Disparities in Care for Depression Among Primary Care Patients

Jeanne Miranda, PhD, Lisa A. Cooper, MD, MPH

CONTEXT: Ethnic minorities traditionally receive less care for depression than do white populations; we examine ethnic minority care for depression in a large cross-national primary care sample.

DESIGN: This is a cross-sectional study of identification and treatment of depression among diverse primary care patients, using self-report of symptoms and care.

SUBJECTS: One thousand four hundred and ninety-eight depressed primary care patients participating in four large studies of quality improvement for depression care are examined at baseline.

RESULTS: Primary care providers recommend depression treatments for Latino and African-American patients as frequently as they do for white patients. However, Latino and African-American patients are less likely to take antidepressant medications (adjusted odds ratio [OR], 0.30; 95% confidence interval [CI], 0.21 to 0.42 and adjusted OR, 0.56; 95% CI, 0.36 to 0.87, respectively) and Latinos are less likely to obtain specialty mental health care (adjusted OR, 0.50; 95% CI, 0.36 to 0.75).

CONCLUSIONS: Primary care providers are now able to recognize depression and recommend treatment for Latino and African-American patients, with this care recommended at equal rates to that of white patients. However, Latino and African-American patients remain less likely to obtain appropriate care, such as antidepressant medications or specialty care. New approaches to improving access to appropriate care for Latino and African-American primary care patients are needed.

KEY WORDS: disparities; depression; primary care; African Americans; Latinos; ethnic minorities.

J GEN INTERN MED 2004;19:120-126.

Disparities in care for depression in the United States exist. African Americans are less likely to receive depression care than are white Americans.¹⁻⁵ Some evidence suggests that this disparity in receipt of care has persisted or increased over the past decade.^{1,4} Latinos also have been

found to use fewer mental health services than do white Americans. Two regional studies of Latinos found low service use. The Los Angeles Epidemiologic Catchment Area (ECA) study of the 1980s found that Mexican Americans who had experienced mental disorders within the past 6 months were less likely to use mental health services than were white Americans.⁶ A recent study of Mexican Americans residing in Fresno County revealed similar results. Only 9% of those with mental disorders during the 12 months prior to the interview sought services from a mental health specialist; the rate was lower for those born in Mexico (5%) compared with those born in the United States (12%).⁷

Depression care can be provided in general medical or specialty mental health settings. Studies in the 1980s found African Americans particularly unlikely to seek specialty mental health care for depression.⁸ However, a recent study found that mental health service use increased in the 1990s, particularly for African Americans in general medical settings.⁹ Similarly, a recent study of Mexican Americans in Fresno County found they were twice as likely to seek treatment for mental disorders in general health care settings as opposed to mental health specialty settings.⁷

Although evidence consistently suggests that Latinos and African Americans receive less care for depression than do whites, less is known about the reasons for this lower use. One study using data from the 1980s Medical Outcomes Study¹⁰ found that providers were less likely to detect diagnosable mental disorders in African-American and Latino patients as compared with white patients. Little is known about current rates of care for depression among depressed African-American and Latino patients. Recent changes have occurred in primary care practice that might influence mental health care for these patients. Clinical guidelines for care of depression have been widely disseminated; and newer antidepressants with fewer side-effects are currently available. As physicians acquire more information about depression care and access to acceptable medications, they may offer care more readily to all their patients, regardless of ethnicity. On the other hand, if depression is less often recognized in minority patients, greater access may be achieved only for nonminority patients with more easily recognized depression. Mental health care is now often provided under contracts that are managed separately from medical care. This may reduce the likelihood that minorities secure this specialty care even when their providers recommend care.

The objective of this study was to examine care for depression among Latino, African-American, and white primary care patients with a current diagnosis of major depression. We examine patient reports of three types of care: 1) recommendation of depression treatment by

Received from UCLA-Neuropsychiatric Institute and Department of Biobehavioral Services (JM), Los Angeles, Calif; Department of Medicine and Department of Health Policy and Management and Welch Center for Prevention, Epidemiology, and Clinical Research, Johns Hopkins University School of Medicine and Johns Hopkins Bloomberg School of Public Health (LAC), Baltimore, Md.

Address correspondence and requests for reprints to Dr. Miranda: UCLA-Neuropsychiatric Institute, Center for Health Services Research, 10920 Wilshire Boulevard, Suite 300, Los Angeles, CA 90024 (e-mail: Mirandaj@ucla.edu).

primary care providers; 2) visits to specialty mental health care providers; and 3) use of antidepressant medications.

