Objective: We examined racial-ethnic differences in all-cause mortality after stroke in a cohort of veterans living in the southeastern United States.

Methods: Data on a cohort of 4115 veterans with a diagnosis of stroke were analyzed. The cohort included veterans who classified themselves as non-Hispanic White, non-Hispanic Black, or Other. All veterans had a diagnosis of ischemic or hemorrhagic stroke. All subjects were seen in Veterans Affairs facilities in the Charleston, South Carolina area and were followed from January 1, 2000 to December 31, 2006. Cox proportional hazards regression models were used to compare survival times by race/ethnicity, adjusting for relevant covariates.

Results: In 38 months of follow-up, 1232 veterans in the cohort died. Compared with non-Hispanic White veterans, Black veterans were ≥20% more likely to die, and other ethnicities were ≥20% less likely to die in the unadjusted model. In the adjusted model, the White-Black disparity increased somewhat, and the disparity between Whites and other ethnicities was somewhat attenuated. Age, coronary heart disease, cancer, and Charlson comorbidity index ≥2 were also associated with higher mortality.

Conclusions: Non-Hispanic Black veterans with a history of stroke in the southeastern United States had significantly higher mortality than did non-Hispanic White veterans and veterans of other ethnicities, even after adjusting for relevant covariates. (Ethn Dis. 2009;19: 161–165)

Key Words: Stroke, Mortality, Race/Ethnicity, Veterans

INTRODUCTION

Stroke is the third leading cause of death in the United States, after heart disease and cancer.1 National statistics indicate that racial/ethnic minorities have almost twice the risk of stroke2 and are more likely to die of stroke at a younger age.2,3 In 2004, the stroke death rate was 73.9 per 100,000 of the US population for Black men and 64.9 for Black women, substantially higher than the rates for White men (48.1) and White women (47.4).1 A review of studies of stroke deaths in the US population indicates that Blacks consistently have higher stroke mortality than do Whites.4–10 Further, excess stroke-related death has been reported among Blacks (aged 35–64 years) living in the southeastern region of the United States.3

Distinctly different and unexplained racial/ethnic differences in death rates for stroke and other chronic conditions have emerged in the Veterans Healthcare System.11–15 Several recent studies of poststroke death in Veterans Affairs (VA) facilities report that Blacks are less likely to die after stroke than are Whites, which suggests better outcomes among Blacks.12–14,16,17 Equal access to care in VA facilities has emerged as the primary explanation for lower poststroke death rates among Blacks, whereas higher death rates are more common in the non-veteran population.13,14

Despite the promising observation of lower mortality among Black veterans, the conclusions of previously reported studies of stroke and other chronic conditions are limited by the possibility of unmeasured or unmeasurable confounders.15 Overall illness severity, admission practices, and patient choice of VA vs non-VA facility are among those variables that are not abstracted from VA administrative datasets. Therefore, it is unclear if recently reported studies of poststroke mortality in the VA are representative of regions of the United States where stroke incidences are higher or regions where Black veterans are more likely to rely on VA facilities for stroke-related care. To determine whether prior findings of lower stroke mortality among Blacks would hold in a VA population with a higher proportion of African Americans and higher incidence of stroke death, we examined racial/ethnic differences in stroke mortality among veterans in the southeastern United States.

The aim of this study was to examine racial/ethnic differences in all-cause mortality among veterans residing in the state of South Carolina and in the heart of the “stroke belt.”18–20 South Carolina has the distinction of being the “buckle” of the stroke belt because it has the highest stroke-related death rates in the United States.1 Additionally, 40% of the population of South Carolina is Black, which suggests more reliance on VA facilities among Black veterans since VA facilities serve a higher proportion of underrepresented minorities than exists in the United States overall.21 We hypothesized that, since the percentage of Black South Carolinians was significantly higher than the US population overall and more Black veterans were more likely to use VA facilities, post-stroke mortality would be higher in Blacks than in Whites, in keeping with findings from non-VA studies.

RESEARCH DESIGN AND METHODS

Study Sample

We created a cohort of veterans with a diagnosis of stroke at a VA facility in the southeastern United States (Charles-