Racial differences in the incidence of chronic kidney disease.

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**Abstract**

**BACKGROUND AND OBJECTIVES**: The incidence of ESRD is higher in African Americans than in whites, despite reports of a similar or lower prevalence of CKD.

**DESIGN, SETTING, PARTICIPANTS, & MEASUREMENTS**: This study compared the incidence of CKD among young African-American and white adults over 20 years of follow-up in the community-based Coronary Artery Risk Development in Young Adults study. Participants included 4119 adults, 18-30 years of age, with an estimated GFR (eGFR) ≥60 ml/min per 1.73 m(2) at baseline. Incident CKD was defined as an eGFR <60 ml/min per 1.73 m(2) and a ≥25% decline in eGFR at study visits conducted 10, 15, and 20 years after baseline.

**RESULTS**: At baseline, the mean age of African Americans and whites was 24 and 26 years, respectively (P<0.001), and 56% and 53% of participants, respectively, were women (P=0.06). There were 43 incident cases of CKD during follow-up, 29 (1.4%) among African Americans and 14 (0.7%) among whites (P=0.02). The age- and sex-adjusted hazard ratio (HR) for incident CKD comparing African Americans to whites was 2.56 (95% confidence interval [95% CI], 1.35-5.05). After further adjustment for body mass index, systolic BP, fasting plasma glucose, and HDL cholesterol, the HR was 2.51 (95% CI, 1.25-5.05). After multivariable adjustment including albuminuria at year 10, the HR for CKD at year 15 or 20 was 1.12 (95% CI, 0.52-2.41).

**CONCLUSIONS**: In this study, the 20-year CKD
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incidence was higher among African Americans than whites, a difference that is explained in part by albuminuria.

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