Race, Psychiatric Diagnosis, and Mental Health Care Utilization in Older Patients

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To evaluate the impact of race on mental health care utilization among older patients within given clinical psychiatric diagnoses, the authors examined a retrospective sample of 23,718 elderly veterans treated in Department of Veterans Affairs inpatient facilities in 1994. Significant racial differences in mental health care utilization found over a subsequent 2-year period were related to outpatient (but not inpatient) care; for instance: 1) African American patients with psychotic disorders had significantly fewer outpatient psychiatric visits; and 2) African American patients with substance abuse disorders had significantly more psychiatric visits than Caucasian patients in their respective groups. Although inpatient utilization appeared to be similar among races, findings related to outpatient utilization may be associated with such factors as compliance, treatment efficacy, access to health care, or possible clinician bias. (Am J Geriatr Psychiatry 2000; 8:301–309)

Different rates of clinical psychiatric diagnoses among patients of all ages have been reported among African Americans as compared with Caucasians.[1–5] Higher reported clinical diagnostic rates of psychotic disorders and lower reported rates of mood disorders have been ascribed to multiple factors, including differential symptom presentations, provider bias, and misdiagnosis.[3,6–14] Notably, in studies where diagnosis is based upon structured clinical interviews or specific research diagnostic criteria, diagnostic rates between African Americans and Caucasians have been similar. Simon et al.,[11] comparing hospital and independent research diagnoses among state hospital patients, found that although a hospital diagnosis of schizophrenia was significantly more frequent in African Americans than in Caucasians, race and diagnosis were independent when research diagnoses were utilized. Liss et al.,[15] examining psychiatric diagnosis on two inpatient units using specific research diagnostic criteria, found a number of significant differences in psychiatric symptoms by race; however, these differences were not attributable to different frequencies of psychiatric disorders between races. Likewise, the Epidemiologic Catchment Area (ECA) study, using a standardized interview, found no significant differences in the prevalence of schizophrenia and mood disorders between African Americans and Caucasians after the data were corrected for factors such as socioeconomic status.[8,16]

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In patients of all ages, racial differences in treatment interventions also may exist, differences such as increased use/dosing of neuroleptics and less emergency room evaluation time in African Americans as compared with Caucasians.[17,18] Differences in mental health care utilization, such as more and shorter psychiatric admissions for similar disorders in African Americans than Caucasians also have been reported.[2,19] Within community mental health centers, Mollica et al.[20] found that African Americans were significantly more often assigned to low-intervention units staffed predominantly by mental health care workers than Caucasians, who were more often assigned to high-intervention units staffed by psychiatrists and psychologists (with individual treatment emphasized). They also found that the percentage of African Americans in ongoing treatment was significantly lower than the percentage of African Americans entering treatment, suggesting a higher dropout rate in African Americans than Caucasians in the study.

African Americans themselves also may demonstrate different patterns of seeking mental health care. Using prospectively gathered data from the ECA Program, Gallo et al.[21] (after controlling for coincident psychiatric disorders) found that African Americans were significantly less likely than Caucasians to have consulted with a mental health specialist. Neighbors and Jackson[22] have noted that African Americans may rely more on informal support for emotional problems.

In elderly patients, specifically, several studies suggest that there are also differences in rates of clinical psychiatric diagnoses among races. In elderly African Americans, higher rates of dementia and psychosis and lower rates of depression diagnoses than in Caucasians have been reported.[23–27] In two separate studies of elderly patients admitted to geropsychiatric acute inpatient units, Fabrega et al.[23] noted a lower proportion of African Americans with mood disorders and higher proportions of African Americans with psychotic disorders, whereas Mulsant et al.[24] found that African American patients were significantly more likely to receive a diagnosis of schizophrenia. Zubenko et al.[25] reported that among patients with Alzheimer's disease, African Americans were more likely to receive a diagnosis of dementia with delusions. Leo et al.,[26] in a study examining geropsychiatric consultation, found that consultants diagnosed African American elderly patients with psychotic disorders and dementia significantly more often, and with mood disorders significantly less often than Caucasians. Finally, in a previous study in patients with dementia, depression, and coexisting dementia and depression,[27] our group found significantly higher rates of clinical diagnoses of dementia and significantly lower rates of clinical diagnoses of depression and coexisting dementia and depression in African American than in Caucasian patients.

