

Research Article

MAJOR DEPRESSIVE DISORDER AMONG OLDER AFRICAN AMERICANS, CARIBBEAN BLACKS, AND NON-HISPANIC WHITES: SECONDARY ANALYSIS OF THE NATIONAL SURVEY OF AMERICAN LIFE

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Background: *Previous epidemiological and clinical research on mental disorders has treated Blacks as a homogenous group and yet Blacks of Caribbean descent and African Americans differ with respect to ethnicity, national heritage, living circumstances, and immigration status. The purpose of this article is to examine the prevalence of major depressive disorder (MDD) among African Americans, Caribbean Blacks, and non-Hispanic whites aged 50 and older with data on psychiatric and physical comorbidity, mental illness severity, and service use. Methods: Secondary analysis of data from the National Survey of American Life, a national household probability sample of African Americans, Caribbean Blacks, and non-Hispanic Whites in the United States, were used (n = 1,950). The response rate was 72.3%. Results: Controlling for age, the lifetime prevalence rate of MDD was 12.1% and the 12-month rate was 5.2%. Older Whites and Caribbean Blacks had significantly higher lifetime prevalence than African Americans but 12-month rates were similar across the three groups. Rates of co-occurring psychiatric disorders and physical conditions were high and were similar for African Americans, Caribbean Blacks, and Whites. Most older adults had either moderate or severe 12-month MDD and most talked to at least one professional, most frequently a family doctor, psychiatrist, or other mental health professional. Conclusion: MDD among older adults is highly prevalent, often associated with other psychiatric disorders or chronic physical conditions, and is associated with high overall mental illness severity. Differences among older Blacks highlight the need for further research on this population to ensure appropriate treatment is being provided to these groups. Depression and Anxiety 30:589–597, 2013. © 2013 Wiley Periodicals, Inc.*

Key words: *MDD; depression; race; ethnicity; epidemiology; prevalence; elderly*

INTRODUCTION

There is limited research regarding the nature and prevalence of major depressive disorder (MDD) among older adults of various racial and ethnic subpopulations within the United States, including Black Americans. Data from the National Comorbidity Survey Replication estimates a lifetime prevalence rate for MDD of 16.6%^[1] and 12-month prevalence of 6.7%.^[2] Studies have consistently found lower prevalence of MDD among older adults and racial/ethnic minorities compared to younger age groups and non-Hispanic whites.^[1,3–7] Comorbidity of depression with other psychiatric disorders,

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particularly anxiety, is high among older adults.^[5,8] Prevalence tends to be higher among those with poorer health and more chronic conditions^[9–11] and is frequently comorbid with physical illnesses common among older adults such as diabetes,^[12] heart disease,^[13] stroke,^[14] Parkinson's Disease,^[15] and Alzheimer's Disease.^[14]

Because of limited sample sizes in previous epidemiological studies, Blacks have been treated as a homogeneous group limiting our understanding of differences between Black American subgroups in the prevalence of mental disorders and their impact.^[16,17] The number of Black Caribbean immigrants in the U.S. population numbered 1.5 million according to the 2000 U.S. Census and over 3 million in 2011.^[18,19] Blacks from the Caribbean make up the largest Black ethnic subgroup in the United States^[16] and represent a significant percentage of the growth of the U.S. Black population particularly in many urban centers.^[18,20] Blacks of Caribbean descent and African Americans differ in terms of ethnicity, national heritage, socioeconomic, and immigration status.^[21] Despite these differences, this heterogeneity has largely been ignored.

For this reason, little is known about mental illness and help seeking for mental disorders among African Americans and Black Caribbeans in the United States. Even less is known about older adults from these groups despite the increasing diversity of the older adult population. Existing research indicates that Caribbean Blacks experience higher rates of schizophrenia.^[22] Rates of depression^[23] and depressive symptoms^[24] are similar among older African Americans and Caribbean Blacks. However, older non-Hispanic Whites have higher rates of MDD^[23] and depressive symptoms.^[24]

Major depression among older Blacks in the United States has yet to be studied. Existing research suggests that mental illness is especially persistent among Blacks,^[7,25] but differences across cultural groups are not clear. Racial/ethnic differences in mental illness severity have also not been sufficiently investigated.^[26] Similarly, little research is available regarding help-seeking behavior among older Black Americans with MDD, although recent data suggest that, across all age groups, only 32% of Black Americans with a mental disorder use professional services and only 22% of Caribbean Blacks and 48% of African Americans with severe symptoms of MDD receive treatment. Information about the prevalence, severity, and service use among older African Americans and Black Caribbeans with MDD in the United States is needed in order to inform assessment of needs for these groups.

