

Obesity is Associated with even Greater Survival Advantage in African American Hemodialysis Patients Compared to other Races

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INTRODUCTION

Overweight and obesity are associated with survival advantages in chronic disease states including in CKD patients undergoing maintenance hemodialysis (HD).

African American (AA) HD patients have greater survival than White patients.

It is not clear whether obesity-survival association is different across races.

METHODOLOGY

- We examined 5-year (7/2001-6/2006) cohort of 138,773 HD outpatients including 43,848 AA outpatients in DaVita dialysis clinics using Cox models adjusted for case-mix and surrogates of the Malnutrition-Inflammation Complex Syndrome (MICS) (Table 1).
- Case mix models included multivariate adjustment for age, gender, dialysis vintage, diabetes mellitus, Charlson comorbidity index score, and ethnicity.
- The Malnutrition-Inflammation Complex Syndrome (MICS) adjusted models controlled for case-mix variables and also serum albumin, blood hemoglobin, nPCR (nPNA), phosphorus, TIBC, ferritin, calcium and creatinine .

RESULTS

Table 1. Demographics by Race

	Age (yrs) mean ± SD	Women (%)	Diabetics (%)
African American	57.8±14.9	49	46
non-African American	63.4±15.4	43	48

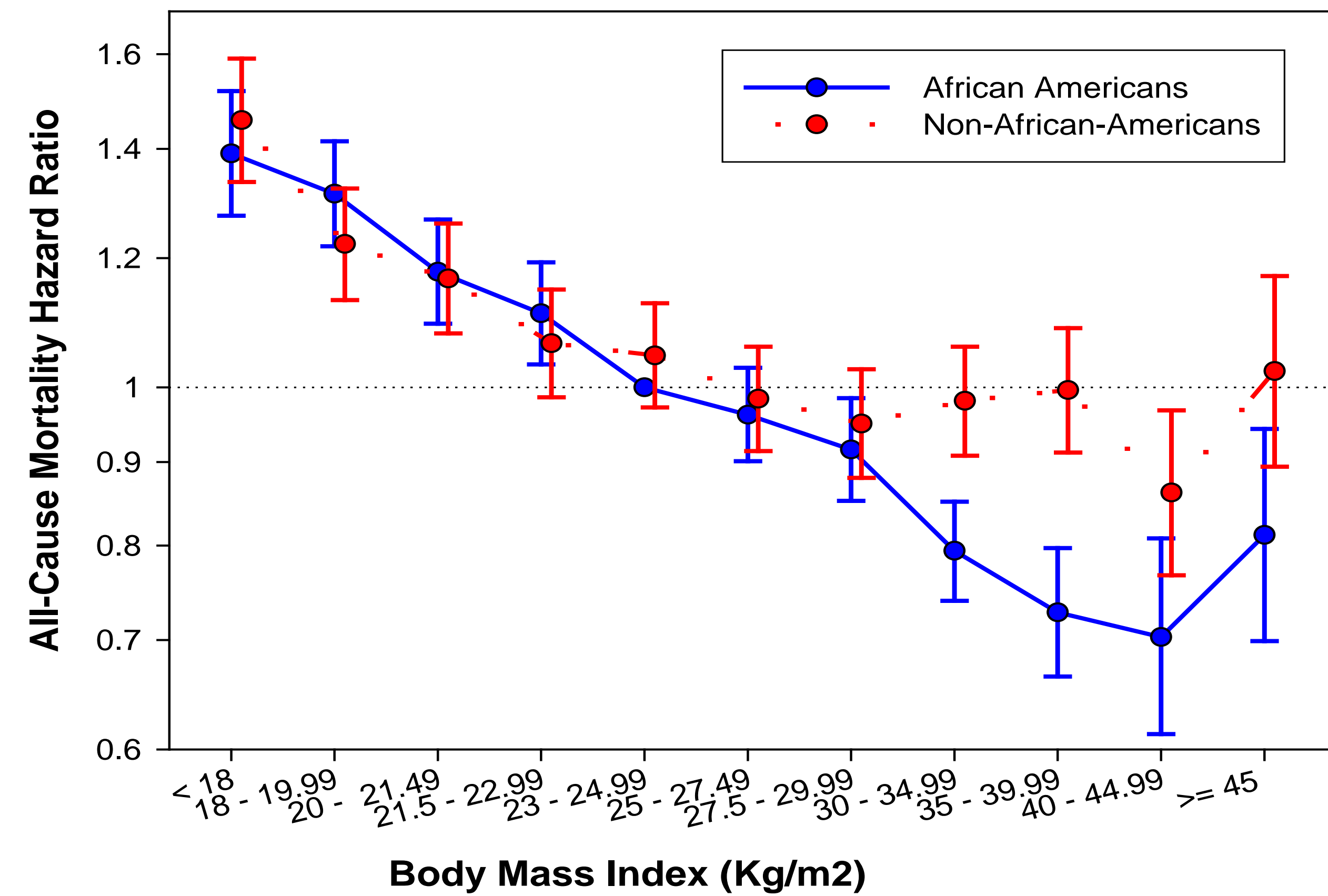


Figure 1. Mortality Risk by Body Mass Index By Race

CONCLUSIONS

- Compared to the reference group (AA with BMI 23 to <25 kg/m²):
 - AAs in 40 to <45 kg/m² had the lowest death hazard ratio (HR: 0.70, 95% confidence interval [CI]: 0.61-0.81).
- However, in non-AA, BMI above 25 kg/m² did not show considerable survival advantage with the exception of BMI of 40 to <45 kg/m² group (HR: 0.86 (95% confidence interval: 0.77-0.97) (Figure 1).

KEY LEARNINGS

- ✓ Among HD patients, the survival advantages of obesity is more prominent in AA and may be a contributor to the overall greater survival observed in AA dialysis patients.
- ✓ Across all subgroups of BMI in the obesity range (>30 kg/m²) AA patients have greater survival than non-AA patients

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