariate analyses show that belief in treatment helpfulness did not differ among racial/ethnic groups. Persons of lower income ($P = 0.01$) were associated with less treatment helpfulness. Having health insurance ($P < 0.01$) and reported higher social support ($P < 0.05$) were associated with greater treatment helpfulness. These associations were not statistically significant in the multivariate analyses.

Psychiatrist

Bivariate analyses showed that satisfaction with treatment received from a psychiatrist was higher among African Americans ($P = 0.01$) and among individuals of 'Other' backgrounds ($P = 0.03$) when compared to Whites. The differences in treatment satisfaction for racial/ethnic groups were not statistically significant in multivariate model. Multivariate analysis also showed that having lower education ($P < 0.01$) was associated with greater satisfaction, while respondents with lower incomes ($P = 0.07$) reported less satisfaction with treatment services. Bivariate analyses show that African Americans were less likely to find treatment helpful ($P = 0.03$) when compared to Whites. Respondents of lower incomes also were less likely to find treatment helpful ($P = 0.03$). In the multivariate analyses, only the income difference remained statistically significant.

Psychologist

Bivariate analyses showed that satisfaction with treatment received from a psychologist was lower among Hispanics ($P < 0.01$) when compared to Whites. Respondents with higher cultural identity were less likely to be satisfied with treatment ($P < 0.01$) when compared to those with lower cultural identity. In the multivariate analyses, African Americans ($P < 0.01$) and respondents of 'Other' backgrounds ($P < 0.01$) were less likely than Whites to be satisfied with treatment. Unlike the bivariate results, in the multivariate analyses, Hispanics were more likely to be satisfied with treatment than Whites ($P < 0.01$). Having higher cultural identity was associated with less satisfaction ($P = 0.01$) when compared to those with lower cultural identity.

In bivariate analyses belief in greater treatment helpfulness was higher among Hispanics ($P < 0.01$) and those with higher cultural identity ($P < 0.01$). In multivariate analyses, African Americans ($P < 0.01$) and 'Other' racial/ethnic groups ($P < 0.01$) were less likely to have found the treatment to be helpful when compared to Whites. Hispanics were likely to have found treatment to be helpful ($P < 0.01$) compared to Whites and cultural identity also was inversely associated ($P < 0.01$) with treatment helpfulness. (See Table 2: Psychologist).

Counselor

There were no significant bivariate or multivariate associations between the covariates of interest and receipt of services from a counselor. (See Table 2: counselor).

Social Worker

Bivariate analyses showed that satisfaction with treatment received from a social worker was lower among African Americans ($P = <0.01$), Hispanics ($P = <0.01$), and respondents of 'Other' backgrounds ($P = 0.03$) when compared to Whites. Respondents with lower income ($P = 0.07$), education ($P = 0.05$), and higher cultural identity ($P < 0.01$) were less satisfied with treatment than those with higher incomes, higher education, and less cultural identity, respectively. Respondents with health insurance were more satisfied with treatment ($P < 0.01$) than those without health insurance. In multivariate analyses, African Americans and Hispanics were more likely to be satisfied with treatment compared to other respondents and having health insurance and high income were associated with greater satisfaction (see Table 2: social worker).

In terms of helpfulness, in bivariate analyses, belief in treatment helpfulness from social workers was higher among African Americans ($P < 0.01$), Hispanics ($P < 0.01$), and individuals of 'Other' backgrounds ($P < 0.01$) when compared to Whites. Having higher cultural identity was associated with report of helpfulness of social workers ($P < 0.01$). The multivariate analyses, the race/ethnic differences remained significant, with cultural identity still predicting helpfulness (See Table 2).

Discussion

Using data from a nationally representative survey, we found that racial/ethnic minorities varied in terms of which type of provider was more satisfactory and/or helpful. In terms of subjective satisfaction, African Americans in the general population reported more satisfaction with psychiatrists and social workers while Hispanics reported more satisfaction with psychologists. In terms of perceived helpfulness, African Americans viewed social workers as the most helpful provider while Hispanics viewed psychologists as the most helpful. These results suggest that racial/ethnic minority respondents were more likely to be satisfied and had greater perceptions of helpfulness from

Table 2 Past 12-month mental health treatment experience, satisfaction with treatment and treatment helpfulness by sociodemographic characteristics among those who sought help from a medical doctor, psychiatrist, psychologist, counselor and social worker: results of bivaritate and multivariate analyses

