

Adherence to Antidepressant Medications in Black and Latino Elderly Patients

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Objective: *The purpose of this pilot study was to identify ethnic group differences in nonadherence and to determine predictors of nonadherence to antidepressant medications in older minority-group members. Methods:* Participants were 49 black and 52 Latino subjects over the age of 55 who had been prescribed antidepressant medications within the past 12 months. **Results:** *We found a distinction between intentional nonadherence (e.g., alteration of medication regimen to fit one's needs) and unintentional nonadherence (e.g., forgetfulness/ difficulties keeping track of medication regimen). Results suggested that older Latino subjects reported significantly more unintentional nonadherence than older black subjects. However, once other predictors were entered into the model, ethnicity did not remain a significant predictor. No ethnic group differences in intentional nonadherence were suggested. After controlling for ethnicity and medication type, intentional nonadherence was associated with concerns about the side effects of antidepressant medications, the stigma associated with antidepressant medications, and the attribution of lesser importance to antidepressant medications than other medications. Unintentional nonadherence was associated with greater cognitive impairment. Conclusions:* Results suggest that the two ethnic minority groups face similar barriers to adherence to antidepressant medications. Interventions to increase adherence should target the specific type of nonadherence presented by the elderly patients. Some may benefit from memory aids and the assistance of family and friends, others from specific educational interventions about the nature of depression and antidepressant medications. (*Am J Geriatr Psychiatry* 2005; 13:572-580)

Poor adherence to medications by older minority-group patients has been a source of public health concern for many years. Researchers have attempted to understand the reasons for nonadherence to medications by older adults, yet few studies have focused

on older minority-group patients or on the specific reasons for their poor adherence to antidepressant medications. The few studies that do exist indicate that ethnic minority-group patients are less likely to adhere to psychotropic medications than whites.^{1,2} In

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primary care, impressive programs targeting systems barriers to accessing mental health services in older adults have been developed.³⁻⁵ However, although these interventions address "access" issues, they do not specifically address ethnic barriers to adherence to antidepressant medications.

Depression is a chronic, recurring illness that can be successfully controlled through continued use of antidepressant medication.^{6,7} The costs associated with nonadherence include a high relapse risk,^{8,9} increased morbidity and mortality,^{10,11} and higher healthcare costs.¹² Thus, it is very important to understand the reasons why older minority-group patients are less adherent to antidepressant medications.

Several studies have attempted to uncover the primary reasons for low levels of adherence to prescribed medications. Wroe¹³ provides a framework for such research by distinguishing between intentional (e.g., alteration of medication regimen to fit one's needs) and unintentional nonadherence (e.g., because of forgetfulness/difficulties keeping track of medication regimen). According to Wroe¹³ these two types of nonadherence occur for different reasons. This distinction has been studied in at least two studies of adherence to medication management of respiratory disorders¹³ and hypertension.¹⁴ Perceiving the medications as unnecessary, ineffective, or unsafe was associated with intentional nonadherence, whereas access to medications, interruptions in one's patterns of medication intake, and forgetfulness were associated with unintentional nonadherence.^{13,14} By recognizing the type of nonadherence presented, clinicians can target their interventions accordingly.

There may be several reasons why older minority-group patients are less adherent to antidepressant medications than older white patients. To use Wroe's conceptualization of intentional and unintentional nonadherence, intentional nonadherence by older minority-group patients may be due to prohibitive cost, beliefs about depression and the importance of its treatment, concerns about antidepressants, and treatment preferences.¹⁵⁻¹⁷ Unintentional nonadherence may be related to the greater side-effect profile of antidepressant medications,¹⁸ bigger size of the pills,¹⁹ and more frequent daily use of the medications.²⁰ Although they provide an important basis for initial investigation, these studies did not distinguish between intentional and unintentional nonadher-

ence; they have been conducted primarily with white patients, and the majority of them did not focus on older adults or on antidepressant medications, specifically.

The purpose of this study was to determine whether ethnic group differences in adherence to antidepressant medications exist and to further determine which intentional and unintentional variables related to nonadherence are most salient to older minority-group patients who have been prescribed antidepressant medications. Our study differs from previous research in that the sample consists of older minority-group patients who have been prescribed an antidepressant by their primary care physicians. The study represents a systematic survey of predictors of adherence to antidepressant medications in black and Latino elderly patients.

