ORIGINAL ARTICLE

Race, Ethnicity, and the Use of Services for Mental Disorders

Results From the National Survey of American Life

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Context: Little is known about differences in the unmet need for mental health service use between African Americans and Caribbean blacks.

Objective: To extend the National Survey of Black Americans by examining 12-month mental health service use for African Americans and Caribbean blacks from the recently completed National Survey of American Life.

Design and Setting: National household probability samples of noninstitutionalized African Americans and Caribbean blacks (blacks from Caribbean area countries now living in the United States) conducted between February 2001 and June 2003, using a slightly modified World Mental Health version of the World Health Organization's Composite International Diagnostic Interview.

Participants: A total of 3570 African Americans and 1621 Caribbean blacks 18 years and older (N=5191).

Main Outcome Measures: Proportion of respondents with 12-month *DSM-IV* disorders who sought help in the specialty mental health, general medical, human service, and complementary-alternative medicine treatment sectors. The percentage receiving minimally adequate treatment was also assessed.

Results: Overall, 10.1% of respondents used some form of mental heath care services in the past year. Use of services was much higher among those who met criteria for a 12-month *DSM-IV* disorder (31.9%) than among those who did not (5.4%). Forty-nine percent of respondents with serious mental illness used services, whereas 39.3% had contact with mental health care specialists. The youngest and oldest age groups were least likely to obtain any services. Among African Americans, women were more likely than men to use general medical care and services from any sector. Respondents with the most years of education showed the highest use of services.

Conclusions: The underuse of mental health services among black Americans remains a serious concern. Educational interventions that focus on both consumers and mental health care professionals are needed.

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TWENTY-FIVE YEARS AGO, THE National Survey of Black Americans (NSBA) produced the first national data on how symptoms of distress are defined and responded to by black Americans.[1,2] The NSBA found that most black Americans did not seek mental health services in response to emotional distress. Predating the *DSM-III*, the mental health need-assessment approach taken by the NSBA grew out of an epidemiologic tradition that emphasized how variation in personal problem definitions is related to patterns of help-seeking behavior.[3] Interestingly, because personal distress was defined from a lay community perspective and not within a medical diagnostic taxonomy, it was difficult to draw firm conclusions about the extent of unmet need for mental health treatment on the basis of the NSBA.[4,5] In this article, we use data from the recently conducted National Survey of American Life (NSAL) to examine help seeking for mental disorders in an ethnically diverse sample of black Americans. The NSAL extends the NSBA in 2 important ways. First, the NSAL uses the Composite International Diagnostic Interview to estimate service use among persons with *DSM-IV* criteria for selected mental disorders. Second, it addresses the issue of black ethnic variation by including samples of both African Americans and Caribbean blacks.

It is estimated that Caribbean-descended and immigrant groups constitute 10% to 15% of the United States' black population. Studies[6] of multiple racial and ethnic groups reveal that groups of color

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are as likely to differ from each other as they are to differ from white Americans. Unfortunately, no studies have addressed black ethnic variation in help seeking for mental disorders within the United States. The few studies[7-9] that have examined help seeking among Caribbean blacks have been conducted in the United Kingdom. As a result, many questions remain unanswered regarding whether Caribbean blacks and African Americans actually differ in mental health service use.

Studying blacks of different ethnic origins is important for public mental health service professionals because of questions about the contribution of culture to population group differences in behavior.[10-13] Hypotheses related to assumed differences in such social processes as group identity, acculturation, nativity, and immigration suggest that sociodemographic factors have differential effects on treatment seeking across different ethnic groups.[14-17] Although such an initial demographic analysis cannot speak directly to culture, it begins to identify directions for future research on differences in psychosocial processes related to culture and mental health.[18]

Given the virtual absence of findings in this area, we take an exploratory, descriptive approach to this first article on mental health services. Nevertheless, on the basis of findings from the general services literature and our previous work with African Americans, we have some expectations. We predict that Caribbean blacks will be less likely than African Americans to use medical and mental health services. We predict significant differences in the use of services for other demographic variables, although we are unsure about how uniform these relationships will be across the 2 ethnic groups and across the multiple service domains explored. Specifically, we predict that both income and education will show a positive relationship with use of services, that women will be more likely than men to use services, that insured people will be more likely than uninsured people to seek professional help, and that the oldest respondents (≥65 years) will be least likely to use services.

In summary, the NSAL is an excellent resource to explore the extent to which both groups receive mental health services and the nature of ethnic differences in the unmet need for mental health care. No national studies have measured the prevalence of mental disorders in conjunction with help seeking in representative national samples of both African American and Caribbean blacks. This article describes the use of general medical, specialty mental health care, human services, and complementary-alternative medical resources for mental health problems and selected, discrete mental disorders.

METHODS

SAMPLE

The NSAL was part of a National Institute of Mental Health Collaborative Psychiatric Epidemiology Surveys initiative that also included the National Comorbidity Survey Replication (NCS-R) and the National Latino and Asian American Study.[19] The NSAL was an integrated national household probability sample of 3570 African Americans and 1621 blacks of Caribbean descent 18 years and older. The African American sample was selected exclusively from geographic segments in proportion to the African American population; the Caribbean black sample was selected from the African American segments and additional metropolitan segments in which blacks of Caribbean descent made up more than 10% of the population.[20] In both the African American and Caribbean black samples, it was necessary for respondents to self-identify their race as black. Those self-identifying as black were included in the Caribbean black sample if they answered affirmatively to any of these inclusion criteria: (1) West Indian or Caribbean descent, (2) from a Caribbean area country, and/or (3) parents or grandparents were born in a Caribbean area country. Most interviews (88%) were conducted face to face and 12% by telephone, using a computer-assisted instrument and lasting an average of 2 hours 20 minutes. Data collection was completed between February 2, 2001, and June 30, 2003. The overall response rate was 72.3%: 70.7% for African Americans and 77.7% for Caribbean blacks.

MEASURES

Diagnostic Assessment

We measured *DSM-IV* disorders, both lifetime and 12 month, with the World Mental Health Composite International Diagnostic Interview, a structured diagnostic interview; mental disorders sections were modified versions of those developed for the World Mental Health project.[21] The 18 twelve-month mental disorders assessed were as follows: anxiety disorders (panic disorder, agoraphobia, social phobia, generalized anxiety disorder, posttraumatic stress disorder, and obsessive-compulsive disorder, which was assessed using the Composite International Diagnostic Interview Short Form),[22] mood disorders (major depressive disorder, dysthymia, and bipolar I and II disorders), substance disorders (alcohol abuse, alcohol dependence, drug abuse, and drug dependence), childhood disorders (oppositional defiant disorder, conduct disorder, and attention-deficit/hyperactivity disorder, asked only of respondents in the 18- to 44-year age range), and eating disorders.