Misdiagnosis as a specific cause of differential rates of clinical psychiatric diagnoses in elderly patients has been supported by several studies. Coleman and Baker,[28] in a VA setting, found that seven of eight middle-aged and elderly African American patients with affective disorders had been misdiagnosed with schizophrenia. Baker[29] also found that 4 of 10 African Americans referred to a community mental health care center with a diagnosis of schizophrenia actually had other psychiatric diagnoses.

Unanswered is the question of whether the possible clinician bias that may affect a given elderly minority patient's clinical psychiatric diagnosis likewise affects that patient's psychiatric treatment or utilization of mental health care. To our knowledge, the only study that has addressed the issue of possible differential rates of clinical interventions among African American and Caucasian elderly patients is that of Leo et al.[26] Their study examined geropsychiatric consultation for African American and Caucasian patients in a tertiary-care hospital and found no differences in interventions or recommendations by race other than more frequent recommendations for legal measures for African American elderly patients. However, this study did not examine intervention rates *within* given diagnostic groups. Also, this study examined a single treatment setting (where factors unique to that setting could have operated) as opposed to a health care system, such as the Department of Veterans Affairs (VA) health care system.

The VA mental health system serves a large, racially diverse clinical population of elderly veterans in whom mental health care utilization may be examined systematically. Baker and Lightfoot[30] have noted that ethnic elders' attitudes and perceptions of the health care system are influenced by their previous experiences of exclusion from American society, experiences such as segregation. Although we are unaware of any data pertaining to how effectively the Department of Veterans Affairs (VA) health care system engages ethnic elderly patients, one earlier study has suggested that among veterans, African Americans are significantly

more likely to seek psychiatric care at VA hospitals than Caucasians, in that African Americans may feel more comfortable at VA than at non-VA hospitals, perhaps because of an identification with the military.[31]

No previous studies, to our knowledge, have examined the possibility that there are different rates of mental health care utilization within a health care system such as the VA for given clinical psychiatric diagnoses among different races in elderly patients. Although utilization rates do not encompass all forms of interventions, these rates may be indicative of mental health delivery for given diagnoses in terms of inpatient and outpatient care. Accordingly, in this study, within a given clinical psychiatric diagnosis, our aim was to assess mental health care utilization among races in a large cohort of elderly patients in the VA nationally.

METHODS

Data were obtained retrospectively from the VA's Patient Treatment File (PTF). This national computerized database contains discharge records for all VA medical centers across the United States, including information on patient characteristics such as age, race, sex, and marital status, and administrative data such as admission and discharge dates and discharge diagnoses. The latter include primary diagnoses responsible for length of stay as well as accompanying secondary diagnoses. Also, the VA has a separate data file, the Outpatient Clinic File, with information pertaining to outpatient utilization that can be linked to PTF data.

We defined fiscal year (FY) 1994 (October 1, 1993, to September 30, 1994) as the index year for our study. We obtained data for FY 1994 from the PTF and identified all patients 60 years old or over, hospitalized for ICD-9-CM[32] psychiatric diagnoses responsible for length of stay (primary diagnoses). We then identified patients of Caucasian, African American, and Hispanic ethnicity for the purpose of comparisons among races for the study hypotheses (patients from other racial groups were excluded because their numbers were extremely small in this age group in our system).

Using this approach, a total of 23,718 elderly patients were identified. Individuals were grouped according to diagnosis responsible for length of stay into six categories on the basis of DSM-III-R groupings: 1) Cognitive Disorders (including dementia and delirium); 2) Mood Disorders (including major depression and bipolar disorder); 3) Psychotic Disorders (including schizophrenia, delusional disorders, and psychotic disorders not otherwise specified); 4) Substance Abuse Disorders; 5) Anxiety Disorders (including posttraumatic stress disorder); and 6) All Other Disorders (including personality disorders, conversion disorders, and somatization disorders). Mood disorders with secondary psychosis were included by primary diagnosis in the Mood Disorders category.

Mental health care utilization of the above patient groups was examined over the subsequent 2-year period after the index hospitalization for each patient. Outcome variables included psychiatric readmissions, lengths of stay, time to psychiatric rehospitalizations, and outpatient utilization (measured by the number of psychiatric visits).