Sociodemographic characteristics	Sought treatment from medical doctor in past year		Satisfaction with treatment								Believed treatment helped							
			Bivariate					Multivariate			Bivariate					Multivariate		
	N	%	*N*	%	Beta	SE	*P*-value	Beta	SE	*P*-value	*N*	%	Beta	SE	*P*-value	Beta	SE	*P*-value
Total	431		247	72.4							267	78.3						
Race/Ethnicity																		
White (Caucasian)	364	84.5	268	73.6							271	74.5						
African American	27	6.26	17	63.0	0.018	0.274	0.945	−0.118	0.482	0.806	20	74.1	0.481	0.631	0.445	0.339	0.488	0.486
Hispanic	14	3.25	11	78.6	0.038	0.385	0.921	−0.085	0.724	0.906	10	71.4	−0.324	0.361	0.369	−0.487	0.394	0.216
Other	25	5.80	20	80.0	−0.165	0.310	0.594	0.236	0.485	0.626	21	84.0	0.512	0.707	0.469	0.364	0.529	0.491
Gender																		
Male	133	30.9	90	67.7	−0.183	0.153	0.231	−0.198	0.171	0.246	93	69.9	0.163	0.186	0.382	−0.189	0.202	0.348
Female	299	69.4	225	75.3							228	76.3						
Income																		
Low	160	37.1	113	70.6	−0.119	0.156	0.231	−0.096	0.098	0.326	109	68.1	−0.265	0.156	0.010	−0.175	0.116	0.132
High	271	62.9	203	74.9							211	77.9						
Education																		
≤12 years	191	44.3	149	78.0	0.241	0.124	0.052	0.254	0.129	0.048	146	76.4	0.105	0.122	0.386	0.131	0.114	0.251
>12 years	241	55.9	166	68.9							174	72.2						
Employment																		
Employed	267	61.9	193	72.3	−0.059	0.115	0.065	−0.045	0.122	0.707	198	74.2	−0.021	0.103	0.841	−0.045	0.105	0.665
Not employed	164	38.1	122	74.4							122	74.4						
Health insurance																		
Yes	308	71.5	228	74.0	0.083	0.111	0.456	0.024	0.124	0.843	239	77.6	0.315	0.122	0.009	0.265	0.158	0.094
No	124	28.8	88	71.0							81	65.3						
Social support																		
High	332	77.0	250	75.3	0.249	0.115	0.029	0.171	0.135	0.204	253	76.2	0.223	0.111	0.049	0.064	0.139	0.646
Low	99	23.0	65	65.7							67	67.7						
Cultural identity																		
High	193	44.8	181	93.8	0.187	0.119	0.015	0.139	0.125	0.264	183	94.8	0.166	0.11	0.131	0.105	0.118	0.372
Low	239	55.4	135	56.5							137	57.3						

Table 2 continued

Sociodemographic characteristics	Sought treatment from medical doctor in past year		Satisfaction with treatment								Believed treatment helped							
			Bivariate					Multivariate			Bivariate					Multivariate		
	N	%	*N*	%	Beta	SE	*P*-value	Beta	SE	*P*-value	*N*	%	Beta	SE	*P*-value	Beta	SE	*P*-value
Total	341		247	72.4							267	78.3						
Race/Ethnicity																		
White (Caucasian)	281	82.4	212	75.4							226	80.4						
African American	31	9.09	17	54.8	0.412	0.177	0.019	−0.439	0.317	0.166	21	67.4	−0.751	0.356	0.034	−0.241	0.311	0.439
Hispanic	9	2.64	7	77.8	−0.117	0.432	0.786	0.713	0.743	0.337	7	77.8	−0.371	0.758	0.624	0.259	0.626	0.678
Other	20	5.87	11	55.0	0.469	0.222	0.034	0.357	0.243	0.141	13	65.0	−0.794	0.603	0.187	−0.386	0.534	0.469
Gender																		
Male	140	41.1	99	70.07	−0.067	0.144	0.639	−0.159	0.160	0.321	106	75.7	−0.174	0.150	0.245	−0.244	0.175	0.163
Female	201	58.9	148	73.6							160	79.6						
Income																		
Low	147	43.1	98	66.7	−0.265	0.156	0.088	−0.297	0.164	0.070	102	69.4	−0.401	0.187	0.032	−0.383	0.194	0.048
High	193	56.6	149	77.2							164	85.0						
Education																		
≤12 years	148	43.4	113	76.4	0.158	0.118	0.182	0.293	0.107	$P < .01$	112	75.7	0.064	0.129	0.619	0.080	0.141	0.568
>12 years	193	56.6	134	69.4							115	59.6						
Employment																		
Employed	185	54.3	136	73.5	0.064	0.138	0.643	0.011	0.145	0.934	150	81.1	0.119	0.120	0.318	0.024	0.128	0.849
Not employed	157	46.0	111	70.7							117	74.5						
Health insurance																		
Yes	227	66.6	165	72.7	0.034	0.131	0.793	−0.034	0.127	0.789	181	79.7	0.075	0.163	0.645	−0.073	0.173	0.674
No	115	33.7	82	71.3							85	73.9						
Social support																		
High	261	76.5	193	73.9	0.167	0.178	0.348	0.118	0.179	0.507	208	79.7	0.267	0.185	0.150	0.225	0.172	0.189
Low	80	23.5	54	67.5							58	72.5						
Cultural identity																		
High	161	47.2	115	71.4	−0.023	0.157	0.884	−0.069	0.181	0.702	124	77.0	0.094	0.155	0.544	−0.187	0.172	0.278
Low	180	52.8	131	72.8							143	79.4						

