Nonpharmacological Treatment of Hypertension: Impact on Prevalence Estimates

To the Editor:

The recent report by Ong et al presents updated information on hypertension prevalence in the United States using data from the National Health and Nutrition Examination Survey 1999–2004. Although it provides vital information on the burden of hypertension in the US population, we have concerns over the definition of hypertension used (systolic blood pressure ≥140 mm Hg, diastolic blood pressure ≥90 mm Hg, or current antihypertensive medication use). This definition fails to acknowledge those individuals with hypertension who are adequately controlled with nonpharmacological treatment.

In analyses of National Health and Nutrition Examination Survey 1999–2004 (using the SURVEY procedures in SAS 9.1 to account for the sampling design and age adjustments to reflect 2000 census data), we expanded the definition of hypertension to include persons who met current definitions by blood pressure criteria or who reported having been told by a physician on ≥2 occasions that they had hypertension. Using this definition, 10% of individuals with hypertension (3.2% of the population) have normal blood pressure on no medications. Of these, 66.4% reported having been told to adopt lifestyle modifications for high blood pressure (decrease sodium intake, moderate alcohol intake, increase physical activity, or lose excess weight), and 50.7% were currently following lifestyle recommendations to lower blood pressure. This modified definition resulted in a higher estimate of hypertension prevalence (32.0%) compared with that of Ong et al (28.8%).

Current guidelines recommend therapeutic lifestyle changes as the initial step in the management of hypertension, recognizing that individual therapeutic lifestyle change interventions may effect a systolic blood pressure decrease of 2 to 20 mm Hg. Although we recognize the importance of using consistent case definitions to track the burden of hypertension through time, the currently accepted definition underestimates the prevalence of hypertension in the US population. Furthermore, we fear it implicitly perpetuates a bias against the nonpharmacological treatment of hypertension.

Disclosures

None.

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