Demographic variables included age, race, gender, and marital status. Discharge location following index stay was also examined. Because mortality rates differed between groups, a separate variable, survival months, was calculated (date of death minus date of index hospitalization/365.25 $\times$ 12) for each patient. Other variables examined were number of secondary or comorbid medical diagnoses (as an estimate of medical comorbidity) and number of secondary or comorbid psychiatric diagnoses (as an estimate of psychiatric comorbidity). In both cases, these were the diagnoses listed by clinicians in addition to the diagnoses responsible for length of stay and group inclusion at discharge from index hospitalization.

Categorical differences were assessed by use of chi-square tests of independence (3 $\times$ 2 design). Groups were compared by three group one-way univariate analyses of variance (ANOVA) and multivariate analysis of variance (MANOVA) designs. Group effects after adjustment for covariates were examined by use of analysis of covariance (ANCOVA).

Specifically, our statistical analysis of outcome data took the following steps. First, we performed a chi-square test for each diagnostic category on patients in a given racial group who had or did not have a psychiatric inpatient hospitalization during the 2-year follow-up. Including only patients who had psychiatric readmissions during follow-up, we then performed MANOVA analyses for overall inpatient psychiatric utilization, including psychiatric inpatient days, psychiatric readmissions, and time to psychiatric readmissions. In these MANOVAs, we included the variable Survival

Months in order to adjust for differential mortality during follow-up. Next, we performed ANOVAs to test group differences in individual inpatient psychiatric variables. We then performed ANCOVAs, using the covariates Age, Medical Comorbidity, and Psychiatric Comorbidity in addition to the adjustment for Survival Months. For the outpatient variable Psychiatric Visits, only ANOVA and ANCOVA analyses were performed. For all ANOVA models, post- hoc testing was conducted using the Tukey-Kramer method for adjustment of simultaneous pairwise comparisons.

The relationship between race, diagnosis, mental health care utilization, and psychiatric comorbidity was examined further in the final sets of analyses. Specifically, we examined mental health care utilization by race and diagnosis in patients with comorbid: 1) Major Depression and Anxiety Disorders diagnoses; and 2) Major Depression and Substance Abuse Disorders diagnoses. Our analyses then followed the same series of steps as described for the analyses in the preceding paragraph.

RESULTS

The sample ($N = 23,718$) consisted of 859 Hispanic (H) patients, 3,529 African American (AA) patients, and 19,330 Caucasian (C) patients. Patients were further divided within the given diagnostic groups by race as shown in Table 1.

Sociodemographic Characteristics

For the entire study population, mean age was 69.7 ± 7.0 years. Sociodemographic characteristics for the racial groups examined in the study are shown in Table 2. African Americans and Caucasians were significantly older than Hispanic patients. There were more women in the group of Caucasian patients than in the other groups. More Hispanic patients were married than Caucasian or African American patients.

More Hispanic patients were discharged to the community after the index hospitalization than Caucasian or African American patients; moreover, the latter two groups were discharged to a VA nursing home or a community nursing home more often than were Hispanic patients. African Americans and Caucasians had significantly higher mortality than Hispanics during the 2-year study period.

Racial Differences in Mental Health Care Utilization by Diagnosis (FY 1994)

With regard to psychiatric readmissions during the 2-year study period, in the Substance Abuse Disorders group, Caucasian patients had a significantly higher percentage of patients with psychiatric readmissions during follow-up than African Americans or Hispanics (C = 33.5% [$n = 2,123$]; AA = 27.1% [$n = 350$]; and H = 25.7% [$n = 67$]; $\chi^2_{[2]} = 25.25$; $P < 0.001$). There were no significant racial differences in the percentage of patients who had psychiatric readmissions during follow-up within the Cognitive (C = 11.4% [$n = 399$]; AA = 9.5% [$n = 75$]; and H = 10.7% [$n = 14$]; the Mood (C = 42.4% [$n = 1,528$]; AA = 43.9% [$n = 125$]; and H = 46.1% [$n = 82$]; the Psychotic (C = 39.4% [$n = 1,430$]; AA = 39.2% [$n = 348$]; and H = 46.9% [$n = 97$]; the Anxiety (C = 35.7% [$n = 271$]; AA = 45.0% [$n = 27$]; and H = 47.2% [$n = 17$]; and the Other Disor-