Table 2 continued

Sociodemographic characteristics	Sought treatment from medical doctor in past year		Satisfaction with treatment								Believed treatment helped							
			Bivariate					Multivariate			Bivariate					Multivariate		
	N	%	*N*	%	Beta	SE	*P*-value	Beta	SE	*P*-value	*N*	%	Beta	SE	*P*-value	Beta	SE	*P*-value
Total	236		186	78.8							191	80.9						
Race/Ethnicity																		
White (Caucasian)	199	84.3	158	79.4							161	80.9						
African American	14	5.93	9	64.3	0.252	0.319	0.431	−3.69	0.547	$P < .001$	11	78.6	−0.118	0.587	0.841	−3.35	0.509	$P < .001$
Hispanic	8	3.39	8	100	−0.767	0.170	$P < .001$	11.07	0.496	$P < .001$	8	100	14.31	0.337	$P < .001$	10.93	0.385	$P < .001$
Other	15	6.36	10	66.7	0.275	0.223	0.218	−3.92	0.373	$P < .001$	11	73.3	−0.641	−0.641	0.24	−4.1	0.481	$P < .001$
Gender																		
Male	92	19.7	73	79.3	0.021	0.153	0.894	0.019	0.153	0.898	74	80.4	0.079	0.211	0.706	−0.116	0.213	0.585
Female	143	21.1	113	79.0							117	81.8						
Income																		
Low	91	20.6	74	81.3	0.134	0.156	0.390	0.314	0.219	0.151	74	81.3	0.077	0.188	0.683	0.081	0.247	0.742
High	144	20.2	111	77.1							116	80.6						
Education																		
≤12 years	69	46.4	56	81.2	0.079	0.167	0.638	0.077	0.195	0.691	55	79.7	5.0E-03	0.174	0.974	−0.018	0.197	0.926
>12 years	167	8.6	130	77.8							135	80.8						
Employment																		
Employed	154	18.1	123	79.9	0.117	0.109	0.484	0.183	0.195	0.348	127	82.5	0.093	0.191	0.627	0.129	0.213	0.544
Not employed	81	2705	63	77.8							63	77.8						
Health insurance																		
Yes	86	19.4	66	76.7	0.169	0.165	0.305	0.346	0.254	0.173	69	80.2	−0.0087	0.192	0.964	0.107	0.269	0.689
No	149	22.8	120	80.5							121	81.2						
Social support																		
High	74	20.4	58	78.4	0.012	0.179	0.947	0.159	0.236	0.501	61	82.4	−0.084	0.168	0.618	0.149	0.206	0.471
Low	162	20.9	128	79.0							129	79.6						
Cultural identity																		
High	121	22.4	103	85.1	−0.429	0.154	$P < .01$	−0.458	0.193	0.017	111	91.7	−0.822	0.219	$P < .001$	−0.844	0.243	$P < .001$
Low	114	19.0	83	72.8							79	69.3						