METHODS

Participants who had a diagnosis of major depression and were prescribed antidepressant medications were randomly selected from the University of California San Francisco (UCSF) patient registry system. Survey information was obtained through a phone interview. For the parent study, inclusion criteria were being age 55 years and older and having been prescribed antidepressant medications in the past 12 months. Participants were excluded from the present study if they were identified as having probable bipolar disorder or psychotic disorder, denied having been prescribed antidepressant medications, and/or did not self-identify as either Latino or black. The latter selection criterion was used because we were specifically interested in nonadherence among ethnic minority-group patients and, therefore, developed two of the measures (stigma related to and concerns about antidepressant medications) on the basis of focus groups of ethnic minority-group patients.

Two hundred sixty-seven participants completed the initial screening, of which 84 were African American, and 82 were Latino. Of the Latino and black participants, 117 indicated that they had been prescribed antidepressant medications in the past year (57 black, 60 Latino). As assessed by the Primary Care Evaluation of Mental Disorders (PRIME-MD),²¹ 16 (8 Latino and 8 black) were excluded from the study

because of a probable diagnosis of psychosis. Three of these participants also were screened as having a probable diagnosis of bipolar disorder.

Dependent Variables

Nonadherence to antidepressant medications. These questions were selected from a measure constructed by Darnell et al.²² Unintentional nonadherence was assessed by the following questions: "Do you forget to take your antidepressant medication?," "Do you have trouble keeping track of which medications you've taken?," and "Do you have trouble keeping track of how many times you have taken it in a day?" Intentional nonadherence was assessed by the following questions: "Do you purposely not take your antidepressant medications?" and "During the past year, how often did you follow your doctor's instructions regarding antidepressant medications?" The first four statements were rated on a 6-point scale (1: none of the time; 2: a little of the time; 3: some of the time; 4: a good bit of the time; 5: most of the time; and 6: all of the time), and the last statement was rated on a 5-point scale (1: every day; 2: nearly every day; 3: 3–4 times a week; 4: 1–2 times a week; and 5: not at all). The distinction between these two types of nonadherence was supported by a factor analysis that demonstrated two distinct factors with eigenvalue greater than 1. This two-factor solution explained 64.8% of the variance.

Because the adherence variables were positively skewed, these variables were dichotomized. For both intentional and unintentional nonadherence, if a participant endorsed being nonadherent at least some of the time (≥ 3) on at least one of the items, response was considered as nonadherence (coded 0). Otherwise, response was considered as adherence (coded 1). As expected, the two types of nonadherence were not correlated ($r_{[96]} = 0.02$; $p = 0.82$).

Independent Variables

Demographic characteristics. Ethnicity, gender, level of education, age, and income were derived from participants' self-report.

Clinical characteristics. Depressive symptoms were assessed by 15 items of the Geriatric Depression Scale (GDS).²³ The measure demonstrated high reliability in the present study (Cronbach's $\alpha = 0.77$).

Physical functioning was assessed by the mean value of two questions from the SF-36: ("How would

you rate your health compared with 1 year ago?;" "How would you rate your health now?"). These two items were moderately related: ($r_{[99]} = 0.28$; $p = 0.003$).

Cognitive impairment was assessed by nine items of the Mini-Mental State Exam (MMSE).²⁴ These items tapped the Orientation and Recall domains. These domains were assessed because they are most likely to affect ability to comply with a medication regimen. A composite MMSE of 0 indicated no evidence of impairment, and a composite MMSE of 9 indicated maximum impairment.

Patient-physician relationship. Selected questions were derived from Garriety and Lawson:²⁵ "Are you satisfied with the doctor who most recently prescribed your antidepressants?;" "How much information has your doctor given you about antidepressant medications?;" "How much information has your doctor given you about depression?;" "How much information has your doctor given you about the possible side effects of antidepressant medications?;" and "How do you rate your doctor's effectiveness in treating your depression?." The first four questions were rated on a 5-point scale (1: not at all; 5: very much), and the fifth question was rated on a 6-point scale (1: terrible; 6: excellent). This measure demonstrated high reliability in the present study (Cronbach's $\alpha = 0.80$). The mean score was used to assess overall satisfaction.