METHODS

Study Design

The data for this study were collected in the baseline survey of four randomized clinical trials of quality improvement strategies for managing major depression in primary health care settings: the Quality Improvement for Depression (QID) Project. The QID includes three National Institute of Mental Health (NIMH)-supported studies and one Depression Patient Outcomes Research Team (PORT) study funded by the Agency for Healthcare Research and Quality (AHRQ) that used the same questions to measure the outcomes of interest in this study. The four studies are described below. First, the Hopkins Quality Improvement for Depression (HQID) Project included 32 practices participating in a large, mixed-model (independent practice association and network-style) managed care organization with primary care capitation in the Washington, DC, Metropolitan area and contributed 72 subjects to the QID project. Baseline interviews were conducted between November 1996 and December 1998. Second, the Mental Health Awareness Project (MHAP) included six medical centers that are part of a staff-model managed care organization and outpatient clinics at a Veterans Administration medical center in Greater Los Angeles with 514 subjects in the QID project. Baseline interviews occurred between September 1997 and July 1998. Third, the Quality Enhancement by Strategic Teaming (QuEST) Project includes 12 mixed-model community-based practices in a primary care research network located in 10 states with 366 participating patients. Baseline interviews were conducted from April 1996 to September 1997. Fourth, the Partners in Care (PORT) study involved 46 primary care practices in 6 US managed care organizations across the US and contributed 546 patients to the QID sample. This study includes a subsample of PORT study patients, including only those who met criteria for major depression and were free of comorbid alcoholism. Baseline interviews occurred between June 1996 and May 1997. The QID study methods have been described in detail elsewhere.^{11,12} Two of these projects (HQID and MHAP) evaluated specified quality-improvement interventions to improve pharmacotherapy and referral to specialty care, whereas the third (MHAP) evaluated two specified processes for developing quality-improvement interventions. The fourth project, Partners in Care, evaluated the impact of disseminating two specified quality-improvement interventions, each designed to improve overall rates of appropriate depression care, to managed primary care practices.

Each study recruited convenience samples of health care organizations to participate in the project. The 11 participating organizations included both managed (staff- and network-model health maintenance organizations (HMOs), independent practice associations (IPAs), preferred

provider organizations (PPOs), and public health clinics) and nonmanaged (fee-for-service) health care in single insurer and mixed-model clinics. Studies had different goals in terms of organizational recruitment. PIC specifically sought organizational diversity; PIC and QuEST sought geographic diversity; and HQID and PIC sought practices with high proportions of minority patients. Practices were then recruited from within the health care organizations. In HQID, 41 of 60 practices eligible to participate in the project agreed to participate. In MHAP, the first 9 of 15 eligible practices approached agreed to participate. In PIC, 46 of 48 invited practices agreed to participate. In QuEST, it was not possible to estimate a practice recruitment rate because all practices in a research network volunteered to participate. Within each participating practice, primary care clinicians were invited to participate in the project. Clinician recruitment rates for the three projects that attempted to recruit all clinicians were 85% (HQID), 97% (PIC), and 100% (MHAP). Patients who screened positive for depression during their visits to participating clinicians were invited to participate in the project. Each project attempted to recruit a representative sample of consecutive patients. Sample loss contributing to nonresponse bias occurred during the screening process (while eligibility status was being determined) and the recruitment process (when patients found to be eligible were recruited to participate in the study). There were no differences in completion of first or second stage screening by ethnic minority status; however, participants determined by screening to be eligible for the studies were more likely to be female, ethnic minority, younger, and to have more depression symptoms. An overall enrollment nonresponse weight was used to mitigate potential nonresponse bias.

The study sites included 80 participating primary care practices affiliated with 11 different managed care organizations. Each depression study selected managed care organizations to meet specific study requirements, but collectively the four studies represent diversity in geographic region, patient demographics, and practice, provider, and managed care organizational plans and arrangements.

Eligibility Criteria

Subjects for this study are drawn from the 1,498 patients participating in the QID study. Potential subjects were approached during a primary care visit and asked to complete a brief screening measure either before or just after seeing their provider. In the screener, subjects were queried about demographic characteristics, mood, alcohol use, and general health and functioning. Patients were identified using a two-step screening process in which they first acknowledged having 1 week or more during the past month when they felt sad, empty, or depressed or lost interest in things they normally enjoyed during screening. This initial screening information was not shared with providers.

