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Prevention

RACIAL DIFFERENCES IN THE PREVALENCE OF UNCONTROLLED AND UNREPORTED HYPERTENSION IN THE SOUTHEASTERN UNITED STATES: INSIGHTS FROM ALMOST 70,000 BLACKS AND WHITES IN THE SOUTHERN COMMUNITY COHORT STUDY

Poster Contributions

Poster Sessions, Expo North

Saturday, March 09, 2013, 10:00 a.m.-10:45 a.m.

Session Title: Special Populations and Hypertension: Race/Ethnicity, the Young, and Underserved

Abstract Category: 25. Prevention: Hypertension

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Background: Compared with whites, blacks have a higher prevalence of hypertension (HTN) for which lifestyle and socioeconomic status (SES) have been implicated as contributory factors. Thus our objective was to evaluate factors associated with HTN in a cohort with well-documented SES characteristics.

Methods: We evaluated 50,157 black and 19,054 white participants in the Southern Community Cohort Study who had self-reported (SR) and ascertained HTN. Multivariable logistic regression models were used to estimate the adjusted prevalence odds ratios (OR) and 95% confidence intervals (CI) for factors associated with HTN, overall and by race-sex.

Results: The prevalence of SR-HTN was 57% overall, but after adjusting for known risk factors blacks were more likely to have SR-HTN than whites (OR 1.84; 95% CI 1.75-1.93), and the association was stronger among women (OR 2.08; 95% CI 1.95-2.21) than men (OR 1.47; 95% CI 1.36-1.60). Both education and income were inversely associated with SR-HTN in all race-sex groups, with an overall OR of 0.62 among those with the highest levels of education (95% CI 0.55-0.70) and income (95% CI 0.51-0.75). There was a strong association between body mass index (BMI) and SR-HTN in all race-sex groups, with OR rising to 4.03 (95% CI 3.74-4.33) for morbidly obese participants (BMI>40). Similar associations were noted for race and BMI in the analysis of ascertained HTN. Among those with SR-HTN and ascertained HTN who reported use of an anti-hypertensive agent, 94% were on at least one of the major classes of anti-hypertensive agents, but only 44% were on at least two classes and only 29% were on a diuretic. The odds of both uncontrolled HTN (SR-HTN and ascertained HTN) and of unreported HTN (no SR-HTN and ascertained HTN) were twice as high among blacks than whites (OR 2.13; 95% CI 1.68-2.69 and OR 1.99; 95% CI 1.59-2.48, respectively).

Conclusions: In this cohort, race and BMI were independently associated with HTN after accounting for contemporaneous SES and lifestyle factors. The racial differences in the prevalence of uncontrolled and unreported HTN, and the suboptimal implementation of treatment guidelines for HTN in the overall cohort, all merit further investigation.