Severity of Mental Disorder

Respondents who reported 12-month suicidal ideation or attempts, who had at least 1 nonaffective psychotic symptom plus ever being treated for psychosis, or who met 12-month criteria for at least 1 disorder were divided into 1 of 3 severity gradients: serious, moderate, or mild. Severity was primarily assessed using measures of role impairment derived from the Sheehan Disability Scale.[23] The significant positive relationship between the severity measure and 30-day disability, ranging from a low of 0.96 disability day for respondents with mildly severe mental disorders to more than 5 disability days for those with serious mental disorders, speaks to the validity of the disability measure.

Service Use

Respondents were asked if they had made contact with anyone from a list of health care professionals for problems with their emotions, nerves, mental health, or use of alcohol or drugs in the past 12 months. Health care professionals were categorized into a mental health sector (psychiatrists, psychologists, counselors and social workers seen in mental health settings, other mental health care professionals, and mental health hotlines) and a general medical sector (general physicians, family physicians, physician specialists, nurses, occupational therapists, and other health care professionals). The term *nonpsychiatrist* refers to psychologists, counselors, and social work-

ers seen in a mental health care setting. The non–health care sector included human services (religious and spiritual advisers and counselors and social workers seen in non–mental health settings) and complementary-alternative medicine (herbalists, chiropractors, spiritualists, self-help groups, and Internet support groups). Twelve-month service use was defined as making at least 1 visit to a service provider within the 12 months before the interview.

Minimally Adequate Treatment

Minimally adequate treatment was defined separately for each 12-month disorder in a manner consistent with that used in the NCS-R,[24] as reporting either (1) at least 4 visits with any physician and receiving appropriate pharmacotherapy for at least 60 days during the past year or (2) at least 8 psychotherapy visits, each averaging 30 minutes or more, with any other health care professional within the health care or human services treatment sectors. Complementary-alternative medicine was considered adequate only for substance disorders and only if respondents attended at least 8 self-help sessions of any duration during the past year. Appropriate pharmacotherapy for disorders included antidepressants for depression and dysthymia, mood stabilizers or antipsychotics for bipolar disorders, antidepressants or benzodiazepines for anxiety disorders, and disulfiram for substance disorders.

Sociodemographic Correlates

Sociodemographic correlates include race/ethnicity (African American or Caribbean black), age (18-29, 30-44, 45-59, or ≥60 years), sex, highest level of education attained (0-11, 12, 13-15, or ≥16 years), marital status (married or cohabiting, previously married, or never married), household income (<$18 000, $18 000-$31 999, $32 000-54 999, or ≥$55 000), employment status (working vs not working), and whether the respondent had health insurance.

ANALYSIS STRATEGY

Cross-tabulations are presented to illustrate ethnic differences in 12-month service use. The Rao-Scott χ^2 represents a complex design-corrected measure of association. Logistic regression was used to examine the main effect of ethnicity on service use, adjusted for demographic variables and having any 12-month *DSM-IV* disorder. To account for multiple comparisons, χ^2 values were estimated for the overall type III effects of each categorical predictor variable within the contexts of the multivariate models. Standard errors and 95% confidence intervals reported in this article reflect adjustment for the sampling design. Unless otherwise stated, $P<.05$ on a 2-sided design–based test of significance represented the cutoff for assessing statistical significance. All analyses were conducted using SAS statistical software, version 9.13, which uses the Taylor expansion approximation technique for calculating the complex design–based estimates of variance.[25]

Since the NSAL used a multistage sample design, involving both clustering and stratification, specialized statistical techniques to account for the complexity of the design and associated standard errors were used. Standard errors calculated on the basis of a simple random sample would not reflect the true variation of estimates in the NSAL, resulting in an increased likelihood of type I errors (declaring a result to be significant when it is not). Because standard errors adjusted for complex design are usually larger than nonadjusted standard errors, differences may appear to be large yet not statistically significant. Furthermore, the Caribbean black sample is significantly more clustered than the African American sample, so the standard errors for the Caribbean black sample are usually higher than those for the African American sample when correctly estimated.

RESULTS

Table 1 focuses on the demographic correlates of 12-month service use in response to problems with emotions, nerves, mental health, or use of alcohol or other drugs in the past 12 months. Overall, 442 (10.1%) of the NSAL respondents used some form of services for mental heath care in the past year. African Americans and Caribbean blacks differ in the use of nonhealth services (132 [4.1%] and 40 [1.8%], respectively), with African Americans more likely to use help. The youngest and oldest age groups are least likely to obtain any services in response to mental health problems. Women are more likely than men, those not married are more likely than married individuals, and those working are more likely than those not working to use any services.

Table 1 also gives the demographic correlates of use for African Americans and Caribbean blacks. Among African Americans, age is related to the use of all service sectors but only to the use of psychiatrists for Caribbean blacks. Among African Americans but not Caribbean blacks, women are more likely than men to contact general medical care, nonhealth sectors, or any services. Both African Americans and Caribbean black respondents with 16 or more years of education have the highest use of nonpsychiatric mental health professionals. Among African Americans, previously married respondents report more use of services than those who are currently married or living with their partner. Employed African Americans are more likely than those not working to use all service sectors except for nonpsychiatric and nonhealth sectors. Insured Caribbean blacks are more likely than uninsured individuals to use psychiatrists or all services combined. Insurance coverage has no influence on the use of services by African Americans.

Table 2 indicates use of services by sex and ethnicity by level of mental disorder severity. Although only 179 respondents (4.8%) without mild, moderate, or serious mental disorder use any services, 84 respondents (48.8%) with serious disorder use any services. A similar relationship is seen for each service sector. Examining those with serious disorders, similar percentages of both African Americans (50 [39.1%]) and Caribbean blacks (17 [41.5%]) obtain help from any mental health service. Within the mental health services sector, however, a much higher percentage of African Americans compared with Caribbean blacks (42 [34.4%] and 14 [18.6%], respectively) seek help from psychiatrists. The reverse occurs for the use of nonpsychiatrist mental health professionals; 10 Caribbean blacks (37.5%) and 27 African Americans (19.4%) obtained help from these types of professionals for serious disorders. Roughly comparable percentages of both ethnic groups with serious disorders seek help from the general medical care sector. Among African Americans with serious disorders, a higher percentage of men than women use both psychiatrists (19 [43.7%] vs 23 [27.9%]) and nonpsychiatrist mental health thera-

Table 1. Prevalence of 12-Month Mental Health Service Use in Separate Sectors by Demographic Characteristics and Ethnicity*