They were then assessed by telephone to determine if they met criteria for major depressive episode in the past

year by the Composite International Diagnostic Interview (CIDI).^{13,14} Only patients who screened positive and then met criteria for major depressive episode in the past year were included in this study. Patients were excluded across all projects if they were less than 18 years of age; had an acute life-threatening condition or cognitive impairment that prevented them from completing the screener; indicated that they did not intend to receive care in the clinic on an ongoing basis; had no access to a telephone; were currently pregnant, breast-feeding, or less than 3 months postpartum; or screened positive for current bereavement, lifetime mania, or lifetime alcohol dependence with current drinking. This diagnostic interview occurred after the provider visit so that all data in this study regarding care for depression were obtained through patient interview prior to the physician receiving diagnostic information from the CIDI.

Because there were small numbers of Asian Americans and Native Americans, we limited our analyses to the patients who self-identified their ethnicity as African American, Latino, or white.

Study Measures

Subject Characteristics. Demographic variables include patient age, gender, race, ethnicity, marital status, and education. Illness measures include depression severity, measured by the modified Center for Epidemiologic Studies Depression Scale (CES-D),¹⁵ and functional status measured by the MOS SF-12.¹⁶ We selected instruments that are relatively brief, have been used successfully in primary care settings, and have been shown to be reliable and valid in African Americans and Latinos.

In this study, we examine whether patients are likely to receive guideline-concordant depression treatments, including taking prescription antidepressant medications or receiving specialty mental health care. We assess patient reports of their primary care provider's recommending or prescribing treatments for depression, as well as patient reports of their use of these treatments.

Provider Recommendation of Depression Treatments.

The primary care provider's recommendation of depression treatments was assessed with the following question: "During your most recent [primary care] visit, did a doctor or health professional: a) recommend that you go for counseling to another doctor or therapist; b) give you a prescription for medication that would help with your personal or emotional problems; or (c) change medication that you were already taking for your personal or emotional problems?" A positive response to at least one of these options was considered to indicate a recommendation of depression treatment by the primary care provider.

Patient Use of Depression Treatments. Antidepressant use was categorized as positive if the medications that a patient reported using in the preceding 6 months included at least one antidepressant medication. Specialty mental health

care was categorized as positive if the patient reported at least one visit to a psychiatrist, psychologist, social worker, or mental health specialist during the preceding 6 months.

Analyses. All analyses were cross-sectional and based on data from the baseline patient interview. We used enrollment weights for each study site to increase the similarity of the participating patient sample to the sample of all eligible patients. We imputed missing data. To test the primary hypotheses, we first conducted bivariate analyses, using χ^2 -tests, for each dependent variable (depression care recommendation by primary care providers, patient receipt of antidepressant medications or specialty mental health care, and any treatment vs no treatment), by patient ethnicity. To further understand ethnic differences in care, we examined the extent to which provider recommending and patient receiving care were related. Second, we used bivariate and multivariate logistic regression models to examine the presence, strength, and statistical significance of the associations of patient ethnicity with physician recommendation and patient use of depression treatment. Multivariate models included adjustment for patient age, education, employment status, depression severity, and functional status. All analyses were performed with Stata version 7.0.¹⁷

RESULTS

Characteristics of the Study Sample

Patient characteristics are reported in Table 1. Overall, two-thirds of the patients were under the age of 50 years, and three-fourths of them were female. The sample had a broad range of educational experiences. Approximately 90% were insured, and around two-thirds were currently employed. The ethnic groups differed in terms of age and education. The Latinos were slightly younger than the other groups, and the Latinos and African Americans evidence lower educational attainment than do the white sample. Finally, the Latinos and African Americans were more likely to be working than were the white patients.

Ethnic Differences in Provider Recommendation and Patient Use of Depression Treatment

As shown in Table 2, there were no ethnic differences in patient reports of primary care provider recommendation of depression treatments. However, a significant ethnic difference exists in the rates of actual receipt of antidepressant medications and specialty care. Latinos and African Americans were less likely to receive antidepressant medications than were white patients (31.5%, 44.1% vs 56.6%, respectively, $P = .001$). Latinos were less likely to receive specialty mental health care than were either African-American or white patients (31.0% vs 42.5% and 43.3%, respectively, $P = .004$). A lower percentage of depressed Latino and African-American patients obtained any treatment than did depressed white patients (44.5% and 59.8% vs 68.8%, respectively, $P < .001$).

