Race-related Differences in Depression Onset and Recovery in Older Persons Over Time: The Health, Aging, and Body Composition Study

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Objectives: *To evaluate race-related differences in depression onset and recovery in older persons, overall and by sex, and examine race-related differences in mortality according to depression.* **Design:** *Prospective cohort study.* **Setting:** *General community in pre-designated zip code areas in Memphis, Tennessee, and Pittsburgh, Pennsylvania.* **Participants:** *3,075 persons aged 70–79 years at baseline in the Health, Aging, and Body Composition study.* **Measurements:** *Depression was assessed at eight time points over 10 years using the 10-item Center for Epidemiologic Studies–Depression scale; patients were categorized as nondepressed (score less than 8) or depressed (score of 8 or higher). We created variables for transitions across each 18-month time interval, namely, from nondepressed or depressed to nondepressed, depressed, or death, and determined the association between race and the average likelihood of these transitions over time.* **Results:** *A higher percentage of blacks than whites were depressed at nearly all time points. Adjusting for demographics, common chronic conditions, and body mass index, blacks had a higher likelihood of experiencing depression onset than whites (odds ratio [OR]: 1.22; 95% confidence interval [CI]: 1.03–1.43); among men, blacks were more likely to experience depression onset than whites (OR: 1.44; 95% CI: 1.24–2.89). Blacks also had a higher likelihood of transitioning from nondepressed to death (OR: 1.79; 95% CI: 1.30–2.46). Overall and in sex-stratified analyses, race was not associated with recovery from depression or with the transition from depression to death.* **Conclusion:** *Our findings highlight race differences in depression in older persons and encourage further research on the course of depression in older black patients.* (Am J Geriatr Psychiatry 2013; ■:■–■)

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Depression is a significant clinical and public health problem for older persons. Whereas major depression affects 1%–2% of community-living persons age 65 and older,[1] 8%–30% of this population experiences clinically significant depressive symptoms.[1,2] Clinically significant depressive symptoms, often referred to simply as "depression," are associated with negative outcomes including high health services utilization, disability, dementia, and mortality.[3–8] What we know about the course of depression in older persons, however, has come largely from overwhelmingly white samples.[9–11]

Older Americans are becoming increasingly diverse, with blacks projected to account for at least 12% of persons aged 65 years and greater living in the United States by 2050.[12] Despite growing numbers of blacks living to older ages, and the national public health goal of reducing health disparities between minority and non-minority populations,[13] whether or not race differentially influences the course of depression in older persons remains uncertain.

Depression is highly variable over time, with periods of chronicity, remission, and recurrence.[14,15] Most studies evaluating race-related differences in depression, however, have been cross-sectional, focusing on prevalence estimates or number of symptoms at one time point as outcomes.[16–19] Furthermore, the few longitudinal studies evaluating race-related differences in the course of depression in older persons have focused on symptom trajectories and average symptom levels rather than transitions into and out of clinically meaningful states of depressive symptoms.[20–23] Of these, only two considered the potential impact of mortality on race differences in depression over time.[20,23] Additionally, the same non-modifiable factors that predict depression onset may not predict the course of depression. For example, low educational attainment and female sex have been found to be associated with depression onset[24–26] but not remission.[27] Relatedly, female sex has been found to be associated with more severe depressive symptoms[28] and a higher likelihood of receiving treatment for depression,[29] whereas black race is associated with a lower likelihood of initiation and adherence to depression treatment.[30] Consequently, whether there are race-related differences in the onset of and recovery from depression in older persons, or whether race is similarly associated with these outcomes in men and women, remains unknown.

The objectives of this prospective study were to determine whether there are race-related differences, overall and by sex, in the onset of depression (i.e., first or recurrent episodes) and in recovery from depression in older persons over time and to examine race-related differences in mortality according to depression. To achieve these objectives, we evaluated possible transitions between three states—not depressed, depressed, and death—over 10 years in a large cohort of older men and women. Improved understanding of these race-related differences will support efforts to identify and subsequently reduce racial disparities in depression treatment and prevention.

METHODS

Study Population

Participants were members of the Health, Aging, and Body Composition (Health ABC) study. Assembly of the cohort (N = 3,075) has been described elsewhere.[31] In brief, participants constitute a random sample of white Medicare beneficiaries and all age-eligible black community-dwelling residents in pre-designated zip code areas in Memphis, Tennessee, and Pittsburgh, Pennsylvania, who were aged 70 to 79 years at time of enrollment between April 1997 and June 1998. At baseline, all participants reported no difficulty walking 0.25 miles, walking up ten steps without resting, and performing basic activities of daily living. Participants signed a written informed consent and protocols were approved by the study site institutional review boards.

Data Collection

Health ABC data were collected using both face-to-face interviews and clinic visits that