TABLE 1. Race and psychiatric diagnosis in hospitalized elderly veterans, FY 1994, *n* (%)

	Group 1 Hispanics ($n = 859$)	*Group 2* African Americans ($n = 3,529$)	*Group 3* Caucasians ($n = 19,330$)	
Diagnosis				$\chi^2_{[df]}$ $374.31_{[10]}$*
Cognitive ($n = 4,430$)	131 (15.2%)	788 (22.3%)	3,511 (18.2%)	
Mood ($n = 4,063$)	178 (20.7%)	285 (8.1%)	3,600 (18.6%)	
Psychotic ($n = 4,722$)	207 (24.1%)	887 (25.1%)	3,628 (18.8%)	
Substance abuse ($n = 7,896$)	261 (30.4%)	1,292 (36.6%)	6,343 (32.8%)	
Anxiety ($n = 856$)	36 (4.2%)	60 (1.7%)	760 (3.9%)	
Other ($n = 1,751$)	46 (5.4%)	217 (6.2%)	1,488 (7.7%)	

*$P < 0.001$.

ders (C = 21.0% [n = 312]; AA = 15.2% [n = 33]; and H = 17.4% [n = 8]) groups.

MANOVA and ANOVA results of inpatient (for patients with psychiatric readmissions during follow-up) and outpatient mental health care utilization during the 2-year study period are reported in Table 3 (Cognitive, Mood, and Psychotic Disorders) and Table 4 (Substance Abuse, Anxiety, and Other Disorders). In terms of inpatient mental health care utilization, among patients with psychiatric readmissions, there were no significant group differences due to race in psychiatric inpatient days, psychiatric readmissions, or time to psychiatric readmissions in any of the diagnostic groupings.

With regard to outpatient mental health care utilization, African Americans with psychotic disorders had significantly fewer psychiatric outpatient visits than Caucasians but not Hispanic patients with psychotic disorders. African Americans with substance abuse disorders had significantly more psychiatric outpatient visits than Caucasian, but not Hispanic patients with substance abuse disorders. In the Anxiety Disorders category, there was an overall significant difference due to race in the number of outpatient visits, but this difference was not significant in post-hoc testing. There were no significant differences due to race in the numbers of outpatient psychiatric visits within the Cognitive, Mood, or Other Disorders categories.

Adjustment for Covariates

Three other covariates (age, medical comorbidity, and psychiatric comorbidity) were added to the original statistical model (which included the survival-months adjustment for differential time-to-death) and tested to rule them out as alternative explanations for the group differences in mental health care seen in the preceding analyses. The addition of these covariates to the model changed the original ANOVA results in only one case. In this case, the additional covariates nullified the significance of the group differences that had been seen in the Anxiety Disorders ANOVA for outpatient psychiatric visits variable ($F_{[2, 849]} = 2.40$; $P = 0.09$). However, for the categories of Psychotic ($F_{[2, 4715]} = 4.13$; $P < 0.02$) and Substance Abuse Disorders ($F_{[2, 7889]} = 17.78$; $P < 0.0001$), the significant group differences remained. In post-hoc testing, African American patients with psychotic disorders had significantly fewer outpatient psychiatric visits (least-squares means: H = 15.9 visits, AA = 15.3 visits, and C = 22.3 visits; C > AA, $P < 0.02$), and African American patients with substance abuse disorders had significantly more outpatient psychiatric visits than Caucasian patients (least-squares means: H = 19.4 visits, AA = 23.2 visits, and C = 13.2 visits; AA > C, $P < 0.0001$) in their respective groups.

