

Correspondence

Treatment of Hypertension Critical in Reducing Morbidity and Mortality

To the Editor: The importance of the article “The New ‘Normal’ Blood Pressure: What Are the Implications for Family Medicine?” by Viera in the January issue of *The Journal of the American Board of Family Medicine* should not be ignored. The lack of adequate control of hypertension in the United States has significant ramifications.¹ Ninety-one percent of cases of heart failure are preceded by hypertension, and half of all patients who suffer a heart attack (and two thirds of those who have a first-time stroke) have a blood pressure greater than 140/90.² During the 10-year period from 1991 to 2001, the actual number of deaths due to hypertension rose 53%.² Considering the poor control of documented hypertension in the United States, the need for lifestyle counseling in prehypertensive patients poses a very serious challenge.

Evidence suggests that the currently accepted level for *normal* blood pressure may be too high. Lewington et al performed a meta analysis involving “time-dependent” correction for regression dilution and related mortality during each decade of age (at death) to the estimated blood pressure at the initiation of the decade.³ They found that with each decade of life, there was a proportional difference in the risk of cardiovascular death when blood pressures were controlled to levels of 115 mm Hg systolic blood pressure and 75 mm Hg diastolic blood pressure. In addition, Vasan et al, using the Framingham Heart Study database, reported an increase in cardiovascular events with higher baseline levels of blood pressure. When compared with optimal blood pressure levels, those with *high-normal* blood pressure had a risk-factor-adjusted hazard ratio for cardiovascular disease of 2.5 in women and 1.6 in men.⁴

Physicians often ignore mildly elevated systolic blood pressures.⁵⁻⁷ As demonstrated by Viera, prehypertension is a significant problem in family medicine. Considering that physicians often ignore mildly elevated blood pressure, it is reasonable to assume that prehypertension will not receive the attention it merits.

Of great concern is the significant lack of awareness of the Joint National Committee on Prevention, Detection, Evaluation, and Management of High Blood Pressure recommendations in the primary care setting. Hyman and Pavlik surveyed a national sample of primary care physicians to determine their practice patterns for the treatment of hypertension and their familiarity with Joint National Committee on Prevention, Detection, Evaluation, and Management of High Blood Pressure guidelines.⁷ Forty-one percent were not familiar with or had not heard of the recommendations. This finding is not trivial. The importance of being familiar with the works of the Joint National Committee on Prevention, Detection, Evaluation, and Management of High Blood Pres-

sure was demonstrated when statistical analysis revealed that a working knowledge of these guidelines correlated with adherence to published recommendations. As such, it would seem that not following the guidelines has less to do with disagreements in treatment options and more to do with education about hypertension.

It does not require a large decrease in blood pressure to achieve benefit. A simple reduction of 5 mm Hg in systolic blood pressure can reduce mortality due to stroke by 14%, the mortality due to heart disease by 9%, and all-cause mortality by 7%.⁸ In 2002, 89.7% of all patients with hypertension or those being screened for hypertension were evaluated in a primary care office.⁹ It is incumbent on all us to do our best in reducing blood pressure and the morbidity and mortality associated with poor control.

Randy K. Wexler
Family Medicine, Ohio State University
Columbus, OH

References

1. Chobanian A, Bakris G, Black H, et al. Seventh report of The Joint National Committee on Prevention, Detection, Evaluation, and Management of High Blood Pressure (JNC-7). *Hypertension* 2003;42:1206-52.
2. American Heart Association. Heart disease and stroke statistics – 2004 update. Dallas (TX): American Heart Association; 2003.
3. Lewington S, Clarke R, Qizilbash N, Peto R, Collins R. Age specific relevance of usual blood pressure to vascular mortality: a meta analysis of individual data for 1 million adults in 61 prospective studies. *Lancet* 2002;360:1903-13.
4. Vasan RS, Larson MG, Leip EP, et al. Impact of high-normal blood pressure on the risk of cardiovascular disease. *N Engl J Med* 2001;345:1291-7.
5. Berlowitz R, Ash A, Hickey E, et al. Inadequate management of blood pressure in a hypertensive population. *New Engl J Med* 1998;339:1957-63.
6. Hyman DJ, Pavlik VN. Characteristics of patients with uncontrolled hypertension in the United States. *N Engl J Med* 2001;345:479-86.
7. Hyman DJ, Pavlik VN. Self-reported hypertension treatment practices among primary care physicians: blood pressure thresholds, drug choices, and the role of guidelines and evidence based medicine. *Arch Int Med* 2000;160:2281-6.
8. Whelton P, He J, Appel L, et al. Primary prevention of hypertension: clinical and public health advisory from the national high blood pressure education program. *J Am Med Assoc* 2002;288:1882-8.
9. Agency for Health Care Research and Quality. Medical Expenditure Panel Survey 2000 [cited 2006 Oct 27]. Available from: <http://www.futurefamilymed.org/PreBuilt/factsaboutFamilyMed.pdf>.

doi: 10.3122/jabfm.2007.03.070002

The above letter was referred to the authors of the article in question, who offer the following reply.