The purpose of this article is to examine the prevalence of MDD among African Americans, Caribbean Blacks, and non-Hispanic whites aged 50 and older with data on psychiatric and physical comorbidity, mental illness severity, and service use. This is the first comprehensive examination of MDD among older African Americans and Blacks of Caribbean descent.

METHOD

SAMPLE

This study used data from the National Survey of American Life: Coping with Stress in the 21st Century (NSAL), a national multistage probability design survey.^[27] The selection of this probability sample of respondents was conducted using sampling frames and a four-step sampling process common to the University of Michigan Survey Research Center's national sample design. This process includes a primary stage sampling of U.S. Metropolitan Statistical Areas and counties, a second stage sampling of area segments, a third stage sampling of housing units within the selected area segments, and finally a random selection of eligible respondents from the sample housing units. The African American sample is the core sample of the NSAL. The core sample consists of 64 primary sampling units. Fifty-six of these primary areas overlap substantially with existing Survey Research Center National Sample primary areas. The remaining eight primary areas were chosen from the South in order for the sample to represent African Americans in the proportion in which they are distributed nationally. The African American sample is a nationally representative sample of households located in the 48 coterminous states with at least one Black adult 18 years or over who did not identify ancestral ties in the Caribbean.

In addition, the NSAL includes the first major probability sample of Caribbean Blacks ever conducted. The Caribbean Black sample was selected from two area probability sample frames: the core NSAL sample as well as an area probability sample of housing units from geographic areas with a relatively high density of persons of Caribbean descent. Respondents were asked to self-identify their race. Those who self-identified as Black and of West Indian or Caribbean descent, reported that they were from one of a list of Caribbean countries presented by the interviewers, or indicated that their parents or grandparents were born in a Caribbean country were coded as Caribbean Black. The NSAL data collection was approved by the University of Michigan Institutional Review Board. Face-to-face interviews were conducted by trained interviewers through the University of Michigan Survey Research Center from 2001 to 2003. The overall response rate was 72.3%, with response rates of 70.7% for African Americans, 77.7% for Caribbean Blacks, and 69.7% for non-Hispanic Whites. The data include 3,570 African Americans, 1,621 Caribbean Blacks, and 891 non-Hispanic Whites. Design and sample characteristics of the NSAL are described in more detail elsewhere.^[16,27] The analytic sample included 1,135 African Americans, 426 Caribbean Blacks, and 389 non-Hispanic Whites aged 50 and older.

SAMPLE CHARACTERISTICS

Table 1 displays the sociodemographic characteristics of the sample by race/ethnicity. A higher proportion of Caribbean Blacks are male. Whites have more years of education than African Americans and Caribbean Blacks. More Whites and Caribbean Blacks are married compared to African Americans. Most Caribbean Blacks were born outside the United States and almost half of this group lived in the Northeast whereas most African Americans live in the Southern United States. Among those born outside of the United States, the majority have lived in the United States for 20 years or longer.

MEASURES

Diagnostic Assessment. Diagnostic assessment was conducted using the Diagnostic and Statistical Manual (DSM-IV) World Mental Health Composite International Diagnostic Interview (WMH-CIDI).^[28] The WMH-CIDI is a structured, lay interviewer-administered diagnostic interview. MDD was indicated if a major depressive episode was present; that episode was not better accounted for

TABLE 1. Sociodemographic weighted distribution of adults aged 50 and older in the NSAL sample compared by race/ethnicity (*n* = 1,950)^a