	Any Service Use			General Medical†		Psychiatrist		Nonpsychiatrist‡		Nonhealth Service§		No. of Respondents‖	
	Total	AA	CB	AA	CB	AA	CB	AA	CB	AA	CB	AA	CB
All cases	10.1 (0.6)	10.1 (0.7)	10.0 (2.0)	4.3 (0.3)	3.7 (1.5)	3.4 (0.3)	2.6 (1.0)	3.7 (0.5)	4.4 (1.7)	4.1 (0.5)	1.8 (0.5)	3412	1579
χ^2_1		<0.01	<0.01	0.1	0.1	0.4	0.4	0.2	0.2	7.2¶	7.2¶		
Age, y													
18-29	7.3 (1.2)	7.1 (1.2)	9.7 (4.9)	1.9 (0.6)	0.6 (0.4)	1.9 (0.5)	2.7 (1.0)	3.2 (0.8)	5.9 (4.4)	3.8 (0.8)	1.6 (0.7)	788	425
30-44	12.6 (1.1)	12.5 (1.1)	13.3 (3.2)	4.6 (0.6)	5.3 (2.9)	5.0 (0.9)	4.4 (2.3)	4.2 (0.8)	4.2 (2.0)	5.2 (0.9)	2.7 (1.2)	1222	591
45-59	12.5 (1.3)	12.9 (1.3)	6.1 (1.6)	6.6 (1.0)	3.8 (1.5)	4.0 (0.7)	1.1 (0.5)	5.0 (1.0)	0.8 (0.4)	4.5 (0.8)	1.4 (0.5)	813	344
≥60	5.5 (1.3)	5.4 (1.3)	7.5 (5.4)	3.8 (1.0)	6.6 (5.5)	1.4 (0.7)	0.4 (0.2)	1.3 (0.6)	6.4 (5.5)	1.7 (0.7)	0.4 (0.3)	589	219
χ^2_3	23.1#	23.5#	1.8	15.9**	5.0	14.2¶	11.4¶	8.5**	1.9	9.5**	5.5		
Sex													
Male	7.8 (0.8)	7.4 (0.9)	11.3 (3.2)	2.9 (0.5)	4.2 (2.2)	2.8 (0.6)	2.0 (1.1)	3.4 (0.7)	5.3 (3.4)	3.2 (0.6)	2.1 (0.9)	1208	630
Female	12.0 (0.7)	12.2 (0.8)	8.5 (1.6)	5.4 (0.5)	3.2 (1.2)	3.9 (0.4)	3.3 (1.4)	3.8 (0.6)	3.5 (1.4)	4.9 (0.7)	1.5 (0.3)	2204	949
χ^2_1	18.4#	20.8#	1.0	11.1#	0.4	2.4	0.6	0.2	0.3	6.1**	0.5		
Education, y													
0-11	9.5 (1.0)	9.5 (1.1)	8.8 (3.2)	4.9 (0.9)	6.3 (3.4)	2.4 (0.6)	2.0 (1.2)	2.6 (0.6)	0.5 (0.2)	3.8 (0.9)	0.7 (0.5)	877	292
12	8.9 (0.9)	8.9 (0.9)	7.9 (2.8)	3.2 (0.5)	1.3 (0.3)	3.1 (0.6)	5.6 (2.7)	3.2 (0.6)	3.6 (2.3)	3.6 (0.7)	0.8 (0.4)	1283	467
13-15	10.6 (1.1)	11.0 (1.2)	5.9 (1.6)	4.6 (0.9)	1.3 (0.4)	3.5 (0.6)	1.3 (0.5)	3.8 (0.9)	2.4 (1.0)	4.4 (0.9)	2.5 (1.5)	777	430
≥16	13.0 (1.7)	12.5 (1.6)	17.6 (7.1)	4.9 (1.1)	7.4 (6.4)	5.1 (1.3)	0.7 (0.5)	5.9 (1.4)	11.5 (5.7)	5.0 (1.1)	2.7 (0.8)	461	381
χ^2_3	7.3	5.5	6.1	3.5	5.5	5.1	17.0#	8.5**	19.7#	1.6	6.5		
Marital status													
Married or partner	8.9 (0.7)	8.9 (0.7)	9.8 (2.9)	4.0 (0.6)	3.3 (1.7)	2.9 (0.5)	1.3 (1.1)	3.3 (0.5)	5.0 (2.9)	3.4 (0.7)	2.1 (0.9)	1173	681
Previously married	12.0 (1.2)	12.3 (1.2)	4.9 (1.7)	5.4 (0.8)	1.7 (0.7)	3.8 (0.7)	1.8 (0.6)	4.0 (0.7)	2.7 (1.4)	5.7 (1.0)	1.0 (0.5)	1106	370
Never married	10.2 (1.0)	10.0 (1.1)	13.3 (3.0)	3.7 (0.5)	5.7 (2.9)	3.8 (0.7)	5.3 (2.3)	3.9 (0.8)	4.4 (2.3)	3.8 (0.9)	1.7 (0.6)	1125	525
χ^2_2	6.3**	7.8**	4.6	3.4	3.1	1.3	5.7	0.9	0.5	4.7	1.1		
Income, $													
<18 000	12.5 (1.3)	12.6 (1.3)	11.5 (4.0)	6.0 (0.7)	6.3 (3.8)	4.7 (0.8)	2.9 (1.1)	4.1 (0.8)	3.1 (1.3)	3.7 (0.8)	1.5 (0.6)	1268	357
18 000-31 999	9.3 (1.2)	9.6 (1.3)	6.2 (2.8)	3.4 (0.9)	1.1 (0.5)	2.9 (0.6)	4.8 (2.7)	3.6 (0.7)	3.7 (2.7)	4.9 (1.1)	0.8 (0.4)	865	426
32 000-54 999	8.5 (1.2)	8.6 (1.3)	8.0 (3.0)	3.4 (1.0)	5.0 (2.8)	1.9 (0.7)	0.6 (0.2)	2.5 (0.7)	2.0 (1.2)	3.8 (0.9)	1.2 (0.4)	740	380
≥55 000	9.0 (1.4)	8.6 (1.5)	12.8 (4.3)	3.3 (0.8)	3.3 (2.7)	3.4 (1.0)	1.9 (1.7)	3.8 (1.0)	7.7 (4.4)	3.8 (0.9)	2.8 (1.6)	527	411
χ^2_3	6.6	6.5	2.5	6.1	2.9	6.9	4.6	2.3	4.1	1.3	4.5		
Employment													
Working	12.2 (1.2)	9.1 (0.9)	9.8 (2.8)	3.5 (0.4)	3.1 (2.0)	2.5 (0.4)	2.7 (1.3)	3.6 (0.7)	5.0 (2.1)	4.2 (0.6)	1.8 (0.6)	2240	1154
Not working	9.1 (0.8)	12.3 (1.2)	10.4 (3.4)	5.9 (0.7)	5.7 (3.4)	5.3 (0.8)	2.5 (0.8)	3.8 (0.6)	2.5 (1.1)	4.0 (0.7)	1.8 (0.7)	1171	424
χ^2_1	4.3**	4.4**	<0.01	7.2¶	0.4	11.8#	<0.01	0.1	3.5	0.1	<0.01		
Insurance													
No	8.6 (1.6)	9.1 (1.8)	3.0 (1.0)	3.5 (1.1)	1.6 (0.7)	2.4 (0.8)	0.9 (0.5)	3.1 (1.0)	0.0 (0.0)	5.2 (1.4)	1.1 (0.6)	624	358
Yes	10.4 (0.6)	10.4 (0.6)	11.7 (2.3)	4.4 (0.3)	4.3 (1.9)	3.7 (0.4)	3.1 (1.2)	3.8 (0.5)	5.5 (2.2)	3.9 (0.5)	1.9 (0.6)	2788	1221
χ^2_1	1.2	0.5	31.4#	0.5	3.2	1.2	3.9**	0.4	NA	1.1	0.9		