Concerns about antidepressant medications. Participants were asked to indicate whether they agree (counted as 1) or disagree (counted as 0) with eight statements about the perceived behavioral and physical side effects of antidepressant medications ("Do you have concerns about any of the following: antidepressant medications may: (a) make you feel sick; (b) make you more aggressive or violent; (c) cause liver damage; (d) change your personality; (e) make you feel suicidal; (f) cause sexual problems." "If you take antidepressant medications: (a) you can become addicted to them; (b) you may have to stay on them for the rest of your life.") and four statements about the perceived stigma associated with use of antidepressant medications ("If you take antidepressant medications (a) people may think you are crazy; (b) people may think you are weak; (c) people may think you cannot handle stress; (d) people may think that you are just feeling sorry for yourself."). Statements were generated through several focus groups with ethnically diverse medical patients. The sum of "Yes" responses to these statements was used to represent concerns about behav-

ioral and physical side effects of antidepressant medications as well as concerns about the stigma of antidepressant medications. Both scales demonstrated high reliability (Cronbach's $\alpha = 0.82$; Cronbach's $\alpha = 0.87$, respectively). Because these scales were highly correlated ($r_{189} = 0.47$; $p < 0.0001$), the sum of the two scales was used to represent overall concerns about antidepressant medications.

The importance of antidepressant medications. Participants were asked to rate the importance of their antidepressant medications, relative to other medications, on a 3-point scale (3: most important; 1: least important).

Medication characteristics. Type of antidepressant medications (i.e., selective serotonin reuptake inhibitors [SSRIs], or one of the new antidepressant agents, such as Effexor, or Remeron, versus tricyclic antidepressants [TCAs], versus monoamine oxidase inhibitors [MAOIs]), number of medications taken in the past 4 weeks, and number of medications taken per day were derived from patient's self report.

Also, participants were asked to rate the presence of the following symptoms in the past month: "feeling sleepy during the daytime;" "nausea or upset stomach;" "difficulty urinating;" "dizziness or lightheadedness;" or "difficulty with sexual activity;" on a 4-point scale (1: did not have problem; 4: problem occurred and was severe). These symptoms were identified by psychiatrists who work with older adults as representing common side effects of antidepressant medications among older adults. The sum of the symptom ranking was used as an indication of overall side-effect profile in the present study.

Data Analysis

To determine the rates of nonadherence to antidepressant medications, we first ran descriptive statistics on the two nonadherence variables. We then conducted chi-square analyses to identify ethnic group differences in nonadherence to antidepressant medications. For nonadherence types that demonstrated ethnic group differences, we identified possible predictors that would account for these group differences by conducting a three-way mediating regression analysis.²⁶ The first step of the analysis is described above (that is, assessing ethnic group differences in the two adherence variables). The second step of the analysis involves assessing ethnic group

differences in the explanatory variables. In this step, we conducted *t*-test analyses for continuous explanatory variables and chi-square analyses for categorical explanatory variables. In the third step, we evaluated whether the group differences in adherence identified were mediated by the explanatory variables that demonstrated significant group differences (that is, it was only appropriate to assess mediation if ethnic group was related to adherence and to the mediators). We then conducted multivariate logistic-regression analyses, with each of the significant adherence types from Step 1 as a dependent variable, the significant predictor variables from Step 2 as mediators, ethnicity as an independent variable, and medication type as a covariate (medication type was a covariate because it has been identified as an important predictor of nonadherence²⁷). Mediation was indicated if the explanatory variables remained significant predictors of adherence, and ethnicity either lost significance (full mediation) or demonstrated a significant reduction in its beta weight (partial mediation).

If there were no ethnic group differences in nonadherence or if no mediators for ethnic group differences in nonadherence were found, we identified explanatory variables associated with nonadherence. Medication type continued to serve as a covariate, and ethnicity served as either a covariate or a predictor variable, depending on its relationship to nonadherence.

We first computed logistic regressions with each of the nonadherence types as dependent variables and each of the possible explanatory variables as independent variables. We then conducted multivariate logistic-regression analyses with the adherence variables as dependent variables, the significant predictor variables as independent variables, medication type as a covariate, and ethnicity as either a covariate or a predictor variable.

