



Editorial commentary: Racial and Ethnic Disparities in Hypertension Prevalence, Awareness, Treatment, and Control in the United States, 2013 to 2018

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The article, “Racial/ethnic disparities in hypertension prevalence, awareness, treatment, and control in the United States, 2013–2018,”¹ by Dr Aggarwal and colleagues indicates that a contemporary understanding of racial and ethnic differences in the hypertension control cascade could inform targeted interventions to improve equity in blood pressure control.^{2–4} Given the health and economic burden of hypertension and the lower rates of hypertension controlled to <140/<90 mmHg in racial and ethnic minorities,^{5,6} the report addresses a topic of epidemiological and clinical significance. The authors provide a clear and concise focus on the hypertension control cascade, including prevalence awareness, and treatment, in racial and ethnic minority groups as a strategy to inform health equity. In the process, they extend and confirm previous observations, for example, “Black Americans have the highest prevalence of hypertension, while rates of awareness and treatment are similar to White Americans.”^{2–4,6}

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Although the roughly 40% greater prevalence of hypertension in Black than White adults is not a direct contributor to disparities in control, it is a major factor underlying racial disparities in cardiovascular and renal outcomes. In other words, treatment and control of hypertension reduce but do not fully reverse the excess risk associated with hypertension, a phenomenon termed

residual risk.⁷ The authors note that adverse socioeconomic factors and structural racism limit access to healthy food and exercise options, which likely contribute to the greater burden of prevalent hypertension among Black than White Americans.^{1,8} Their premise is consistent with the viewpoint that racial disparities in prevalent hypertension are more reflective of social than biological factors and consistent with reports that such disparities are not observed in more egalitarian societies.⁹

Previous studies indicate that lesser treatment effectiveness, or a lower proportion of treated adults controlled, is the major factor underlying racial (Black-White) disparities in hypertension control.^{2,10–12} Without specifically identifying treatment effectiveness as a driver of racial differences in hypertension control, the authors provide credible explanations for less effective antihypertensive treatment in Black adults including limited access to care and medications. They also cite evidence that providing care more directly from trusted community resources, for example, the successful barbershop study, represent effective approaches for improving hypertension control in Black men.¹³

The explanation remains unclear on how adverse social determinants drive disparities between Black and White adults in prevalent hypertension and treatment effectiveness, while awareness and treatment are not different. A more granular understanding of specific social factors driving disparities in hypertension prevalence and treatment effectiveness between Black and White adults could inform targeted interventions for greater health equity.

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Hypertension control among treated adults in 2015 to 2018 was significantly lower among Black, Hispanic, and Asian than White Americans after adjusting for age, sex, and race and ethnicity.¹² Racial and ethnic differences in hypertension control among treated adults, that is, treatment effectiveness, remained significant for Black and Asian but not Hispanic Americans when education, income, type of health care insurance, having a usual source of health care and a health care visit in the past year were included in multivariable adjustment.¹² Similarly, the disparity in hypertension control between Hispanic and Black relative to White Americans in 2015 to 2018 appeared to be attenuated more after adjustment for education, obesity, and access to care in Hispanic (unadjusted and adjusted odds ratios 0.74 versus 0.98, respectively) than in Black Americans (0.79 versus 0.84, respectively).¹⁴ These reports are consistent with the authors' viewpoint that social and structural factors affecting the control cascade vary across the different race-ethnicity subgroups and highlight the importance of more granular understanding to inform effective targeted interventions.¹

HISPANIC AMERICANS

The authors indicate that prevalent hypertension is similar in Hispanic and White Americans, whereas awareness and treatment are lower. In fact, lower awareness and treatment rates in Hispanic than White Americans partially explain the ethnic disparity in hypertension control.^{2,3,6,10,11} Lesser treatment effectiveness in Hispanic than White Americans contributes to inequities in hypertension control,^{2,10-12} even if attenuated in multivariable adjustment.¹² Of note, the magnitude of the disparity in health care insurance and access to care is greater for Hispanic than Black Americans and is a likely contributor to lower hypertension awareness and treatment rates in the former.^{12,14,15}

ASIAN AMERICANS

The authors reported that Asian Americans had lower hypertension awareness but similar prevalence and treatment rates as White Americans.¹ The lower awareness with similar treatment rates suggest that the proportion of aware adults treated is greater in Asian than White Americans. Lesser treatment effectiveness emerges as the key driver of poorer hypertension control in Asian and Black than White Americans and a significant factor in lower control rates among Hispanic than White Americans.^{2,12} Unfortunately, treatment effectiveness declined among most demographic groups during 2015 to 2018 and was a significant contributor to the broad-based decline in hypertension control during this timeframe.¹⁴

The authors focused attention on key racial and ethnic differences in the hypertension control cascade as an opportunity to inform interventions that promote greater equity in hypertension control.^{1,2} They also noted the substantial decline in sequential steps of the hypertension control cascade among White Americans, which highlights the imperative for improving care for all adults given the urgent need to reverse a recent, large, and broad-based fall in hypertension control.^{12,14} Their findings highlight the need for further research to elucidate the specific socioeconomic and structural factors mediating racial and ethnic similarities (lower treatment effectiveness for Black, Hispanic, and Asian Americans) and differences (prevalence [greater for Black Americans], awareness [lower for Hispanic and Asian Americans], treatment [lower for Hispanic Americans]) in the hypertension control cascade relative to White Americans. Such research is critically important and timely in the ongoing quest for greater equity in hypertension control and related clinical outcomes.

ARTICLE INFORMATION

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