Abbreviations: AA, African Americans; CB, Caribbean blacks; NA, the number of respondents was insufficient to complete the analysis.
*Data are reported as percentage (standard error) unless otherwise indicated.
†Defined as general physicians, family physicians, nurses, occupational therapists, and other health care professionals.
‡Defined as psychologists, counselors, and social workers seen in mental health care specialty settings, other mental health care professionals, and mental health hotlines.
§Defined as religious and spiritual advisers, counselors, and social workers seen in nonmental health settings and complementary-alternative medicine (herbalists, chiropractors, spiritualists, self-help groups, and Internet support groups).
‖Unweighted number of respondents.
¶Significant at $P = .01$.
#Significant at $P = .001$, 2-sided test.
**Significant at $P = .05$.

pists (10 [24.8%] vs 17 [15.7%]). On the other hand, a higher percentage of women than men with serious mental illness seek the help of general medical care professionals. For Caribbean blacks, the opposite occurs; women use more mental health services than men, but men use more medical services than women.

Table 3 presents service sector use for each disorder separately for African Americans and Caribbean blacks. Use of services was much higher among those who met criteria for a 12-month *DSM-IV* disorder than among those who did not; 238 (31.9%) of those with a disorder obtained some type of help, whereas only 204 (5.4%) of those without a disorder did so. The use of any services for any mood disorder is higher for African Americans: 92 (43.5%) compared with 30 Caribbean blacks (22.9%). The same is true for the use of psychiatrists (37 [17.8%] and 11 [4.0%], respectively) and general medical care (45 [21.0%] vs 6 [12.5%], respectively). A sizeable percentage of Caribbean blacks, however, use psychiatrists for bipolar disorder (6 [16.1%]), which is much more than for dysthymia (1 [1.1%]) and major depression (9 [4.1%]). Comparatively large percentages of African Americans use psychiatrists for major depression (32 [18.6%]), dysthymia (11 [20.9%]), and bipolar disorder (10 [20.7%]). Similar differences are found between African Americans and Caribbean blacks in the use of psychiatrists for any anxiety disorder (44 [14.4%] vs 13 [4.0%]), but again, not for nonpsychiatric mental health professionals, from

Table 2. Prevalence of 12-Month Mental Health Service Use by Disorder Severity, Ethnicity, and Sex*

Variable	Any Services	Any Health	General Medical	Any Mental Health	Psychiatrist	Nonpsychiatrist	Any Nonhealth	No. of Respondents†
		Any Health		Any Mental Health				
None	4.8 (0.5)	3.5 (0.4)	1.8 (0.3)	2.1 (0.3)	1.0 (0.2)	1.3 (0.3)	1.9 (0.4)	4101
African American	4.8 (0.5)	3.6 (0.4)	1.8 (0.3)	2.2 (0.3)	1.0 (0.2)	1.4 (0.3)	1.9 (0.4)	2775
Male	3.3 (0.7)	2.6 (0.6)	1.1 (0.4)	1.7 (0.4)	0.7 (0.3)	1.5 (0.4)	1.3 (0.4)	1030
Female	6.1 (0.7)	4.4 (0.6)	2.4 (0.4)	2.5 (0.5)	1.3 (0.4)	1.4 (0.4)	2.4 (0.5)	1745
Caribbean black	4.4 (1.2)	3.1 (1.0)	1.7 (0.8)	1.5 (0.7)	1.2 (0.7)	0.3 (0.1)	1.5 (0.6)	1321
Male	4.7 (1.6)	3.1 (1.4)	0.6 (0.4)	2.5 (1.4)	2.3 (1.4)	0.2 (0.1)	1.8 (1.0)	538
Female	4.1 (1.4)	3.2 (1.4)	2.7 (1.4)	0.5 (0.2)	0.2 (0.1)	0.4 (0.2)	1.2 (0.3)	783
Mild	18.1 (3.3)	12.9 (3.0)	7.6 (2.3)	7.5 (2.2)	3.5 (1.4)	5.8 (2.0)	7.9 (2.6)	285
African American	18.3 (3.4)	12.5 (3.1)	7.0 (2.3)	6.7 (2.2)	3.8 (1.6)	4.9 (1.9)	8.7 (2.9)	197
Male	14.6 (5.6)	7.1 (3.7)	3.4 (2.4)	3.7 (2.9)	0.9 (0.9)	2.9 (2.8)	9.4 (4.9)	56
Female	20.3 (4.1)	15.5 (4.4)	9.0 (3.6)	8.4 (2.7)	5.5 (2.2)	6.1 (2.4)	8.3 (2.7)	141
Caribbean black	17.2 (11.0)	16.3 (10.9)	13.0 (10.4)	14.0 (10.5)	1.0 (0.8)	13.2 (10.4)	1.2 (0.7)	88
Male	14.5 (14.6)	14.1 (14.6)	14.1 (14.6)	14.1 (14.6)	0.0 (0.0)	14.1 (14.6)	0.4 (0.4)	33
Female	23.2 (8.8)	21.5 (8.8)	10.4 (4.9)	13.8 (8.1)	3.4 (2.6)	11.0 (7.9)	3.1 (2.0)	55
Moderate	37.4 (3.4)	29.7 (2.9)	19.0 (2.6)	21.5 (3.1)	11.1 (1.9)	16.5 (2.9)	14.2 (2.5)	416
African American	38.1 (3.6)	30.3 (3.0)	19.9 (2.8)	21.7 (3.3)	11.3 (2.0)	16.8 (3.1)	14.5 (2.6)	298
Male	32.9 (7.3)	27.9 (6.7)	21.4 (6.2)	20.2 (6.9)	8.0 (4.1)	19.2 (6.9)	13.4 (5.3)	76
Female	40.3 (3.1)	31.4 (3.3)	19.2 (3.1)	22.4 (3.3)	12.7 (2.1)	15.7 (3.3)	15.0 (2.6)	222
Caribbean black	24.1 (5.5)	17.8 (5.1)	1.8 (0.9)	17.2 (5.1)	7.7 (4.1)	12.4 (3.9)	7.9 (2.9)	123
Male	28.6 (10.3)	15.6 (9.4)	1.0 (1.0)	15.6 (9.4)	3.9 (3.0)	15.6 (9.4)	15.1 (7.7)	43
Female	21.3 (7.2)	19.1 (7.0)	2.3 (1.3)	18.1 (6.9)	10.0 (6.2)	10.4 (2.9)	3.6 (1.7)	80
Serious	48.8 (4.2)	45.6 (4.2)	18.3 (3.7)	39.3 (4.4)	32.8 (4.2)	21.3 (3.5)	18.6 (3.0)	189
African American	47.7 (4.3)	44.3 (4.3)	18.1 (3.9)	39.1 (4.5)	34.4 (4.4)	19.4 (3.4)	20.7 (3.3)	142
Male	53.9 (6.9)	52.1 (6.9)	14.6 (6.4)	50.0 (6.7)	43.7 (7.9)	24.8 (6.7)	21.0 (6.4)	46
Female	43.5 (7.2)	38.8 (7.1)	20.6 (6.1)	31.5 (6.4)	27.9 (6.4)	15.7 (3.9)	20.4 (4.9)	96
Caribbean black	58.0 (15.9)	57.8 (15.9)	19.6 (13.8)	41.5 (18.3)	18.6 (9.9)	37.5 (17.0)	0.4 (0.3)	47
Male	60.6 (22.1)	60.6 (22.1)	26.2 (20.4)	35.6 (25.8)	1.2 (1.3)	35.6 (25.8)	0.0 (0.0)	16
Female	53.2 (13.3)	52.6 (13.4)	7.3 (4.5)	52.6 (13.4)	51.0 (13.9)	41.0 (16.7)	1.1 (0.9)	31
Total sample	10.1 (0.6)	8.0 (0.5)	4.2 (0.3)	5.6 (0.5)	3.4 (0.3)	3.7 (0.5)	4.0 (0.5)	4991