	African American (<i>n</i> = 1,135)		Black Caribbean (<i>n</i> = 426)		White (<i>n</i> = 389)		χ^2	<i>P</i>
	<i>N</i>	%	<i>n</i>	%	<i>n</i>	%		
Age								
50 to 64	682	61.5	275	61.4	223	59.5	1.33	0.266
65 to 74	301	26.5	98	26.4	101	24.1		
75 and older	152	12.1	53	12.2	65	16.4		
Gender								
Male	426	42.9	177	52.1	150	49.5	5.92	0.004
Female	709	57.1	249	47.9	239	50.5		
Employment status								
Employed	483	44.8	237	61.8	181	51.2	1.55	0.217
Unemployed	60	5.1	21	3.2	16	3.6		
Not in labor force	583	50.1	167	35.0	188	45.2		
Education								
<11 years	441	34.9	123	32.3	80	22.5	3.67	0.017
12 years	363	32.3	125	27.8	142	34.6		
13 to 15 years	171	16.6	67	9.9	83	21.5		
16 years or more	160	16.1	111	30.0	84	21.4		
Household income								
0 to \$17,999	499	35.9	123	23.7	121	26.1	2.37	0.093
\$18,000 to \$31,999	274	24.7	111	23.1	99	22.9		
\$32,000 to \$54,999	199	20.0	88	17.0	82	21.4		
\$55,000 or greater	163	19.5	104	36.3	87	29.7		
Marital status								
Currently married	371	43.3	193	58.6	164	52.2	2.07	0.122
Previously married	655	48.7	187	35.9	192	39.3		
Never married	101	8.0	46	5.5	31	8.5		
Nativity								
Born in United States	1,102	99.2	66	25.1	376	98.4	203.02	<.001
Born outside United States	8	0.8	359	74.9	6	1.6		
Region								
Northeast	138	15.2	292	53.6	46	21.9	3.08	0.028
Midwest	205	19.2	5	5.3	42	8.7		
South	725	56.4	123	28.6	265	59.5		
West	67	9.2	6	12.6	36	9.9		
Urbanicity								
Major metropolitan	955	86.7	426	100.0	293	80.3	0.26	0.755
Other urban	112	8.2	0	0.0	51	10.9		
Rural	68	5.2	0	0.0	45	8.8		

^aUnweighted frequencies and weighted%*s* are reported.

by schizoaffective disorder and was not superimposed on schizophrenia, schizophrenia-form disorder, delusional disorder, or another psychotic disorder; and there had never been a manic episode, a mixed episode, or a hypomanic episode. Other disorders assessed include dysthymia, agoraphobia, social phobia, generalized anxiety disorder, panic disorder, posttraumatic stress disorder (PTSD), alcohol abuse and dependence, substance abuse and dependence, suicidal ideation, and suicidal plan. Prevalence estimates are based on the sample proportion that met DSM-IV criteria for 12-month and lifetime MDD.

Sociodemographic Characteristics. Sociodemographic characteristics include age (50 to 64, 65 to 74, 75 and older), gender, employment status (employed, unemployed, not in labor force), education (<11 years, 12 years, 13 to 15 years, 16 years or more), household income (0 to \$17,999, \$18,000 to \$31,999, \$32,000 to \$54,999, \$55,000 or greater), marital status (currently married, previously married, never married), nativity (born in United States, born outside United States),

region of the United States (Northeast, Midwest, South, and West), and urbanicity (major metropolitan, other urban, rural).^[29]

Physical Health. Two measures of physical health are included. Self-rated physical health is respondents' rating of their overall physical health at the present time (1 = poor to 5 = excellent). Respondents were also asked whether a doctor or health professional had ever told them they had any health problems from a list provided by the interviewer. A dichotomous variable was created for each of the 18 disorders and coded 1 if endorsed by the respondent. In addition, the number of conditions was summed for each respondent and an ordinal variable created measuring 0 to 1, 2 to 3, or 4 or more health problems to examine multimorbidity.

Severity of MDD. Severity of MDD was assessed using the Sheehan Disability Scale. This scale measures disability in four domains: the respondent's ability to clean, shop, and take care of the home; the respondent's ability to work; the respondent's ability to form and maintain close relationships with other people; and the

respondent's social life. Respondents indicate the extent to which depression interfered with each domain during the period in the last 12 months when the depression was most severe (0 = no interference to 10 = severe interference).^[30] MDD severity is defined as mild if interference is less than or equal to 3 in all four domains, moderate if interference is reported as 4 through 6 in any of the domains, and severe if interference in any domain is 7 or higher.

Service Use. Use of any professional for depression was indicated by responses to the question "Did you talk to a medical doctor or other professional about your (sadness/or/discouragement/or/lack of interest) in the past 12 months?" Among those who said yes, respondents were asked to indicate which professionals they had ever talked to from a list provided by the interviewer. Prevalence estimates of the use of seven different types of professionals are reported based on these responses. The proportion who reported ever receiving help from family or friends for depression is also reported as is the use of antidepressant medications.