Table 2 continued

Sociodemographic characteristics	Sought treatment from medical doctor in past year		Satisfaction with treatment								Believed treatment helped							
			Bivariate					Multivariate			Bivariate					Multivariate		
	N	%	*N*	%	Beta	SE	*P*-value	Beta	SE	*P*-value	*N*	%	Beta	SE	*P*-value	Beta	SE	*P*-value
Total	222		173	77.9							182	82.0						
Race/Ethnicity																		
White (Caucasian)	180	81.1	138	76.7							144	80.0						
African American	23	10.4	18	78.3	−0.082	0.556	0.883	−0.134	0.534	0.802	20	87.0	0.526	0.661	0.426	0.261	0.672	0.698
Hispanic	6	2.70	5	83.3	0.87	1.16	0.454	0.897	0.913	0.326	5	83.3	0.714	1.156	0.537	0.465	0.975	0.634
Other	15	6.76	11	73.3	−0.401	0.691	0.562	−0.613	0.598	0.305	13	86.7	0.071	0.922	0.937	−0.332	0.799	0.678
Gender																		
Male	91	40.9	73	80.2	0.239	0.224	0.286	0.222	0.193	0.251	73	80.2	−0.044	0.252	0.862	0.088	0.221	0.693
Female	132	59.5	99	75.0							108	81.8						
Income																		
Low	96	43.2	27	28.1	−0.243	0.204	0.234	−0.258	0.236	0.275	79	82.3	−0.049	0.209	0.813	0.053	0.259	0.839
High	127	57.2	101	79.5							102	80.3						
Education																		
≤12 years	105	47.3	76	72.4	−0.164	0.174	0.346	−0.330	0.237	0.164	79	75.2	−0.230	0.229	0.316	−0.358	0.265	0.177
>12 years	118	53.2	92	78.0							102	86.4						
Employment																		
Employed	143	64.4	106	74.0	−0.224	0.204	0.272	−0.313	0.221	0.157	114	80.0	−0.048	0.248	0.847	−0.086	0.253	0.734
Not employed	80	36.0	67	84.0							67	84.0						
Health insurance																		
Yes	139	62.6	105	75.5	−0.049	0.204	0.808	−0.257	0.268	0.337	112	80.6	0.093	0.238	0.698	0.076	0.279	0.786
No	84	37.8	68	81.0							68	81.0						
Social support																		
High	173	77.9	136	78.6	0.292	0.242	0.228	0.348	0.291	0.230	142	82.1	0.255	0.237	0.282	0.379	0.300	0.206
Low	51	23.0	36	70.6							39	76.5						
Cultural identity																		
High	114	51.4	83	72.8	−0.169	0.225	0.454	−0.258	0.391	0.391	86	75.4	−0.251	0.204	0.219	−0.365	0.263	0.166
Low	109	49.1	90	82.6							94	86.2						

Table 2 continued

Sociodemographic characteristics	Sought treatment from medical doctor in past year		Satisfaction with treatment								Believed treatment helped							
			Bivariate					Multivariate			Bivariate					Multivariate		
	N	%	*N*	%	Beta	SE	*P*-value	Beta	SE	*P*-value	*N*	%	Beta	SE	*P*-value	Beta	SE	*P*-value
Total	101		77	76.2							84	83.2						
Race/Ethnicity																		
White (Caucasian)	81	80.2	58	71.6							64	79.0						
African American	7	6.93	7	100	−8.34	0.215	$P < .001$	8.66	0.598	$P < .001$	7	100	16.55	0.496	$P < .001$	5.09	0.674	$P < .001$
Hispanic	3	2.97	3	100	−8.34	0.411	$P < .001$	7.75	0.848	$P < .001$	3	100	16.55	0.622	$P < .001$	4.37	1.24	$P < .001$
Other	10	9.90	9	90.0	−0.654	0.292	0.025	−7.11	0.377	$P < .001$	10	100	16.55	0.569	$P < .001$	4.17	0.540	$P < .001$
Gender																		
Male	45	19.7	34	75.6	−0.111	0.215	0.604	−0.358	0.208	0.086	38	84.4	−0.025	0.232	0.914	−0.188	0.248	0.449
Female	55	33.7	43	78.2							46	83.6						
Income																		
Low	46	23.4	30	65.2	−0.654	0.358	0.068	−0.858	0.386	0.026	34	73.9	−0.589	0.462	0.202	−0.857	0.553	0.121
High	54	28.6	47	87.0							49	90.7						
Education																		
≤12 years	55	33.5	38	69.1	−0.439	0.221	0.046	−0.037	0.299	0.899	42	76.4	−0.439	0.250	0.064	−0.252	0.346	0.466
>12 years	46	20.3	39	84.8							41	89.1						
Employment																		
Employed	53	20.0	41	77.4	0.065	0.287	0.821	−1E − 05	0.391	0.100	43	81.1	−0.165	0.337	0.624	−0.279	0.411	0.497
Not employed	47	37.3	35	74.5							40	85.1						
Health insurance																		
Yes	68	27.0	59	86.8	0.829	0.272	$P < .01$	0.742	0.235	0.001	60	88.2	0.507	0.285	0.075	0.162	0.235	0.489
No	33	23.7	18	54.5							24	72.7						
Social support																		
High	73	24.8	57	78.1	0.157	0.226	0.486	−0.304	0.329	0.357	61	83.6	0.025	0.327	0.939	−0.496	0.422	0.239
Low	27	26.0	20	74.1							23	85.2						
Cultural identity																		
High	45	26.8	38	84.4	−0.355	0.139	$P < .01$	0.158	0.178	0.375	41	91.1	0.642	0.204	$P < .01$	0.702	0.267	$P < .01$
Low	55	24.8	39	70.9							42	76.4						