*Data are reported as percentage (standard error) unless otherwise indicated. Any health, general medical, any mental health, and any nonhealth professionals are defined in the Table 1 footnotes. Severity was assessed using measures of role impairment from the Sheehan Disability Scale, 12-month suicidal ideation or attempts, nonaffective psychosis, or meeting 12-month criteria for at least 1 disorder.

†Unweighted number of respondents at each level of severity by ethnicity and sex.

whom 41 African Americans (14.3%) and 12 Caribbean blacks (16.4%) received care. African Americans and Caribbean blacks are more similar in the use of any health services for any anxiety disorder (87 [28.6%] and 28 [29.4%], respectively) but not for any mood disorder (73 [34.6%] and 25 [20.4%], respectively). In general, Caribbean blacks are more likely to obtain mental health care from nonpsychiatrist mental health professionals than from psychiatrists for each disorder type. These differences are not present for African Americans.

Table 4 gives the results of multivariate logistic regression analyses that estimated the effect of ethnicity and other demographic measures to each service use sector, adjusting for any 12-month mental disorder. Ethnicity is not related to specialty mental health service use. African Americans, however, are 2.7 times more likely than Caribbean blacks to use non–health care services. Table 4 also indicates that the use of any services is associated with being 30 to 44 and 45 to 59 years old, female, and insured and having 16 or more years of education. Age is similarly related to the use of any mental health services. Those 18 to 29 years old are significantly less likely than the older age groups to use general medical care for treatment of mental problems. Women are more likely than men to use general medical care and any non–health care services. Those with insurance are more likely than the uninsured to use a psychiatrist or any health services. Previously married respondents are more likely than the married and never married to use non–health care services. Those with the highest level of education were more likely to use all health-related services sectors than those with lower educational levels. Having a disorder increases significantly the use of all service sectors.

Table 5 indicates the proportion of African Americans and Caribbean blacks who are receiving minimally adequate treatment by service sectors. Overall, 63 (26.2%) received minimally adequate treatment, but the percentages varied noticeably in the service sector, ranging from 18 (10.5%) in the general medical sector to 56 (30.0%) for any mental health care services (41 [29.3%] to psychiatrists and 28 [28.5%] to nonpsychiatric mental health care professionals). The percentages of patients who are receiving minimally adequate treatment are higher for Caribbean blacks than for African Americans, but large standard errors make conclusions about Caribbean blacks problematic.

Table 3. Prevalence of 12-Month Mental Health Service Use by 12-Month *DSM-IV* World Mental Health Version of the Composite International Diagnostic Interview Disorder by Ethnicity*