Comorbid Psychiatric Disorders

Analyses were performed to examine mental health care utilization by race and diagnosis in patients with comorbid 1) Major Depression and Anxiety Disorders diagnoses; and 2) Major Depression and Substance Abuse Disorders diagnoses. Among patients with major depression, comorbid depression and anxiety was significantly less common in African Americans (10.1%; $n = 13$) than in Hispanics (12.9%; $n = 11$) or Caucasians (18.8%; $n = 274$; $\chi^2_{[2]} = 7.64$; $P < 0.02$). However, among patients with comorbid major depression and anxiety, there were no significant differences in mental health care utilization by race. Among patients with major depression, comorbid depression and substance

TABLE 2. Sociodemographic characteristics by study group (race), mean ± standard deviation; *n* (%)

	Group 1 Hispanics (n = 859)	*Group 2* African Americans (n = 3,529)	*Group 3* Caucasians (n = 19,330)	Significance Tests
				$F_{[df]}$
Age, years	69.0 ± 6.3	69.6 ± 7.3	69.8 ± 7.0	$6.37_{[2, 23,715]}$*
				$\chi^2_{[df]}$
Female gender	8 (0.9)	37 (1.0)	495 (2.6)	$37.93_{[2]}$*
Marital status	465 (54.1)	1,270 (36.0)	8,081 (41.8)	$101.34_{[2]}$*
Discharge location				$93.83_{[4]}$*
Community	719 (83.7)	2,679 (75.9)	13,741 (71.1)	
Nursing home	69 (8.0)	457 (13.0)	2,919 (15.1)	
Mortality	134 (15.6)	722 (20.5)	4,101 (21.2)	$16.18_{[2]}$*

*$P < 0.001$.

abuse was significantly more common in African Americans (32.6%; $n = 46$) than in Hispanics (28.6%; $n = 24$) or Caucasians (23.3%; $n = 350$; $\chi^2_{[2]} = 6.95$; $P < 0.03$). African Americans with comorbid depression and substance abuse had significantly more outpatient visits (mean: 76.0 ± 118.2 visits) than Hispanics (mean: 11.8 ± 15.8 visits) or Caucasians (mean: 27.5 ± 83.6 visits; $F_{[6, 413]} = 6.89$; $P < 0.001$). This significance was confirmed in post-hoc testing (least-squares means: AA = 74.8 visits, H = 11.6 visits, and C = 27.7 visits; AA > H, $P < 0.01$, and AA > C, $P < 0.002$). There were no other significant differences in mental health care utilization by race among patients with comorbid depression and substance abuse.

DISCUSSION

In this, the first large-scale study examining mental health care utilization in older patients with attention to race, diagnosis, and comorbidity, we found relatively few differences in mental health care utilization based on these factors. Significant differences in mental health care utilization among races were found in outpatient, but not inpatient utilization (except for significantly more substance abuse readmissions for Caucasians). Outpatient differences in mental health care utilization among the racial groups examined were found within the Anxiety, Psychotic, and Substance Abuse disorders categories. The Anxiety Disorders findings appeared to be due to factors other than race, given that these findings lost their significance when covariates (age and medical and psychiatric comorbidity) were included in the analyses. However, even accounting for these covariates, African American patients had significantly fewer psychiatric visits than Caucasians within the Psychotic Disorders category and significantly more psychiatric visits than Caucasians within the Substance Abuse Disorders category.

These differences in outpatient psychiatric utilization (Psychotic and Substance Abuse Disorder diagno-

TABLE 3. Utilization of mental health care services by study group (race) for the 2-year study period for patients with cognitive, mood, and psychotic disorders, mean ± standard deviation