ANALYSIS STRATEGY

Statistical analyses were performed using the survey commands in Stata 10.0 accounting for the complex multistage-clustered design of the NSAL sample, unequal probabilities of selection, nonresponse, and poststratification to calculate weighted, nationally representative population estimates, and standard errors. Unweighted frequencies and weighted percentages are reported. The Rao-Scott χ^2 statistic was used to test for associations across categorical variables and an *F*-means test was used for continuous variables in bivariate comparisons. Both unadjusted and adjusted percentages are presented. Adjusted percentages are based on adjusted probabilities from logistic regression and design-corrected Wald tests are presented for testing hypotheses about group differences. Percentages control for age and gender for most analyses, and severity of MDD for those analyses related to help seeking. A *P* < .05 cutoff is used for statistical significance.

RESULTS

PREVALENCE

Controlling for age, the lifetime prevalence rate of MDD for adults aged 50 and older was 12.1% and the 12-month rate was 5.2% (Table 2). Roughly 45% of respondents with lifetime MDD met criteria for 12-month MDD. Older Whites and Caribbean Blacks had significantly higher lifetime prevalence than African Americans. There were no significant racial/ethnic differences in 12-month MDD nor in lifetime or 12-month rates by gender. White females and Black Caribbean males had the highest rates of lifetime MDD.

COMORBIDITY—MENTAL DISORDERS

Controlling for age and gender, roughly half of older adults with MDD met diagnostic criteria for lifetime dysthymic disorder and lifetime anxiety disorders (Table 3). Among all three racial groups, lifetime social phobia was most prevalent, followed by generalized anxiety disorder, then panic disorder, and agoraphobia. PTSD, substance disorders, suicidal ideation, and suicidal plan were only assessed for African Americans and Caribbean Blacks. Controlling for age and gender, 45% of older Blacks with MDD also met criteria for PTSD, 32% met criteria for a substance disorder, 47.9% for sui-

TABLE 2. Prevalence of MDD among adults aged 50 and older in the NSAL sample by race and gender^a

	Lifetime			12 months		
	<i>n</i>	%	Adjusted percentage ^b	<i>n</i>	%	Adjusted percentage ^b
Race/ethnicity**						
African Americans (<i>n</i> = 1,074)	96	8.8	16.9	46	4.0	7.1
Black Caribbeans (<i>n</i> = 415)	30	11.2	22.6	16	8.1	14.7
Whites (<i>n</i> = 378)	55	14.6	23.9	18	5.9	9.2
Total (<i>N</i> = 1,867)	181	12.1		80	5.2	
Gender						
Male (<i>n</i> = 721)	54	9.3	17.8	26	5.8	9.9
Female (<i>n</i> = 1,146)	127	14.5	27.6	54	4.6	8.0
Total (<i>N</i> = 1,867)	181	12.1		80	5.2	
Race/ethnicity by gender**						
African American male (<i>n</i> = 404)	27	7.0	13.6	10	2.3	4.0
African American female (<i>n</i> = 670)	69	10.1	20.5	36	5.3	9.4
Black Caribbean male (<i>n</i> = 172)	11	18.2	34.5	7	13.9	23.4
Black Caribbean female (<i>n</i> = 243)	19	4.3	10.0	9	2.3	4.4
White male (<i>n</i> = 145)	16	10.4	18.2	9	7.7	12.0
White female (<i>n</i> = 233)	39	18.7	30.6	9	4.1	6.4
Total (<i>N</i> = 1,867)	181	12.1		80	5.2	

^aUnweighted frequencies and weighted percentages are presented.

^bPercentages adjusted for age.

***P* < .01 for lifetime MDD.

cidal ideation, and 26.8% for suicidal plan. Compared to older adults without MDD, the prevalence of other DSM disorders was significantly greater among older adults with MDD. A higher proportion of older Whites and African Americans met criteria for panic disorder compared to Caribbean Blacks.

COMORBIDITY—PHYSICAL ILLNESS

The majority of both older adults with and without MDD reported at least one chronic physical disorder (Table 4). A significantly higher proportion of older adults with MDD reported their health as only poor or fair and a higher proportion had two or more chronic conditions compared to those without MDD. The most common physical disorder among older adults with MDD was high blood pressure, followed by arthritis, ulcers, and asthma. Compared to other older adults, a significantly higher proportion of those with MDD had ulcers, asthma, chronic lung disease, and circulation problems. A significantly higher proportion of Whites with MDD reported their health as very good or excellent compared to African Americans and Caribbean Blacks, although there was not a significant racial/ethnic