		Any Health						
				Any Mental Health				
	Any Services	Any Health	General Medical	Any Mental Health	Psychiatrist	Nonpsychiatrist	Any Nonhealth	No. of Respondents†
Total sample								
Any disorder	31.9 (2.0)	25.7 (1.9)	14.8 (1.5)	18.9 (2.0)	11.7 (1.4)	13.2 (1.8)	12.7 (1.4)	869
No disorder	5.4 (0.5)	4.2 (0.4)	2.0 (0.3)	2.7 (0.3)	1.6 (0.3)	1.7 (0.3)	2.1 (0.4)	4122
AA sample								
Anxiety disorder								
Panic disorder	41.3 (7.2)	36.0 (7.1)	22.4 (5.8)	24.3 (5.9)	21.2 (5.8)	18.3 (5.8)	15.4 (5.7)	76
Agoraphobia without panic	30.9 (6.9)	13.9 (6.6)	9.5 (5.4)	13.9 (6.6)	8.9 (4.9)	11.9 (6.5)	18.5 (5.9)	46
Social phobia	37.6 (5.4)	26.8 (5.0)	16.8 (3.3)	21.4 (5.4)	13.5 (3.5)	17.1 (5.3)	19.7 (3.5)	140
GAD	42.8 (6.8)	35.4 (6.9)	19.8 (5.7)	31.0 (6.1)	21.8 (4.6)	19.9 (6.0)	21.4 (5.8)	83
OCD	41.1 (10.7)	24.1 (9.8)	19.3 (9.9)	24.1 (9.8)	24.1 (9.8)	11.9 (9.1)	28.8 (11.9)	18
PTSD	36.7 (6.2)	29.3 (5.9)	21.3 (5.6)	20.1 (4.9)	13.3 (3.4)	14.3 (4.8)	14.9 (3.8)	134
Any anxiety disorder	35.8 (3.0)	28.6 (2.5)	17.6 (2.2)	20.5 (2.9)	14.4 (2.1)	14.3 (2.7)	15.2 (2.1)	356
Mood disorder								
MDD without hierarchy	45.0 (3.3)	35.8 (3.0)	21.8 (3.5)	26.1 (3.2)	18.6 (2.7)	17.8 (3.1)	20.4 (3.2)	197
Dysthymia	46.9 (7.8)	38.6 (7.1)	19.5 (5.5)	26.0 (7.1)	20.9 (7.5)	18.1 (6.1)	15.2 (5.5)	70
Bipolar I-II disorder‡	40.0 (7.0)	34.0 (6.9)	20.2 (5.0)	27.0 (7.4)	20.7 (7.6)	21.2 (6.8)	20.5 (5.5)	75
Any mood disorder	43.5 (3.2)	34.6 (3.1)	21.0 (2.8)	25.7 (3.4)	17.8 (2.9)	17.4 (3.3)	20.5 (2.8)	245
Substance disorder								
Alcohol abuse	26.2 (5.7)	19.7 (5.2)	5.9 (2.0)	18.3 (5.3)	12.8 (5.3)	10.9 (4.3)	10.0 (3.6)	77
Alcohol dependence	38.2 (9.3)	35.9 (9.5)	6.9 (2.5)	35.9 (9.5)	23.0 (9.4)	22.4 (7.8)	9.5 (4.1)	42
Drug abuse	39.8 (9.2)	37.4 (8.4)	10.2 (5.1)	37.4 (8.4)	29.5 (8.2)	24.6 (7.0)	15.6 (6.4)	40
Drug dependence	37.2 (12.9)	37.2 (12.9)	11.1 (5.3)	37.2 (12.9)	23.3 (11.8)	20.0 (9.5)	10.3 (6.4)	20
Any substance disorder	29.7 (5.6)	24.9 (4.9)	7.2 (2.1)	23.8 (5.0)	17.6 (4.4)	15.8 (4.1)	10.8 (3.2)	103
Any disorder	32.0 (2.1)	25.5 (1.9)	15.1 (1.6)	18.7 (2.0)	12.2 (1.4)	12.6 (1.8)	13.6 (1.5)	619
No disorder	5.4 (0.6)	4.3 (0.4)	2.0 (0.3)	2.8 (0.3)	1.5 (0.3)	1.7 (0.3)	2.1 (0.4)	2793
Total AA sample	10.1 (0.7)	8.0 (0.5)	4.3 (0.3)	5.6 (0.5)	3.4 (0.3)	3.7 (0.5)	4.1 (0.5)	3412
CB sample								
Anxiety disorder								
Panic disorder	44.1 (6.1)	41.5 (6.9)	36.5 (9.9)	7.7 (7.5)	7.7 (7.5)	0.0 (0.0)	3.4 (3.1)	25
Agoraphobia without panic	7.1 (6.8)	7.1 (6.8)	7.1 (6.8)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	12
Social phobia	30.8 (17.4)	29.6 (17.3)	22.5 (17.2)	8.9 (6.2)	2.8 (1.6)	7.0 (5.7)	1.6 (1.1)	58
GAD	11.3 (6.0)	10.0 (5.7)	5.8 (4.4)	5.1 (2.9)	1.7 (1.2)	5.1 (2.9)	2.1 (1.6)	27
OCD	51.6 (15.2)	51.6 (15.2)	9.2 (8.2)	42.4 (16.7)	23.3 (16.4)	42.4 (16.7)	0.0 (0.0)	11
PTSD	52.2 (19.0)	50.9 (19.2)	21.7 (16.6)	30.3 (21.8)	4.1 (2.0)	27.4 (19.9)	1.3 (0.9)	41
Any anxiety disorder	31.0 (11.9)	29.4 (11.9)	12.2 (7.1)	18.8 (12.2)	4.0 (1.5)	16.4 (11.2)	2.1 (0.9)	133
Mood disorder								
MDD without hierarchy	24.3 (12.1)	21.5 (11.9)	14.0 (11.5)	20.1 (11.8)	4.1 (2.4)	16.9 (11.6)	3.6 (2.1)	79
Dysthymia	3.5 (3.4)	2.0 (2.1)	0.9 (1.1)	1.1 (1.4)	1.1 (1.4)	1.1 (1.4)	1.6 (1.7)	12
Bipolar I-II disorder‡	25.2 (11.2)	24.3 (11.1)	2.7 (2.7)	24.3 (11.1)	16.1 (10.0)	9.2 (5.0)	4.1 (2.9)	30
Any mood disorder	22.9 (10.8)	20.4 (10.6)	12.5 (10.3)	19.2 (10.5)	4.0 (2.2)	16.0 (10.4)	3.6 (1.9)	97
Any substance disorder§	38.8 (4.8)	38.8 (4.8)	29.7 (7.6)	11.3 (10.9)	2.8 (2.9)	10.6 (10.5)	0.6 (0.7)	23
Any disorder	29.9 (8.5)	27.4 (8.4)	11.5 (5.3)	21.4 (9.3)	6.3 (3.5)	19.6 (8.7)	3.2 (1.1)	250
No disorder	4.8 (1.3)	3.6 (1.1)	1.8 (0.8)	2.0 (1.0)	1.7 (0.9)	0.5 (0.2)	1.4 (0.6)	1329
Total CB sample	10.0 (2.0)	8.5 (2.0)	3.7 (1.5)	5.9 (2.0)	2.6 (1.0)	4.4 (1.7)	1.8 (0.5)	1579

Abbreviations: AA, African Americans; CB, Caribbean blacks; GAD, generalized anxiety disorder; MDD, major depressive disorder; OCD, obsessive-compulsive disorder; PTSD, posttraumatic stress disorder.

*Data are reported as percentage (standard error) unless otherwise indicated. Any health, general medical, any mental health, and any nonhealth professionals are defined in Table 1 footnotes.

†Unweighted number of respondents meeting criteria for 12-month disorder who responded to services questions.

‡Bipolar I-II disorder represents proportion of respondents who had bipolar I, bipolar II, or subthreshold bipolar disorders.

§Number of Caribbean black respondents with alcohol or other drug abuse or dependence was too small to report separately.

COMMENT

The NSAL has several strengths. First, the NSAL assesses the presence of mental disorders, thereby addressing a major limitation of data gathered in previous mental health surveys that focused on black Americans. Second, the study includes a large representative sample that permits the identification of mental health differences among groups often lumped together within the black American population. These types of analyses are critical because of changing immigration patterns and diverging socioeconomic conditions that have occurred within the

Table 4. Multivariate Logistic Regressions of Type of Service Use on Ethnicity, Controlling for Sociodemographic Variables*

