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Letter by Kuller and Neaton Regarding Article, “Association of Race With Mortality and Cardiovascular Events in a Large Cohort of US Veterans”

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Kovesdy, et al(1) conclude that among veterans receiving healthcare through the U.S. Veterans Health Administration (VHA) event rates among blacks compared to whites are lower or similar for all-cause mortality, coronary heart disease (CHD) incidence, or stroke. Table 2 of the paper shows a slightly higher age-adjusted all-cause rate for black as compared to white men, a higher incidence of CHD among white as compared to black men, a much higher rate of stroke in black as compared to white men, and similar rates of acute myocardial infarction.

We previously reported that for the 300,647 white and 20,223 black men screened for the Multiple Risk Factor Intervention Trial (MRFIT), there were 2,518 deaths among blacks and 30,772 deaths among whites due to cardiovascular disease (CVD) over 25 years. The black/white hazard ratios (HRs) adjusted for age, risk factors and income were 1.05 (95% CI: 1.01–1.10) for CVD mortality, 0.86 (95% CI: 0.81–0.91) for CHD mortality, and 1.37 (95% CI: 1.20–1.57) for stroke mortality.(2) HRs for CVD varied significantly by age ($p < 0.0001$) and declined from 1.23 (95% CI: 1.06–1.43) for those 35–39 years to 0.98 (95% CI: 0.92–0.98) for those 55–57 years at the time of screening.

In an earlier paper, we showed that the age-adjusted HR of death in 16 years for blacks versus whites in MRFIT was 1.47 (95% CI: 1.42–1.53) but dropped to 1.19 (95% CI: 1.14–1.25) after adjustment for income and risk factors.(3) For men 35–44 years this adjusted HR was greater (1.36; 95% CI: 1.25–1.49) than for those 45–57 years (1.14; 95% CI: 1.08–1.20). This is similar to Table 2 in the Kovesdy paper. HRs vary by cause of death. The HR (black versus white) for CVD mortality adjusted for age, income and risk factors did not differ significantly from 1.0; the HR for CHD mortality was significantly less than 1.0, and

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the HRs for stroke, especially cerebral hemorrhage, homicide, prostate cancer, lung cancer, and pneumonia were significantly greater than 1.0.(3) With the exception of the 12,866 men who were randomized and followed closely for 7 years(4), the MRFIT screening included no additional medical care or any specific follow up for risk factors.

The black-white differences reported in MRFIT and other studies are greater for younger age groups. To fully understand the results of Kovesdy et al, the authors need to show age-specific outcome differences among blacks as compared to whites.

Considering the results from MRFIT, in addition to variation by age, the results of this VA study may be due to selection for military service (5) and subsequent use of VA services among blacks and whites. This limits the generalizability of the findings and the results should be interpreted with caution.

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