Table 1. Characteristics of Study Sample (N = 1,321)

Characteristic	White (N = 994)		Latino (N = 200)		African American (N = 127)		P Value*
	n	(%)	n	(%)	n	(%)	
Age, y							
18–34	238	(23.9)	69	(34.5)	28	(22.1)	
35–49	393	(39.5)	83	(41.5)	64	(50.4)	
50–64	264	(26.6)	41	(20.5)	33	(26.0)	
65+	99	(10.0)	7	(3.5)	2	(1.6)	< .001
Gender							
Female	729	(75.4)	152	(72.6)	100	(72.6)	
Male	265	(24.6)	48	(27.4)	27	(27.4)	.352
Education							
College graduate	257	(25.9)	21	(10.5)	22	(17.3)	
Some college	342	(34.4)	77	(38.5)	54	(42.5)	
High school graduate	304	(30.6)	49	(24.5)	36	(28.4)	
Less than high school	91	(9.2)	53	(26.5)	15	(11.8)	< .0001
Insurance status							
No	83	(8.3)	11	(5.5)	13	(10.2)	
Yes	911	(91.7)	189	(94.5)	114	(89.8)	.262
Currently employed							
No	379	(38.1)	68	(34.0)	41	(32.3)	
Yes	615	(61.9)	132	(66.0)	86	(67.7)	.283
Employment status							
Full-time	494	(49.7)	110	(55.0)	79	(62.2)	
Part-time	121	(12.2)	22	(11.0)	7	(5.5)	
Not working	379	(38.1)	68	(34.0)	41	(32.3)	.042
Mean CESD-R score [†]	34.8		35.6		34.7		.256
Mean score, SF-12							
Mental (MCS)	31.7		30.9		31.6		.215
Physical (PCS)	44.6		44.4		43.6		.617

* P values are from χ^2 -tests for categorical variables and t-tests for continuous variables.

[†] In a study of 1, 120 subjects to the standard 20-item CES-D and the modified 23-item version, the items were calibrated simultaneously using F. Samejima's graded IRT model. The established cut score of 16 on the standard CES-D corresponded most closely to a summed score of 20 on the modified version.¹⁸

Among those patients for whom depression treatments were recommended, the percentages of Latino and African-American patients taking antidepressant medication were lower than the percentage of white patients (44.9% and 61.0%, respectively, vs 74.0%, $P < .001$). There were no

ethnic differences in likelihood of attending specialty mental health care among patients for whom depression treatment was recommended by the primary care provider.

Similar to the findings among primary care providers, Latino and African-American patients who received

Table 2. Depression Care by Patient Ethnicity

	White N = 994	Latino N = 200	African American N = 127	P Value*
PCP recommended treatment, n (%)	400 (40.2)	78 (39.0)	59 (46.5)	.412
Patient received antidepressant medication, n (%)	563 (56.6)	63 (31.5)	56 (44.1)	< .001
Patient received specialty care, n (%)	430 (43.3)	62 (31.0)	54 (42.5)	.004
Patient received any treatment (medication and/or specialty care), n (%)	684 (68.8)	89 (44.5)	76 (59.8)	< .001
PCP recommended treatment and:	n = 400	n = 78	n = 59	
Patient received antidepressant [†] , n (%)	296 (74.0)	35 (44.9)	36 (61.0)	< .001
Patient received specialty care [†] , n (%)	178 (39.7)	31 (39.7)	28 (47.5)	.639
Patient received specialty care and:	n = 430	n = 62	n = 54	
antidepressant medication, n (%)	308 (71.6)	35 (56.5)	34 (63.0)	.042

* P Values are from chi-square tests for differences among ethnic groups.

[†] Treatment categories not mutually exclusive.

PCP, primary care provider.

specialty mental health care were less likely to be taking antidepressant medications than their white counterparts who were receiving specialty care (56.5% and 63.0%, respectively, vs 71.6%, $P = .042$).