Variable	Any Health			Any Mental Health			Any Nonhealth
	Any Services	Any Health	General Medical	Any Mental Health	Psychiatrist	Nonpsychiatrist	
Ethnicity							
African American	1.0 (0.6-1.7)	0.9 (0.5-1.6)	1.0 (0.4-2.4)	1.0 (0.5-2.0)	1.3 (0.6-3.0)	0.9 (0.4-2.0)	2.7 (1.4-5.3)
Caribbean black†	1.0	1.0	1.0	1.0	1.0	1.0	1.0
χ^2_1‡	0.0	0.2	0.0	0.0	0.4	0.1	8.6§
Sex							
Male†	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Female	1.4 (1.1-1.7)	1.2 (0.9-1.7)	1.5 (1.0-2.2)	1.0 (0.7-1.6)	1.2 (0.7-1.9)	0.9 (0.5-1.4)	1.4 (1.0-2.1)
χ^2_1‡	6.7§	1.5	4.6‖	0.0	0.4	0.3	4.1‖
Age, y							
18-29	1.1 (0.5-2.2)	0.7 (0.3-1.6)	0.3 (0.1-0.7)	1.5 (0.6-3.7)	1.3 (0.4-3.7)	1.6 (0.6-4.4)	2.2 (0.7-6.9)
30-44	2.4 (1.3-4.5)	2.0 (1.0-4.2)	0.9 (0.4-2.2)	3.1 (1.3-7.3)	4.3 (1.3-13.7)	2.0 (0.8-5.3)	2.9 (1.3-6.7)
45-59	2.3 (1.3-4.2)	2.1 (1.0-4.1)	1.4 (0.6-3.2)	2.9 (1.2-6.8)	3.1 (0.9-9.9)	2.4 (0.9-6.2)	2.2 (0.9-5.6)
≥60†	1.0	1.0	1.0	1.0	1.0	1.0	1.0
χ^2_3‡	23.3¶	20.1¶	17.2¶	16.7¶	15.4§	3.7	9.6‖
Marital status							
Married or partner†	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Previously married	1.1 (0.9-1.5)	0.9 (0.7-1.3)	0.8 (0.5-1.4)	1.1 (0.7-1.6)	1.1 (0.7-2.0)	1.1 (0.6-1.8)	1.9 (1.2-2.8)
Never married	1.1 (0.8-1.7)	1.2 (0.7-2.0)	1.2 (0.6-2.2)	1.3 (0.7-2.3)	1.6 (0.8-3.1)	1.1 (0.6-2.1)	1.0 (0.5-2.1)
χ^2_2‡	0.9	1.1	1.3	0.7	1.6	0.1	8.4‖
Income, $							
<18 000	1.2 (0.8-2.0)	1.6 (0.9-2.7)	1.4 (0.7-3.1)	1.3 (0.7-2.6)	1.0 (0.5-2.4)	1.2 (0.5-2.9)	0.6 (0.3-1.2)
18 000-31 999	1.0 (0.6-1.9)	1.0 (0.5-2.0)	1.0 (0.4-2.5)	1.0 (0.4-2.1)	0.9 (0.3-2.3)	1.1 (0.5-2.4)	0.9 (0.5-1.7)
32 000-54 999	0.9 (0.6-1.5)	1.0 (0.5-1.8)	1.1 (0.5-2.5)	0.7 (0.4-1.2)	0.5 (0.2-1.3)	0.6 (0.3-1.1)	0.8 (0.5-1.4)
≥55 000†	1.0	1.0	1.0	1.0	1.0	1.0	1.0
χ^2_3‡	1.8	5.7	2.0	3.8	2.9	4.1	3.1
Education, y							
0-11	0.5 (0.3-0.7)	0.4 (0.2-0.6)	0.6 (0.3-1.2)	0.2 (0.1-0.4)	0.3 (0.1-0.6)	0.2 (0.1-0.5)	0.7 (0.4-1.1)
12	0.6 (0.4-0.9)	0.5 (0.3-0.8)	0.6 (0.3-1.0)	0.5 (0.3-0.8)	0.6 (0.3-1.2)	0.4 (0.3-0.7)	0.7 (0.4-1.2)
13-15	0.7 (0.5-1.1)	0.6 (0.4-1.0)	0.9 (0.5-1.7)	0.6 (0.4-0.9)	0.7 (0.4-1.1)	0.5 (0.7-0.9)	0.8 (0.4-1.3)
≥16†	1.0	1.0	1.0	1.0	1.0	1.0	1.0
χ^2_3‡	14.2§	18.7¶	5.1	22.7¶	12.3§	18.8¶	3.0
Insurance							
No†	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Yes	1.6 (1.1-2.3)	1.7 (1.1-2.7)	1.6 (0.8-3.0)	1.8 (1.0-3.3)	2.3 (1.1-5.2)	1.7 (0.9-3.3)	0.8 (0.5-1.5)
χ^2_1‡	4.9‖	4.8‖	1.6	3.4	4.4‖	2.5	0.4
Employment							
Working†	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Not working	1.6 (1.1-2.3)	1.7 (1.1-2.7)	1.5 (0.9-2.7)	1.9 (1.2-2.9)	2.9 (1.7-4.9)	1.2 (0.7-2.1)	1.1 (0.7-1.8)
χ^2_1‡	4.7‖	6.0‖	2.3	7.2§	15.3¶	0.3	0.3
12-Month disorder							
Yes	8.1 (61-10.7)	7.9 (5.9-10.7)	8.7 (5.4-13.9)	8.5 (5.9-12.1)	8.0 (5.0-12.6)	9.1 (5.9-14.1)	6.3 (4.4-9.1)
No†	1.0	1.0	1.0	1.0	1.0	1.0	1.0
χ^2_1‡	218.2¶	178.2¶	81.0¶	138.2¶	79.0¶	98.1¶	101.2¶

*Data are reported as odds ratio (95% confidence interval). Any health, general medical, any mental health, and any nonhealth professionals are defined in the Table 1 footnotes.
†Reference group.
‡χ^2 values were estimated for the overall type III effects of each categorical predictor variable within the contexts of the multivariate models.
§Significant at $P = .01$.
||Significant at $P = .05$.
¶Significant at $P = .001$; 2-sided test.

black population in the last 25 years. Third, our study used novel geographical screening procedures that ensured that every African American household in the continental United States had a known probability of selection.[1,26,27] In addition, new methods were developed to ascertain the influences of structurally missing members of black households (eg, young men in prisons) on sampling and disorder estimates.[1] Fourth, all respondents were selected from the targeted geographic segments in proportion to the African American and Caribbean black population, making this the first national sample of people of different racial and ethnic groups who live in the same contexts and geographical areas (high- and low-density, urban and rural areas).

In addition to these strengths, a few limitations should be noted. First, the World Mental Health Composite In-

Table 5. Respondents Who Received at Least Minimally Adequate Treatment in Service Sectors for Any 12-Month *DSM-IV* Composite International Diagnostic Interview Disorder*

		Any Health					
				Any Mental Health			
Variable	Any Services	Any Health	General Medical	Any Mental Health	Psychiatrist	Nonpsychiatrist	Human Services†
African Americans	19.3 (2.9) [n = 174]‡	21.7 (3.8) [n = 138]	10.7 (3.2) [n = 83]	26.9 (4.9) [n = 100]	29.3 (6.3) [n = 67]	24.0 (6.0) [n = 62]	10.2 (4.6) [n = 52]
Caribbean blacks	44.8 (15.9) [n = 64]	48.9 (17.6) [n = 50]	7.5 (5.3) [n = 20]	61.4 (17.5) [n = 40]	31.0 (17.0) [n = 23]	61.2 (19.0) [n = 27]	4.0 (4.1) [n = 14]
Total sample	21.2 (3.1) [n = 238]	24.0 (3.7) [n = 188]	10.5 (3.1) [n = 103]	30.0 (5.1) [n = 140]	29.3 (6.0) [n = 90]	28.5 (6.4) [n = 89]	10.1 (4.5) [n = 66]

*Data are reported as percentage (standard error). Any health, general medical, and any mental health professionals are defined in the Table 1 footnotes. Minimally adequate treatment was defined as receiving appropriate pharmacotherapy combined with at least 4 visits to any physician or at least 8 visits (of at least 30 minutes) with any health care or human services professional.

†Use of any nonhealth professional was reduced to human services sector because complementary-alternative medicine is not considered adequate treatment for most of the disorders and the sample reporting use of complementary-alternative medicine was small. Human services is defined as religious and spiritual advisers and counselors and social workers seen in non–mental health care settings.