TABLE 3. Comorbidity of MDD with other DSM-IV disorders by race^a

	Older adults with MDD			Older adults without MDD			African Americans			Black Caribbeans			non-Hispanic Whites		
	n	%	Adjusted	n	%	Adjusted	n	%	Adjusted	n	%	Adjusted	n	%	Adjusted
			percentage ^b			percentage ^b			percentage ^b			percentage ^b			
Lifetime dysthymia ^{***}	54	23.7	50.2	8	0.3	0.9	30	29.6	42.3	6	11.9	28.5	18	21.5	29.8
Lifetime anxiety disorders ^{c,***}	81	48.1	56.2	143	9.8	12.9	43	44.9	27.5	12	34.5	18.3	26	50.1	32.7
Lifetime agoraphobia ^{**}	12	7.1	13.8	27	1.3	2.8	10	13.1	22.5	1	1.4	6.7	1	4.6	7.0
Lifetime social phobia ^{***}	44	25.0	35.3	73	5.2	8.3	24	26.4	33.4	5	8.8	17.5	15	25.0	30.1
Lifetime generalized anxiety ^{***}	24	13.4	29.4	35	1.8	4.4	13	14.5	14.2	4	23.7	40.6	7	12.5	11.1
Lifetime panic disorder ^{**††}	22	16.6	13.9	35	3.3	2.6	11	9.8	3.0	1	0.6	0.1	10	20.2	8.0
Lifetime PTSD ^{d,***}	31	27.9	45.2	60	5.1	10.3	24	28.9	52.2	7	15.7	39.7	-	-	-
Lifetime substance disorder ^{d,***}	29	28.5	32.0	102	9.3	10.8	22	27.4	30.9	7	41.1	32.3	-	-	-
Lifetime suicidal ideation ^{d,***}	37	26.1	47.9	72	6.0	15.1	29	25.5	37.0	8	32.7	45.9	-	-	-
Lifetime suicidal plan ^{d,***}	16	10.9	26.8	23	2.0	6.1	12	10.9	21.8	4	11.6	28.7	-	-	-

^aUnweighted frequencies and weighted percentages presented.

^bPercentages adjusted for age and gender.

^cIncludes agoraphobia, social phobia, generalized anxiety disorder, and panic disorder.

^dNot assessed for Whites.

** $P < .01$, *** $P < .001$ comparing older adults with and without MDD.

†† $P < .01$ comparing racial/ethnic groups.

difference in the number of chronic conditions. A higher proportion of Caribbean Blacks and African Americans reported having arthritis while significantly more Whites and African Americans had ulcers. More African Americans reported kidney problems than either Caribbean Blacks or Whites while more African Americans and Caribbean Blacks with MDD had glaucoma.

SEVERITY OF MENTAL ILLNESS AND USE OF SERVICES

The majority of adults aged 50 and over who had 12-month MDD had severe MDD and this proportion increased when controlling for age and gender (Table 5). This is true across racial/ethnic groups as well and there were no significant racial/ethnic differences in severity.

Among older adults with 12-month MDD, 62.7% reported talking to at least one professional within the previous 12 months (Table 6). This dropped to only 9.2% when controlling for age, gender, and MDD severity. The service provider most commonly talked to was a family doctor, followed by a psychiatrist, religious or spiritual advisor, other mental health professional, and other medical doctor. Only 16.8% reported receiving help at some point in their lifetime from family or friends, a large drop from 69.8% in the unadjusted percentages.

A significantly higher proportion of African Americans and Whites reported talking to a religious or spiritual advisor or another health professional compared to Black Caribbeans. There were no racial/ethnic differences in the use of informal support. Just over one third of older Blacks reported using antidepressants in the last 12 months.

DISCUSSION

This study documents the substantial impact of MDD on older adults in the United States and between group (Black versus White) and within group (African American versus Caribbean Black) differences in that impact. Among older adults, MDD is prevalent and commonly associated with other psychiatric and physical disorders.

Consistent with previous research, both the lifetime and 12-month prevalence of MDD for adults aged 50 and older was lower than rates for all age groups, reported in previous studies.^[1,2] Lifetime prevalence rates differed across the three racial/ethnic groups with a significantly greater proportion of Whites and Caribbeans meeting criteria for MDD than African Americans. There was no significant racial/ethnic difference in the rates of 12-month MDD. Looking across all age groups, Williams et al. (2007) found higher rates of lifetime MDD for Whites compared to both Caribbean Blacks and African Americans and similar rates across all three groups for 12-month MDD. Although older Whites and African Americans in this study have lower rates of MDD compared to those of all age groups found by,^[31] the rate for older Caribbean Blacks is similar to that for all age groups.