RESULTS

The final sample consisted of 49 black and 52 Latino primary-care patients. Both samples consisted primarily of low-income (annual income $< \$20,000$: 71.4% and 71.2%, respectively), elderly (mean age: 64.63 years [standard deviation (SD): 7.31]; and 71.08 [SD: 8.48], respectively) women (85.7% and 86.5%, re-

spectively). The majority of black (60%) and Latino elderly patients (78.5%) indicated that they were prescribed an SSRI or other new antidepressant medication as their primary antidepressant, whereas 40% of the black elderly and 21.4% of the Latino elderly patients indicated that they were prescribed a TCA as their primary antidepressant. None of the participants were prescribed MAOIs. Of the black sample, 28.5% reported taking more than one type of antidepressant medication, whereas 11.5% of Latino sample reported taking more than one type of antidepressant medication. Demographic and clinical characteristics are summarized in Table 1.

Adherence Rates

In the present study, 34.6% of the black sample (N = 17) and 28.5% of the Latino sample (N = 14) were classified as intentionally nonadherent. Eighteen percent of the black sample (N = 9) and 36% of the Latino sample (N = 18) reported unintentional nonadherence.

Ethnic group differences. There were no significant ethnic differences in intentional nonadherence ($\chi^2_{[1, 98]} = 0.42$; $p = 0.51$). We found significant differences in unintentional nonadherence ($\chi^2_{[1, 99]} = 3.87$; $p = 0.04$), with Latino elderly patients reporting significantly more unintentional nonadherence than did black patients.

Significant ethnic group differences in several explanatory variables were identified. As assessed by the total score on the GDS, the black sample was significantly less depressed (mean: 4.29 [SD: 3.61]) than the Latino sample (mean: 6.25 [SD: 3.83]; $t_{[98]} = -2.64$; $p = 0.01$). The black sample also was significantly younger (mean: 64.63 [SD: 7.31] years) than the Latino sample (mean: 71.08 [SD: 8.48] years; $t_{[98]} = -4.07$; $p < 0.0001$), had significantly more education than the Latino sample ($\chi^2_{[5, 101]} = 22.56$; $p < 0.0001$), and reported taking significantly more medications in the past 4 weeks (mean: 7.43 [SD: 4.06]) than the Latino sample (mean: 5.65 [SD: 3.23]; $t_{[95]} = 2.38$; $p = 0.01$).

TABLE 1. Demographic and Clinical Characteristics

Participant Characteristics	Black (N = 49)	Latino (N = 52)
Women, %	85.7	86.5
Household income, <\$20,000, %	71.4	71.2
Education, 8th grade or less, %	8.2	40.4
Married, %	14.3	44.2
Prescribed SSRI or other "new" agent, %	51.0	57.7
Age, years, mean (SD)	64.63 (7.31)	71.08 (8.48)
Depression (GDS score), mean (SD)	4.29 (3.61)	6.25 (3.83)
Health status (two items of the SF-36), mean (SD)	3.30 (0.71)	3.27 (0.88)
Cognitive impairment (nine items of the MMSE), mean (SD)	0.53 (0.66)	0.51 (0.95)
Patient-physician relationship, mean (SD)	3.62 (1.10)	3.26 (1.06)
Concerns about antidepressant medications, mean (SD)	3.00 (3.31)	3.50 (3.22)
Importance of antidepressant medications, mean (SD)	2.04 (0.73)	2.06 (0.78)
Number of medications taken in the past 4 weeks, mean (SD)	7.43 (4.06)	5.65 (3.23)
Number of medications taken per day, mean (SD)	1.60 (1.37)	1.20 (0.56)
Side effects of medications, mean (SD)	8.10 (2.71)	7.80 (2.32)

Note: SSRI: selective serotonin reuptake inhibitor; SD: standard deviation; GDS: Geriatric Depression Scale; SF-36: MOS 36-item Short-Form Health Survey; MMSE: Mini-Mental State Exam.

TABLE 2. Multivariate Logistic-Regression Analysis to Identify Possible Mediators of Ethnic-Group Differences in Unintentional Nonadherence

Possible Predictors ^a	OR	95% CI	P
Ethnicity	0.53	0.17-1.57	0.25
Depression (GDS score)	1.00	0.88-1.14	0.94
Age	0.98	0.92-1.03	0.98
Number of medications taken in the past 4 weeks	1.04	0.90-1.21	0.53
Education	1.23	0.88-1.70	0.21

Note: OR: odds ratio; CI: confidence interval; GDS: Geriatric Depression Scale.

^a $\chi^2_{[5]} = 7.13$; $p = 0.21$.