	Group 1: Hispanics ($n = 859$)	Group 2: African Americans ($n = 3,529$)	Group 3: Caucasians ($n = 19,330$)	MANOVA	ANOVA
Diagnostic group:					
Cognitive disorders ($n = 4,430$)				$F_{[6, 964]}$	
Psychiatric inpatient utilization ($n = 488$)				0.72	
Number of					$F_{[3, 484]}$
Days	47.1 ± 60.5	72.9 ± 101.5	65.8 ± 109.9		0.43
Readmission	1.8 ± 1.2	1.9 ± 1.6	1.7 ± 1.1		0.99
Days to readmission	178.1 ± 136.7	175.0 ± 178.1	182.3 ± 187.2		0.06
Outpatient utilization ($n = 4,430$)					$F_{[3, 4,426]}$
Psychiatric visits	3.4 ± 9.1	2.1 ± 9.8	2.1 ± 16.4		0.25
Mood disorders ($n = 4,063$)				$F_{[6, 3,458]}$	
Psychiatric inpatient utilization ($n = 1,735$)				0.28	
Number of					$F_{[3, 1,731]}$
Days	76.0 ± 83.5	79.6 ± 89.1	71.4 ± 84.3		0.51
Readmission	2.8 ± 2.2	3.0 ± 2.2	2.8 ± 2.9		0.17
Days to readmission	185.8 ± 190.4	173.0 ± 172.6	171.6 ± 178.8		0.20
Outpatient utilization ($n = 4,063$)					$F_{[3, 4,059]}$
Psychiatric visits	21.0 ± 50.6	33.9 ± 122.6	24.5 ± 77.6		1.75
Psychotic disorders ($n = 4,722$)				$F_{[6, 3,738]}$	
Psychiatric inpatient utilization ($n = 1,875$)				1.18	
Number of					$F_{[3, 1,871]}$
Days	68.1 ± 72.2	81.3 ± 102.0	86.8 ± 110.4		1.53
Readmission	2.5 ± 2.3	2.8 ± 2.8	2.6 ± 2.3		0.90
Days to readmission	203.1 ± 179.3	198.9 ± 182.8	195.4 ± 179.9		0.19
Outpatient utilization ($n = 4,722$)					$F_{[3, 4,718]}$
Psychiatric visits	18.4 ± 47.4	15.8 ± 47.8	22.0 ± 76.0[a]		3.43*

Note: Significant post-hoc (Tukey-Kramer's) comparisons ($P < 0.05$): [a]significantly greater than Group 2.
*$P < 0.05$.

ses) may relate to a number of factors, such as differential medication dosing/response, treatment compliance, illness course, access to mental health care, and provider bias. Chung et al.[19] noted that African American patients with schizophrenia received higher neuroleptic doses than Caucasian patients in their study population. Although we are unable to assess the effect of medications in our study population, perhaps higher medication doses resulted in more rapid symptom resolution for African Americans in the Psychotic Disorders group. Alternatively, higher medication doses could have resulted in treatment noncompliance associated with higher rates of side effects. Factors related to access to mental health care, such as poverty, lack of resources (such as transportation), and homelessness, may have also resulted in lower utilization of outpatient mental health care for African Americans in the Psychotic Disorders group.

The higher outpatient utilization of African Americans within the Substance Abuse Disorders group could have been due to better treatment compliance or, alternatively, higher relapse rates as compared with Caucasian patients (although it was Caucasian patients who had a significantly greater rate of readmissions). A previous study[33] found that among hospitalized alcoholic patients of all ages, African Americans and Hispanics were significantly less likely to complete inpatient treatment than Caucasian patients. Finally, in the analysis performed examining mental health care utilization in patients with comorbid depression and substance abuse, African Americans had significantly more outpatient psychiatric visits than Hispanics or Caucasians, so, perhaps, the higher outpatient utilization of African Americans within the Substance Abuse Disorders category relates in part to "dual diagnosis."

Some of the explanations offered above for the differences in outpatient utilization for the Psychotic and Substance Abuse Disorder diagnoses may themselves be linked to clinician bias. For example, clinicians might routinely prescribe higher neuroleptic doses or offer

TABLE 4. Utilization of mental health care services by study group (race) for the 2-year study period for patients with substance abuse, anxiety, and other disorders; mean ± standard deviation

