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Abstract
BACKGROUND: Albuminuria is an important risk factor for progressive chronic kidney disease (CKD) and is more prevalent in black than white adults. We sought to determine the association between low income and albuminuria and whether this association differs for blacks and whites.

STUDY DESIGN: Cross-sectional study.

SETTING & PARTICIPANTS: 9,144 black and 13,684 white US adults 45 years and older in the population-based Reasons for Geographic and Racial Differences in Stroke (REGARDS) Study.

PREDICTORS: Self-reported annual household income category (≥$75,000, $35,000-$74,999, $20,000-$34,999, and <$20,000); black and white race.

OUTCOMES & MEASUREMENTS: Albuminuria defined as high (30-300 mg/g) or very high (>300 mg/g) urinary albumin-creatinine ratio (ACR). Multinomial logistic regression used to examine the race-stratified association between categories of income and albuminuria (normal, high, or very high ACR).

RESULTS: Overall, geometric mean ACR was 10.2 mg/g and was higher for blacks (11.8 mg/g) than whites (9.3 mg/g), P<0.001. Lower income was associated with a higher prevalence of
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albuminuria for both whites and blacks in unadjusted analyses. After adjustment for demographics, lifestyle factors, comorbid illnesses, and estimated glomerular filtration rate, there was a trend toward a stronger association between lower income levels and high ACR in blacks (ORs of 1.38 [95% CI, 1.07-1.77], 1.36 [95% CI, 1.05-1.75], and 1.58 [95% CI, 1.21-2.05] for income levels of $35,000-$74,999, $20,000-$34,999, and <$20,000, respectively; reference group is those with income≥$75,000) compared with whites (ORs of 0.95 [95% CI, 0.81-1.12], 0.95 [95% CI, 0.79-1.14], and 1.26 [95% CI, 1.02-1.55], respectively); P interaction=0.08 between race and income. Results were similar for very high ACR and subgroups of participants with diabetes or hypertension.

LIMITATIONS: Cross-sectional design; not all REGARDS participants provided their annual income.

CONCLUSIONS: Lower income may be associated more strongly with albuminuria in blacks than whites and may be a determinant of racial disparities in albuminuria.

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