‡Unweighted number of respondents who met criteria for any 12-month disorder seeking treatment in each service sector are shown in brackets.

ternational Diagnostic Interview does not include the *DSM-IV* diagnoses of schizophrenia or other nonaffective psychoses. In addition, the NSAL did not collect data on specific phobias or intermittent explosive disorder. Second, because homeless and institutionalized individuals were not included, prevalence estimates are likely lower than reported. Those who did not speak English were not included, which underrepresents French-, Spanish-, and Creole-speaking Caribbean blacks. These groups are relatively rare in the United States, so their exclusion should have minimal effects. Another limitation is the global nature of our designation of Caribbean ancestry, which is characterized by heterogeneity that we were not able to fully explore owing to sample size limitations. Because of the high clustering of Caribbean blacks and a relatively smaller sample size, their adjusted standard errors are sometimes large. A final limitation is systematic nonresponse to various questions. Some nonrespondents may have met the criteria for a *DSM-IV* disorder.

Despite the popular view that African Americans and Caribbean blacks represent different cultural heritages, they did not differ much in the use of services. Differences observed between these 2 ethnic groups were largely due to different relationships among demographic groups to mental health service use. This finding suggests the presence of interactions among ethnicity, use of services, and a third demographic variable. We tested the effect of sex and ethnicity on any services use and found that the relationship of sex to use depended on ethnicity. African American women were significantly more likely to use services than African American men. No sex effect was found among Caribbean blacks (data available from the author). The absence of sex effects on use among Caribbean blacks is surprising, since black women are typically more likely to use services than black men.[28] The idea that requesting help is antithetical to male socialization may not be uniform across all black men. Future work will focus more explicitly on ethnic differences in the social construction of masculine identities.

The findings showed that age differences in mental health care use deserve attention in future analyses of the NSAL. The youngest and the oldest groups, especially among African Americans, used services the least. These age differences are consistent with other research in this field.[18,29] Age at onset of mood disorders, which tends to occur at approximately 30 years, may account at least partially for the lower use among young people.[30] Older respondents are known to underuse mental health services because of greater perceived stigma.

There was little evidence that respondents with higher incomes are more likely to use services. Education, on the other hand, showed a positive relationship with service use. These findings are consistent with the notion that, although related, income and education capture distinctive aspects of socioeconomic position.[31] Education is likely a proxy for knowledge, greater attentiveness to mental health information, and awareness of the availability and acceptability of seeking help for mental health problems.[32] Differential access to services based on income may be less striking in this sample because of working people having health insurance and poor people having Medicaid.[17] Placing income and education in the same model may account for some of the same variance, and the effects of income may be mediated through education. The lack of an income effect might also be attributed to the sizeable proportions of both African Americans (65.9%) and Caribbean blacks (62.9%) who had mental health care insurance. This level of insurance coverage is comparable to that in whites, and as a result, statistical power was not a problem on the basis of a restricted range of insurance coverage. There may be more of an insurance effect than we were able to capture given our additive modeling approach. Clearly, we need to know more about how both socioeconomic status/position and insurance in combination affect use across all service sectors.

African Americans and Caribbean blacks who sought professional help for mental health problems used general medical care almost as much as specialty mental health care. The relative accessibility of primary care physicians and the limitations that most health insurance plans put in place to control the use of specialty mental health care make this the most likely pattern of use.[33-35] The large per-

centages of African Americans and Caribbean blacks who go to their primary care physicians for help with mental health problems might be receiving inappropriate levels of care. We believe that professionals trained especially to deal with mental health problems (ie, psychiatrists, psychologists, and social workers) are best suited to handle the treatment of these mental disorders.

Although not the focus of the present study, the proportion of NSAL respondents who obtained 12-month service use (10.1%) is noticeably lower than the percentage reported by the NCS-R (17.9%).[24] This finding is compelling evidence that the black-white difference in the use of mental health services remains an issue worthy of more in-depth investigation. Differences were also found in the sociodemographic correlates of 12-month service use between the NSAL and the NCS-R; specifically, not having a low family income, previously being married, and not living in a rural area. Income and marital status were not significant predictors of use in the NSAL, whereas education was. These patterns suggest interesting interactions among race, sociodemographic predictors, and service use that can be explored once the NSAL and NCS-R data are merged.

Some findings in the literature suggest that although the black-white gap in use may be narrowing,[36] racial disparities may occur in the quality of mental health treatment.[37] Rates of minimally adequate treatment are lower in the NSAL (26.2%) compared with the NCS-R (32.7%). Although the level of minimally adequate treatment provided by the general medical sector is comparable across the 2 studies (10.5% and 12.7%, respectively), minimally adequate treatment received from psychiatrists is noticeably lower in the NSAL (29.3% and 44.5%, respectively).[24] Such differences in treatment adequacy are worthy of attention in future work.

Many black Americans who do not use services rely on help from informal support networks and alternative helpers, such as ministers.[38,39] We were not able, in this first article, to address specifically the role of faith-based organizations and particularly the helping role of clergy, which our previous work has shown to be important.[40] We have begun to explore the use of clergy, and preliminary results indicate a much higher clergy use for mood and anxiety disorders among African Americans than Caribbean blacks. The more pressing policy question, however, is whether the seriousness of the emotional challenges confronting all black Americans is appropriately matched with the help sources to which these groups turn. Many mental disorders require the attention of trained mental health care professionals. Despite the positive aspects of informal help, social support is as much a barrier to mental health care as an acceptable treatment alternative.[40-43]

The mental health need-assessment tradition from which the NSAL flows relied more on lay conceptualizations of distress than on professional judgments of need. Although good clinical, scientific, and policy reasons exist for the development of highly structured survey instruments that can classify respondents by *DSM-IV* criteria, this should not be the only approach to assessing need for mental health services; not everyone in need of mental health treatment meets the criteria for a disorder,[37] and meeting these criteria may not be serious enough to warrant treatment.[30,44] People decide to seek professional help not because they know that they have a particular disorder but because the level of distress experienced has exhausted the personal and social resources used to cope with the emotional pain.[44] The NSAL embraced each of these epidemiologic traditions, and future work will explore both the lay taxonomy that motivates the search for help and how well the conceptualization of distress represented by the *DSM-IV* predicts the need for services.[45-48]

Our findings demonstrate that underuse of mental health services for both African Americans and Caribbean blacks remains a serious concern. As a result, educational interventions that focus on both black consumers and mental health care professionals are needed. Primary care physicians need to be educated on how best to identify black individuals with serious mental health problems and disorders. Mental health care professionals must incorporate knowledge about ethnic differences in idioms of distress and how to overcome feelings of mistrust into their therapeutic approach. Mental health educational programs must facilitate, among black consumers, the recognition and definition of symptom clusters that need to be treated by mental health care professionals. Clearly, ways must be found to increase the use of mental health care and to increase the quality of that care among all black groups, irrespective of their ethnic heritage. The consequences in terms of needless pain and suffering and unnecessary losses in productivity are too great to ignore.

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