services received from specialty mental health providers compared with services by generalist providers. Recent studies which examined within group differences also found Hispanics, Asians and Caribbean Blacks to be more satisfied with services from the specialty mental health service sector (Jackson et al. 2007; Alegria et al. 2007; Abe-Kim et al. 2007). Our findings on treatment helpfulness also corroborate previous work. Past research has demonstrated that racial/ethnic minorities tend to find services from any service sector more helpful, which in some instances does include the use of specialty providers such as psychologists and psychiatrists (Jackson et al. 2007; Alegria et al. 2007; Abe-Kim et al. 2007).

It has been amply shown that racial/ethnic minorities generally are referred at lower rates for specialty care services (Alegria et al. 2002). In this study we showed that racial/ethnic minorities found specialty mental health services more satisfactory and helpful then other generalist services. This suggests that racial/ethnic minorities may be referred primarily to mental health services which are considered less satisfying and helpful, possibly contributing to low help-seeking in these groups. This suggests that more attention should be given to the way this population is referred to specialty care and that, in part; the effort to address disparities in mental health help-seeking between racial/ethnic groups should include an effort to make sure that this group is referred to services which are perceived to be helpful and satisfactory.

The help-seeking literature has linked greater client satisfaction of mental health services with quality of life, age, attitudes about help-seeking, and empathy of provider (Diala et al. 2000; Constantine 2002; Mitchell 1998; Blenkiron and Hammill 2003). We found that being high in cultural identity was linked to less satisfaction and helpfulness, at least with services from a psychologist; however, in the adjusted model, being high in cultural identity was a positive predictor of satisfaction for those who saw a social worker. Previous studies which examined within group differences of racial/ethnic minorities found cultural variations, such as language, nativity, and generational status can negatively affect satisfaction of treatment experiences; however these studies did not examine cultural identity (Jackson et al. 2007; Alegria et al. 2007; Abe-Kim et al. 2007).

Consistent with our work, previous studies have found culturally sensitive and/or culturally competent treatment services are more likely to elicit greater treatment outcomes for clients compared to non-culturally specific treatment services (Takeuchi et al. 1995). These findings suggest that providers and mental health researchers should consider the way cultural identity can influence help-seeking behaviors and treatment experiences.

There are limitations to this study. Although this was a large national sample, the absolute number of racial/ethnic minorities was small. The limited sample size did not allow for the desegregation of African Americans from Caribbean Blacks or other Blacks, or of the various Hispanic populations such as Mexican Americans and Puerto Ricans, as well as Asian populations. Further research is needed to better understand the various within group differences of racial/ethnic minorities. In addition, we had no data available on a range of other factors, including, for example, language ability and experience of discrimination, which may also contribute to differences in help-seeking or treatment satisfaction.

In closing, many, including the Surgeon General's report on mental health have emphasized the problem of unmet mental health needs for racial/ethnic minorities. Addressing specialty referral rates and cultural barriers to care may be ways of improving the treatment experiences of racial/ethnic minorities in need of mental health services (USDHHS 1999).

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