	Group 1: Hispanics (n = 859)	Group 2: African Americans (n = 3,529)	Group 3: Caucasians (n = 19,330)	MANOVA	ANOVA
Diagnostic group:					
Substance abuse disorders (n = 7,896)				$F_{[6, 5,068]}$	
Psychiatric inpatient utilization (n = 2,540)				0.83	
Number of					$F_{[3, 2,536]}$
Days	35.6 ± 32.5	39.5 ± 46.6	40.4 ± 53.3		0.33
Readmissions	2.0 ± 1.5	2.3 ± 2.3	2.6 ± 2.9		2.32
Days to readmission	205.1 ± 181.7	202.7 ± 182.4	193.5 ± 190.8		0.28
Outpatient utilization (n = 7,896)					$F_{[3, 7,892]}$
Psychiatric visits	20.2 ± 83.6	23.7 ± 85.1[a]	13.1 ± 46.3		19.21**
Anxiety disorders (n = 856)				$F_{[6, 618]}$	
Psychiatric inpatient utilization (n = 315)				0.61	
Number of					$F_{[3, 311]}$
Days	54.9 ± 43.6	61.3 ± 55.1	51.5 ± 56.9		0.39
Readmissions	2.7 ± 2.8	2.4 ± 1.9	2.5 ± 2.1		0.11
Days to readmission	238.0 ± 198.0	210.1 ± 165.0	187.4 ± 180.8		0.64
Outpatient utilization (n = 856)					$F_{[3, 852]}$
Psychiatric visits	53.9 ± 100.4	40.9 ± 64.3	29.3 ± 64.2		3.01*
Other disorders (n = 1,751)				$F_{[6, 694]}$	
Psychiatric inpatient utilization (n = 353)				1.48	
Number of					$F_{[3, 349]}$
Days	69.1 ± 72.9	69.0 ± 112.6	55.0 ± 84.3		0.44
Readmissions	3.4 ± 2.1	2.4 ± 2.2	2.1 ± 1.9		1.63
Days to readmission	276.2 ± 205.6	145.6 ± 127.8	165.0 ± 173.5		1.78
Outpatient utilization (n = 1,751)					$F_{[3, 1,747]}$
Psychiatric visits	22.6 ± 63.7	7.4 ± 28.1	10.2 ± 48.2		1.65

Note: Significant post-hoc (Tukey-Kramer's) comparisons (P<0.05): [a]significantly greater than Group 3; *P<0.05; **P<0.0001.

less intensive follow-up to elderly African Americans with psychosis, resulting in noncompliance or treatment dropout. Adebimpe[8] has noted that clinicians' misperceptions about noncompliance in African American patients could explain differential patterns of antipsychotic prescribing in these patients. Misdiagnosis of an affective disorder as a primary psychotic disorder, such as that found by Coleman and Baker[28] and Baker,[29] could also bias treatment interventions and the utilization of mental health care for elderly African American patients. African Americans with substance abuse diagnoses might have higher relapse rates due to their being assigned inexperienced clinicians or low-intensity treatments, as noted in the Mollica et al.[20] study, or to the lack of a therapeutic alliance with non-minority clinicians.

Unlike past studies, which have found racial differences in length of psychiatric stay for similar disorders,[2] our study found essentially no differences in inpatient psychiatric utilization between the racial groups in older patients. Although past studies, including our own,[23–27] have found significant differences in rates of clinical psychiatric diagnoses among different races in elderly patients, the findings of the present study may suggest that generally, VA providers may not be intervening differently, given a certain clinical psychiatric diagnosis. We find the latter result heartening, because it suggests that although efforts to decrease disparities in clinical psychiatric diagnoses may be needed, rates of treatment and intervention (at least as reflected in inpatient utilization rates) appear to be similar.

Our study contains some obvious limitations, including the fact that all patients studied were veterans, and predominantly male. Though the VA system is nationally representative of a mental health care system serving a large, racially diverse clinical population of elderly veterans, the findings cannot be generalized to non-veteran populations containing equal numbers of elderly men and women. This study was also retrospectively performed using an administrative database, and thus we could not examine such factors as specific treatment modalities rendered, treatment response and compliance, level of social support, and use of non-VA mental health services. Comparisons of mental health care utilization among races and diagnostic groups also may have been affected by the misdiagnosis and misclassification of patients.[12,34]

Despite the caveats noted, the finding of few consistent differences in mental health care utilization within clinical diagnostic categories among different races is an important one. Although our earlier study found clear differences among races for clinical psychiatric diagnoses, the present findings indicate that, given a clinical psychiatric diagnosis, the utilization of mental health care is not different overall among races for most psychiatric diagnoses in older patients.

CONCLUSIONS

The results of this study provide new data on race, psychiatric diagnosis, and mental health care utilization in elderly patients. Our findings suggest that, within a given diagnosis in elderly patients, the delivery of inpatient mental health care (as reflected in the utilization of mental health care) does not appear to be markedly different among races. The few differences found in outpatient psychiatric utilization may relate to such factors as treatment compliance, efficacy, access to mental health care, or provider bias.

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