All significant variables were entered into a multivariate logistic model. Multicollinearity was not a problem among the mediator variables, with the largest correlation between any of these variables being $r_{[99]} = -0.28$ ($p = 0.004$) between age and level of education. Analysis indicated that none of the variables showed promise in accounting for the ethnic group difference identified (see Table 2).

Predictors of nonadherence. Table 3 summarizes the results of the univariate logistic-regression analyses we conducted. Results indicate that greater concerns about antidepressant medications, lesser beliefs in the importance of antidepressant medications, and lesser satisfaction with the patient-physician relationship are significant predictors of intentional nonadherence. Greater cognitive impairment, as assessed by

TABLE 3. Univariate Logistic-Regression Analyses for Intentional and Unintentional Nonadherence

Nonadherence/Possible Predictors ^a	OR	95% CI	p
Intentional nonadherence			
Concerns about antidepressants	0.81	0.69-0.93	0.005
Importance of antidepressants	3.03	1.57-5.83	0.001
Satisfaction with patient-physician relationship	1.54	1.02-2.32	0.03
Health status (two items of the SF-36)	1.31	0.75-2.27	0.32
Depression (GDS score)	1.02	0.91-1.14	0.67
Cognitive impairment (nine items of the MMSE)	0.66	0.38-1.15	0.14
Income	1.96	0.83-4.59	0.12
Education	1.02	0.77-1.34	0.88
Age	0.99	0.94-1.04	0.82
Number of medications taken in past 4 months	0.97	0.86-1.09	0.66
Side effects of medications	1.01	0.84-1.22	0.87
Unintentional nonadherence			
Concerns about antidepressants	1.10	0.93-1.29	0.24
Importance of antidepressants	0.64	0.34-1.19	0.15
Satisfaction with patient-physician relationship	1.15	0.76-1.73	0.49
Health status (two items of the SF-36)	1.21	0.68-2.14	0.50
Depression (GDS score)	0.96	0.86-1.08	0.58
Cognitive impairment (nine items of the MMSE)	0.53	0.30-0.96	0.03
Income	0.96	0.55-1.69	0.90
Education	1.33	0.98-1.81	0.06
Age	0.95	0.90-1.00	0.08
Number of medications taken in past 4 months	1.07	0.94-1.22	0.28
Side effects of medications	0.90	0.75-1.08	0.29

Note: OR: odds ratio; CI: confidence interval; SF-36: MOS 36-item Short-Form Health Survey; GDS: Geriatric Depression Scale; MMSE: Mini-Mental State Exam.

^aSeparate logistic regressions were conducted for each predictor. Likelihood ratio: $\chi^2_{[11]}$

TABLE 4. Multivariate Logistic-Regression Analyses for Intentional and Unintentional Nonadherence

Nonadherence/Possible Predictors	OR	95% CI	p
Intentional nonadherence ^a			
Ethnicity	1.95	0.58-6.54	0.27
Medication type	0.88	0.25-3.11	0.85
Concerns about antidepressants	0.78	0.64-0.94	0.01
Importance of antidepressants	3.15	1.41-7.06	0.005
Satisfaction with patient-physician relationship	1.61	0.94-2.78	0.08
Unintentional nonadherence ^b			
Ethnicity	0.42	0.14-1.27	0.12
Medication type	0.54	0.15-1.95	0.34
Cognitive impairment (nine items of the MMSE)	0.43	0.20-0.89	0.02

Note: OR: odds ratio; CI: confidence interval; MMSE: Mini-Mental State Exam.

^aAll significant predictors were entered simultaneously into the model, controlling for medication type and ethnicity. $\chi^2_{[5]} = 24.35$; $p = 0.0002$.

^bAll significant predictors were entered simultaneously into the model, controlling for medication type. $\chi^2_{[3]} = 10.43$; $p = 0.015$.

nine items of the MMSE, and ethnicity were significant predictors of unintentional nonadherence. None of the other possible predictors studied were identified as significant predictors of nonadherence.

We found no significant correlations between the explanatory variables, indicating no evidence of multicollinearity. Multivariate logistic-regression analysis was performed for each nonadherence type (intentional and unintentional) separately. Table 4 summarizes the results. Our results support the notion of two types of nonadherence: 1) intentional nonadherence, due to certain beliefs about the risks and benefits associated with antidepressant medications (i.e., greater concerns about antidepressant medications and the perception of antidepressant medications as less important than other medications); and 2) unintentional nonadherence, due to cognitive impairment. This distinction between intentional and unintentional nonadherence remained even after medication type and ethnicity were entered into the model. Results indicate that the barriers to adherence to antidepressant medications are similar in the two groups.