The findings of this analysis in conjunction with previous research indicate that a small group of Caribbean Black men may be particularly vulnerable to mental health problems. Other research using the NSAL data have found that across the age range Caribbean Black men have higher rates of major depression than African American men. The rate of major depression of Caribbean Black men is similar to that of Caribbean Black women and African American women.^[7] Caribbean Black men also have higher rates

TABLE 4. Comorbidity of MDD and physical disorders by race^a

	Older adults with MDD			Older adults without MDD			African Americans			Black Caribbeans			non-Hispanic Whites		
	<i>n</i>	%	Adjusted percentage ^b	<i>n</i>	%	Adjusted percentage ^b	<i>n</i>	%	Adjusted percentage ^b	<i>n</i>	%	Adjusted percentage ^b	<i>n</i>	%	Adjusted percentage ^b
Any physical disorder	160	87.5	71.0	1,407	84.5	65.4	85	90.7	72.1	28	96.3	84.0	47	85.7	63.8
Self-rated health ^{***†}															
Poor	33	20.0	10.0	113	7.4	3.4	15	15.2	8.8	6	14.8	4.3	12	22.4	14.4
Fair	54	25.9	24.4	365	17.7	15.0	36	37.9	50.2	8	27.8	43.8	10	20.5	27.7
Good	44	19.6	20.5	536	34.2	32.4	28	27.7	16.7	7	50.3	34.5	9	14.8	9.5
Very Good	41	28.7	36.8	484	30.0	35.2	14	15.4	17.8	7	5.5	11.9	20	35.5	38.0
Excellent	9	5.8	8.3	186	10.8	14.0	3	3.8	6.5	2	1.5	5.4	4	6.8	10.4
Number of chronic conditions ^{**}															
0 – 1	54	28.3	49.3	733	44.3	65.4	24	23.6	50.8	10	25.7	63.7	20	30.5	54.4
2 – 3	65	44.6	36.1	584	34.2	24.0	36	37.2	23.3	11	45.4	20.2	18	47.9	31.2
4 or more	62	27.1	14.6	369	21.6	10.6	36	39.2	25.9	9	29.0	16.1	17	21.7	14.4
Arthritis ^{††}	102	46.8	32.9	746	43.7	29.5	59	62.0	49.9	17	84.4	81.0	26	38.6	26.4
Ulcers ^{***†††}	33	26.7	28.1	188	11.5	12.2	14	19.5	29.3	2	1.3	1.8	17	30.9	44.5
Cancer	20	11.5	4.2	141	8.6	2.7	9	10.5	3.3	3	10.5	3.5	8	12.0	3.9
High blood pressure	105	60.2	49.3	964	55.5	44.0	64	66.5	52.4	15	62.5	40.5	26	57.3	43.9
Diabetes	36	19.0	10.8	361	16.9	9.2	19	19.3	4.0	9	12.6	1.1	8	19.1	4.5
Liver problems	12	5.9	11.7	52	4.0	8.0	7	9.3	22.1	1	2.2	8.0	4	4.6	10.5
Kidney problems [†]	18	8.7	4.5	123	8.5	4.3	14	16.6	6.7	1	0.6	0.2	3	5.4	1.9
Stroke	16	8.4	4.9	110	6.9	3.8	7	10.2	3.2	4	6.0	2.6	5	7.7	2.3
Asthma*	35	18.3	21.3	173	9.1	10.8	19	19.9	25.1	4	5.0	10.5	12	18.0	21.4
Chronic lung ^{**}	18	8.1	9.9	55	3.3	4.2	10	11.0	18.3	3	22.7	38.2	5	6.2	10.3
Circulation ^{***}	40	25.9	6.8	212	13.5	2.6	18	21.7	5.5	7	25.7	3.2	15	27.8	9.1
Sickle cell	2	0.8	0.6	17	0.9	0.5	2	2.7	9.7	0	n/a	n/a	0	n/a	n/a
Heart	37	18.8	6.1	264	19.7	5.8	16	19.6	15.2	10	57.5	50.0	11	16.9	13.3
HIV/AIDS	6	2.1	16.7	5	0.4	3.2	4	4.6	6.9	1	8.0	10.2	1	0.8	1.2
Glaucoma [†]	13	4.2	1.2	144	6.5	1.8	9	10.3	7.7	3	21.4	13.6	1	0.8	0.6
Tuberculosis	4	1.3	0.9	15	0.6	0.4	4	4.3	1.0	0	n/a	n/a	0	n/a	n/a
Fertility problems	11	4.3	5.8	49	4.0	5.4	7	5.9	5.9	2	1.2	1.5	2	3.7	3.6
Osteoporosis	16	9.2	6.2	78	6.8	4.1	8	6.7	0.2	1	1.4	0.8	7	10.6	5.1

^aUnweighted frequencies and weighted percentages presented.