Ethnic Differences in Odds of Depression Treatment

Table 3 shows both unadjusted and adjusted odds ratios (ORs) demonstrating the association of patient ethnicity with patient reports of depression care. As can be seen, primary care providers' recommendation of depression treatment was not significantly different for Latinos or African Americans as compared with white patients. However, ethnic differences were found in the odds of taking antidepressant medication. Latinos (adjusted OR, 0.30; 95% confidence interval [CI], 0.21 to 0.42) and African Americans (adjusted OR, 0.56; 95% CI, 0.36 to 0.87) had less odds of taking antidepressant medications than did white patients. Latinos had statistically significant less odds of obtaining specialty mental health care than did white patients (adjusted OR, 0.52; 95% CI, 0.36 to 0.75), while there were no statistically significant differences between African Americans and whites in the odds of obtaining specialty mental health care (adjusted OR, 1.10; 95% CI, 0.73 to 1.67). Latinos, but not African Americans, had statistically significant less odds of receiving any depression treatment than did white patients (adjusted OR, 0.31; 95% CI, 0.22 to 0.44) (Table 3).

DISCUSSION

This study supports previous studies in finding that Latino and African-American patients are less likely to obtain care for depression than are white patients. However, in this study, Latino and African-American patients reported

that their primary care providers recommended depression treatments at rates similar to those of white patients. Unfortunately, ethnic minority patients were less likely to report that they actually took antidepressant medications or attended specialty care than were white patients. Overall, both Latino and African-American patients were much less likely to take antidepressant medications than were their white counterparts. Furthermore, Latinos were less likely than whites to obtain specialty mental health care.

These results offer hope that primary care practitioners are now recognizing and attempting to manage depression in their minority patients similarly to their white patients. Unfortunately, many of these patients fail to use antidepressant medications or obtain specialty care, suggesting that many Latino and African-American patients continue to lag behind whites in obtaining appropriate care for their depression.

Several factors could contribute to the lower use of antidepressant medications among the Latinos and African Americans. Evidence suggests that most primary care patients prefer counseling to medications, and this may be particularly true for Latinos and African Americans.^{19,20} African Americans are less likely to find antidepressant medication acceptable for treating depression, less likely to believe antidepressant medications are effective, and more likely to believe that antidepressant medications are addictive than whites.²¹ Although they may accept antidepressant prescriptions from their providers, they may be less likely to fill the prescription or take this medication if they feel uncomfortable with psychiatric medications. We would have liked to test this potential explanation for our findings; however, because acceptability of depression treatment and patient preferences were measured differently across the four studies in the QID sample, we were unable to adjust for patient preferences in our analyses.

Table 3. Odds of Receiving Depression Care by Patient Ethnicity

	Unadjusted OR	95% CI	Adjusted OR*	95% CI
PCP recommended treatment				
Latinos	0.92	0.69 to 1.23	0.85	0.62 to 1.16
African Americans	1.20	0.83 to 1.73	1.20	0.78 to 1.84
Whites	1.00		1.00	Reference
Patient received antidepressant medication				
Latinos	0.30	0.22 to 0.42	0.30	0.21 to 0.42
African Americans	0.60	0.38 to 0.93	0.56	0.36 to 0.87
Whites	1.00	Reference	1.00	Reference
Patient received specialty mental health care				
Latinos	0.50	0.34 to 0.73	0.52	0.36 to 0.75
African Americans	1.11	0.71 to 1.74	1.10	0.73 to 1.67
Whites	1.00	Reference	1.00	Reference
Patient received any treatment (meds and/or specialty care)				
Latinos	0.32	0.22 to 0.44	0.31	0.22 to 0.44
African Americans	0.74	0.48 to 1.14	0.71	0.46 to 1.08
Whites	1.00	Reference	1.00	Reference

* From logistic regression models controlling for age, education, employment status, CES-D Score, MCS12, and PCS12. OR, odds ratio; CI, confidence interval.

One explanation for the lower rates of receiving care by minorities could be that differences in insurance benefits exist between white and minority participants. Data on insurance and prescription benefits were not uniformly collected across all four studies, and another limitation of this study is that we were unable to adjust for the potential impact of insurance and prescription benefits in our analyses. Nonetheless, minorities did not differ from whites in insurance coverage or prescription benefits in 3 of the 4 studies. Moreover, the vast majority of participants in the QID studies were insured; therefore, differences in benefit structure are not likely to be responsible for the observed ethnic differences in reports of care.

Recent work shows that ethnic minority patients have less collaborative relationships with their white providers than do white patients.⁹ Indeed, lower rates of participation in medical decision-making among ethnic minority patients might be an important contributor to health care and health disparities, since higher levels of patient involvement in care have been related to improved patient satisfaction, adherence, and health outcomes such as glycemic control, blood pressure control, and reduction of emotional distress.^{22,23} Perhaps patients who fail to take antidepressant medications could be encouraged to do so by primary care and specialty mental health providers through supportive patient education about depression care. Use of more patient-centered communication behaviors that elicit patient's explanatory models, concerns, and preferences regarding treatment may improve uptake of depression care, particularly for ethnic minorities.