DISCUSSION

Both Latino and black elderly patients in the present study reported relatively high levels of intentional and unintentional nonadherence to antidepressant medications. These results are similar to previous research finding that almost one-third of primary-care patients discontinue their antidepressant medications during the first month of therapy.²⁸ Although there was no indication of ethnic differences in intentional nonadherence, ethnic differences in unintentional nonadherence were found, with Latino elderly patients reporting significantly more unintentional nonadherence than black patients. None of the explanatory variables studied, however, showed promise in accounting for the ethnic group differences identified, and, once other predictors were entered into the model, ethnicity did not remain a significant predictor of unintentional nonadherence. Overall, the present research suggests that barriers to adherence to antidepressant medications are similar in the two groups.

As expected, nonadherence to antidepressant medications is a multifaceted construct, determined by multiple factors. This study provides initial means of

targeting the high rates of nonadherence among ethnic minority-group patients by distinguishing between two types of nonadherence and by identifying different predictors for each. Although preliminary, our findings suggest that there may be a substantial difference between unintentional and intentional nonadherence. Unintentional nonadherence was associated with greater cognitive impairment, whereas intentional nonadherence was associated with greater concerns about antidepressant medications and with the consideration of antidepressant medications as less important in one's overall care. Previous research has found that both Latino and African American primary-care patients are less receptive to antidepressant medications than are whites.²⁹ The present study provides initial means for understanding this finding by identifying the specific beliefs responsible for low levels of adherence in these groups.

Our study demonstrates that older adults' concerns about the side-effect profile of their antidepressant medications and about the stigma associated with taking antidepressant medications are a very prominent factor in intentional nonadherence. The actual side-effect profile of antidepressants, on the other hand, is of a lesser importance. Similarly, Lin et al.²⁸ found that only a very severe side-effect profile was associated with early termination of antidepressant medications. This demonstrates the importance of social interventions that advocate for the proper use of antidepressant medications and address concerns about antidepressant medications in elderly patients.

Limitations. In reviewing these findings, readers should be advised that these data are preliminary and, thus, should be interpreted with caution. The sample size is relatively small, and, thus, the strength of the association between adherence and its correlates may appear stronger than it actually is. Second, this study is retrospective. Participants were surveyed about their experiences and beliefs about medications after having been prescribed them. Thus, beliefs about medications and depression may have changed over time. Last, participants may have provided more favorable estimates of their medication intake than is actually the case. However, recent research has shown that self-report of adherence is highly reliable.³⁰ It also is possible that those who agreed to participate in the study and that reported being prescribed antidepressant medications were more amenable to taking antidepressant medications

and adhering to their medication regimen than the general patient population might be.

To summarize, the uniqueness of the present study is its ability to support previous research and theory that distinguish between two types of nonadherence: intentional and unintentional. The study argues for the importance of beliefs about antidepressant medications in determining intentional nonadherence and for the importance of cognitive functioning in determining unintentional nonadherence. This distinction is of major importance for the understanding of barriers to adherence in older adults and in ethnic minority-group patients, in particular, and for the development of interventions to overcome these barriers in the future. Furthermore, this study assessed an actual sample of older ethnic minority-group patients that had nearly equal representations of black and Latino elderly subjects.

The present study suggests that different interventions are required in order to target the two distinct types of nonadherence. To target unintentional nonadherence, physicians should help patients identify memory aids, increase the involvement of family

members in patients' care, and encourage patients to use drug delivery systems. In contrast, in order to target intentional nonadherence among black and Latino elderly patients, more attention should be given to patients' negative beliefs and concerns about antidepressant medications and to the level of importance assigned to antidepressant medications by patients. Specific educational interventions that target stigma and concerns about side effects of antidepressant medications and that reiterate the significance of antidepressant medications should be used for this purpose. Also, as previous research has shown, both black and Latino patients are less interested in taking antidepressant medications and, instead, are more likely to prefer counseling.^{29,31} Therefore, increased communication between patient and physician is essential in order to better meet the specific preferences and needs of the patient.

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