^bPercentages adjusted for age and gender.

* $P < .05$, ** $P < .01$, *** $P < .001$ comparing older adults with and without MDD.

[†] $P < .05$, ^{††} $P < .01$, ^{†††} $P < .001$ comparing racial/ethnic groups.

of anxiety disorders.^[7,32] Caribbean Black men were also found to have higher rates of suicide attempts than Caribbean Black women, African American women, and African American men.^[33] Although research almost uniformly has found that women have higher rates of depression and suicide attempts compared to men, this is not the case for Caribbean Blacks in the United States.

Other significant differences were noted between Black Caribbeans and African Americans with MDD in the prevalence of panic disorder, arthritis, ulcers, and kidney problems, as well as their use of certain types of service providers (other health professional, religious/spiritual advisor). Research in the United States has typically viewed Blacks as a homogenous population.

TABLE 5. Severity of mental illness for 12 month MDD^a

	Total MDD sample			African Americans			Black Caribbeans			non-Hispanic Whites		
	<i>n</i>	%	Adjusted percentage ^b	<i>n</i>	%	Adjusted percentage ^b	<i>n</i>	%	Adjusted percentage ^b	<i>n</i>	%	Adjusted percentage ^b
MDD specific												
Mild	9	8.0	2.9	5	11.3	5.9	3	5.6	6.0	1	6.4	5.9
Moderate	13	28.3	5.6	7	16.1	10.6	2	41.2	9.8	4	33.7	14.6
Severe/serious	52	63.8	91.4	31	72.5	83.5	10	53.2	84.2	11	60.0	79.5

^aUnweighted frequencies and weighted percentages presented.

^bPercentages adjusted for age and gender.

TABLE 6. 12-month MDD and help seeking^a

	Total MDD sample			African Americans			Black Caribbeans			Whites		
	<i>n</i>	%	Adjusted percentage ^b	<i>n</i>	%	Adjusted percentage ^b	<i>n</i>	%	Adjusted percentage ^b	<i>n</i>	%	Adjusted percentage ^b
Any professional ^c	50	62.7	9.2	28	66.6	13.2	11	92.4	35.8	11	58.6	7.2
Psychiatrist ^d	34	83.2	76.1	18	61.6	84.5	6	89.0	91.4	10	95.2	98.2
Other mental health ^{d,e}	26	67.3	58.5	13	45.4	56.6	5	80.5	62.8	8	78.7	84.0
Family doctor ^d	39	84.2	81.8	22	75.3	87.7	8	54.7	94.0	9	92.7	97.4
Other medical doctor ^{d,f}	17	35.0	44.8	9	42.2	42.9	4	51.8	66.3	4	28.9	31.5
Other health professional ^{d,g*}	15	43.2	14.9	10	37.6	24.1	2	5.0	0.5	3	50.6	18.0
Religious or spiritual advisor ^{d*}	27	43.0	67.5	18	69.6	73.3	4	7.9	18.9	5	31.3	40.3
Other healer ^{d,h}	2	3.0	13.3	1	1.2	24.8	0	n/a	n/a	1	4.4	26.6
Informal support ⁱ	58	69.8	16.8	36	77.6	43.3	10	54.1	44.5	12	66.8	43.3
Any antidepressants ^j	19	33.9	34.3	16	32.6	34.8	3	43.6	30.0	–	–	–
Any SSRI medications ^j	10	16.9	15.0	9	19.0	13.0	1	1.5	0.6	–	–	–
Any TCA medications ^j	6	11.3	1.0	4	7.1	2.7	2	42.1	3.8	–	–	–
Any other antidepressants ^j	5	7.5	73.8	4	8.3	54.1	1	1.5	38.5	–	–	–

^aUnweighted frequencies and weighted percentages presented.

^bPercentages adjusted for age, gender, and MDD severity.

^cTalk to a medical doctor or other professional about sadness/or/discouragement/or/lack of interest in last 12 months.

^dAmong those who talked to a professional in the last 12 months, ever talked to this type of professional.