Latinos are less likely to receive specialty mental health care than are African-American or white patients. This may be owing to difficulties obtaining care in Spanish or from providers that are sensitive to the cultural needs of these patients. Since both Latinos and African Americans are underrepresented among mental health professionals, ethnically matched mental health care is unlikely for many ethnic minorities.

Other factors may also contribute to the lower rates of care obtained by the minority patients. For example, Latinos may need family involvement for a particular family member to obtain mental health care. Because our medical system tends to suggest care only to the individual patient, failure to engage the family might lead to less likelihood of obtaining care. Furthermore, structural, financial, and other access barriers may also explain lower rates of care even among insured patients. Latino and African American families may have fewer resources, such as transportation, babysitting, or availability of out-of-pocket funds for obtaining care. These types of barriers may prohibit Latino and African-American patients from obtaining care for depression when it is needed.

Several limitations should be considered when evaluating these results. First, all of our data is self-report data from the patient perspective. Patient self-report of depression care during the previous 6 months may be affected by recall bias and lead to under-reporting actual use of care.

However, there is no evidence that recall bias differs by ethnicity. Second, ethnic status is self-reported and limited to heterogeneous categories of African-American, Latino, and white patients. Further, no measure of acculturation or assimilation is available for minorities in this study. These factors could be associated with intraethnic variations in care or could partially explain the observed relations of patient ethnicity with treatment recommendations and actual receipt of treatment. Third, the study is cross-sectional, and therefore we were unable to examine the temporal relationships between provider treatment recommendations (e.g., prescription of antidepressant medication or referral to a mental health specialist) and patient receipt of care (taking recommended antidepressant medication or visiting mental health specialists). Fourth, clinical site variables (such as limits of time to see patients and availability of culturally appropriate personnel and educational materials) and patient social, cultural, and economic variables (such as patients' trust in health professionals, explanatory models of illness, and perceptions of the financial burdens related to medications and counseling) were not uniformly measured across the four QID studies and could further explain racial and ethnic differences in treatment. Fifth, sampling and observation biases might be associated with this trial. The results are widely generalizable to the patients and providers associated with the diverse managed care organizations as represented in this study; however, this sample is primarily insured. Patients who declined to participate in the studies could have introduced bias. Of note, however, for these quality improvement studies, patients did not consent to randomized treatments but rather agreed to participate generally in the quality improvement studies. Similarly, physicians were aware that their practices were participating in a quality improvement for depression study. Although this may have heightened their awareness of depression, this should affect all patients so that our ethnic comparisons remain valid. Finally, our measures of depression treatment indicate only whether patients are taking antidepressant medications or attending a least one specialty visit and therefore do not represent quality of care measures.

The strengths of our study include the use of detailed clinical measures of depression symptomatology, measures of depression prescription, and treatment utilization. The studies' inclusion of patients from a broad range of community-based primary care settings across the United States allows for generalization to diverse, insured populations in managed health care settings.

A major finding from this study is that African-American and Latino primary care patients are less likely to take antidepressant medication than are white patients, even when recommended to do so by their provider. These findings suggest that new approaches to treating depression in minority primary care patients are needed. Increasing the availability of effective psychotherapy options for minority patients may be helpful. For Latinos, this will require providing services in Spanish. For African Americans, it may

require attention to cultural issues such as spirituality.²³ In addition, interventions to improve the communication skills of primary care providers, particularly in the area of participatory decision-making, and to encourage ethnic minority patients to become more active participants in their care, expressing their concerns and preferences, are promising strategies to improve acceptance of treatment and depression outcomes for ethnic minority patients.

This work was supported by the John D. and Catherine T. MacArthur Foundation and the National Institute of Mental Health R0 Cooperative Agreement Quality Improvement for Depression (MH57992, MH5444, and MH5443) and the Agency for Healthcare Research & Quality (R01-HS08349). Three Center grants supported Dr Miranda's writing of this paper (P01HS19758, AG-02-004, and MH59876). This work was also supported by a grant to Dr Cooper from the Quality Care Research Fund of Aetna Foundation, Inc., Hartford, CT.

We thank Jose J. Arbelaez, MD, for assistance with statistical programming.

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