^ePsychologist, psychotherapist, social worker, a mental health nurse, or counselor.

^fFor example, a cardiologist, gynecologist, urologist.

^gFor example, a nurse or physician’s assistant.

^hFor example, an herbalist, chiropractor, or spiritualist.

ⁱEver received any help from family, friends, or other acquaintances.

^jMedication use in past 12 months. Only assessed for African Americans and Black Caribbeans.

**P* < .05.

Black Americans, however, are an increasingly diverse group; these findings highlight the importance of examining differences among Black Americans as well as between Blacks and Whites.

Research on help seeking among Black Caribbeans is limited. What is available, however, suggests that like African Americans, Black Caribbeans may underutilize mental health services and that differences in informal support networks between Black Caribbeans and Whites do not always mirror those found in comparisons between African Americans and Whites.^[34,35] In this study, although older African Americans and Black Caribbeans with MDD do not differ significantly in their use of any professional or in the use of informal support, there is some difference in the use of particular types of professionals, perhaps most interestingly in the use of a religious or spiritual advisor. Previous research has found that clergy play a major role in providing counseling for personal problems among both Black Caribbeans and African Americans^[36–38] and yet in this study significantly fewer Black Caribbeans visited a religious or spiritual provider. Previous research has found that Caribbean Blacks are less likely to be church members and less likely to participate in auxiliary congregation groups than both African Americans and Whites. This probably results in less interaction between Caribbean Blacks and clergy.^[39]

Almost 60% of older adults with MDD have co-occurring mental disorders. Most of that is driven by

anxiety disorders (particularly social phobia) and is consistent with rates in other samples where comorbidity of MDD with anxiety has been as high as 50% in community-based samples and even higher in clinical samples.^[40–42] Comorbidity with PTSD, substance disorder, and suicidal ideation, assessed only among Blacks, was as high or higher as comorbidity with social phobia. High rates of comorbid depression and PTSD has been found in the general population,^[43] among Vietnam veterans,^[44] and among African Americans in a primary care setting.^[45] Increasingly, however, research has suggested that it is hard to differentiate depression as a distinct disorder from PTSD.^[46,47] In the first few months after a traumatic event, depression can often be diagnosed as a separate disorder. Over time, however, depression becomes harder to differentiate from PTSD. Symptoms of PTSD and depression are believed to be characteristics of more general chronic traumatic stress suggesting that PTSD might lead to depression, including an initial brief reactive depression immediately following the trauma, or that PTSD and major depression are influenced by common or overlapping vulnerabilities. Development of depression among individuals exposed to trauma, but who do not develop PTSD, is much lower than depression among those who develop PTSD. PTSD, therefore, may develop among a particularly vulnerable subset of people who experienced traumatic events and the development of depression might result from preexisting vulnerabilities that are exposed

and exacerbated by the trauma.^[46,47] The presence of both PTSD and MDD in this older adult sample, therefore, may be indicative of this more general stress construct than the true comorbidity of the disorders as distinct constructs.

The present study has several limitations. First, although this is a large, nationally representative dataset, the relatively small number of older adults with MDD limits statistical power when attempting to compare across groups along MDD-related dimensions. Second, the cross-sectional nature of this study does not allow for ongoing assessment of temporal relationships between disorders or investigation of causal factors over time. Third, the assessment of lifetime prevalence with a mixed age sample may lead to the appearance of comorbid disorders when, in fact, they are randomly associated. Respondents, however, were only asked about lifetime experience of physical disorders, therefore, we are unable in the present study to evaluate the current associations between MDD and chronic illness.^[48]

CONCLUSION

Despite these limitations, the study provides a comprehensive examination of MDD among older African Americans, Caribbean Blacks, and non-Hispanic Whites. It is clear that MDD is a significant public health problem among older adults. Despite the high prevalence and substantial impairments associated with MDD among older adults, very little research has been conducted about the nature and treatment of MDD in this population or its interaction with other mental and physical disorders among Black Americans.

Racial/ethnic differences in the prevalence of MDD and other mental disorders may be due to differences in the presentation of self-reported symptoms.^[49,50] Other aspects of cultural context may also affect the presentation of depressive symptoms among older ethnic and racial minorities.^[51] Understanding within-group differences in symptom presentation has implications for practice as service providers will need to consider potential group-specific norms as well as provider factors that may influence clinician bias and misdiagnosis. Findings from this study further highlight the importance of exploring culturally based explanatory models of symptom presentation, provider interpretation, and client help-seeking.

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