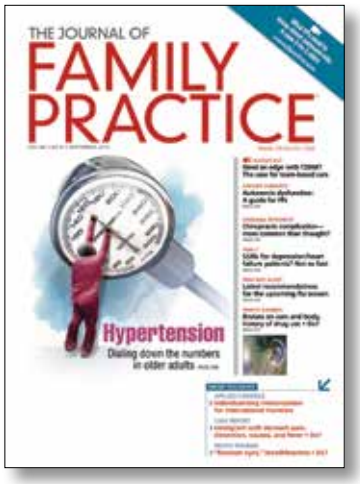
While it is tempting to make generalizations about BP treatment targets, we owe it to our patients to understand the nuances of applicable guidelines.

Utilize guidelines, but customize BP treatment in older patients



In the article, "Hypertension treatment strategies for older adults" (*J Fam Pract.* 2017;66:546-554), Hansell et al recommend a systolic blood pressure (SBP) treatment target of <120 mm Hg for community-dwelling, nondiabetic patients ≥75 years of age. This recommendation is not supported by the authors' cited guidelines, and we have serious concerns about the risk of harm from such overly stringent BP control in this population.

While Hansell et al acknowledge that no consensus exists regarding an optimal BP target for older patients, the authors cite the Eighth Joint National Committee (JNC 8), the American College of Physicians (ACP), the Systolic Blood Pressure Intervention Trial (SPRINT) subgroup analysis, and the BP arm of the Action to Control Cardiovascular Risk in Diabetes (ACCORD) trial to justify their recommendation. But as the authors mention, JNC 8 conducted a comprehensive review of the available evidence and determined that a BP target of <150/90 mm Hg for hypertensive patients ≥60 years of age is appropriate.[1]

The authors also state that ACP recommends an SBP target of <140 mm Hg, while, in fact, the recommendations from ACP (which are joint guidelines published with the American Academy of Family Physicians) say that high-quality evidence strongly supports an SBP target of <150 mm Hg to reduce the risk for mortality, stroke, and cardiac events in adults ≥60 years of age.[2]

SPRINT does support Hansell et al's recommended SBP target of <120 mm Hg, but this trial provided only composite data of adults ≥75 years of age and did not differentiate between the outcomes in otherwise healthy adults ≥75 years of age vs those with cardiovascular conditions.[3] As Hansell et al point out, the SPRINT trial was halted prematurely, which compromises the validity of their findings.

Lastly, the ACCORD trial did not find benefit to treating SBP <120 mm Hg compared with <140 mm Hg in adults with diabetes, but it did find substantial harms in the <120 mm Hg group, including an increased risk of renal impairment and hypokalemia.[4]

Hansel et al's overreliance on the SPRINT subgroup analysis represents a significant flaw in the assertion that an SBP target <120 mm Hg is reasonable for all community-dwelling, nondiabetic adults ≥75 years of age. While the authors made the allowance that a higher target (<140 mm Hg) is acceptable if a target of <120 mm Hg places undue burden on the patient, the guidelines they cited, when considered together, suggest that starting at a higher target is not only sufficient to prevent complications, but also reduces overtreatment.

Adults ≥75 years of age are a diverse group regarding disease conditions, life expectancy, and personal priorities. While it is tempting to make generalizations about BP treatment targets, we owe it to our patients to understand the nuances of applicable guidelines so that we can tailor BP treatment targets to each patient's unique clinical situation and personal priorities. Applying a blanket recommendation to this heterogeneous population may result in significant harms from overtreatment.

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Although we do believe that SPRINT is a landmark trial, we strongly emphasized that comorbidities, frailty, and dementia greatly impact treatment decisions.

Authors' response

We agree with the title of this letter, "Utilize guidelines, but customize BP treatment in older patients." Our recommendations are not limited to targeting a systolic BP <120 mm Hg for community-dwelling, nondiabetic adults ≥75 years of age, but include consideration for "undue burden." Our third practice recommendation, which recommends that one consider cognitive function, polypharmacy, multimorbidity, and frailty, is an equally—if not more—important recommendation.

With regard to the specific concerns about the current guidelines:

1. The American College of Physicians and American Academy of Family Physicians' "Recommendation 1" advocates a systolic BP goal <150 mm Hg for adults ≥60 years of age. However, "Recommendation 3" endorses intensifying treatment in adults ≥60 years of age at high cardiovascular (CV) risk. Based on Framingham criteria, all adults ≥75 years of age are considered at high risk for CV disease, as stated in our article. Therefore, "Recommendation 3" for a target of <140 mm Hg is applicable for the population addressed in our article.[1]
2. The Eighth Joint National Committee (JNC 8) does recommend a BP target <150 mm Hg for adults ≥60 years of age, but does not take into account recent data, which is why we wanted to highlight that data for physicians.[2]
3. Since submission of our article, The American College of Cardiology/-American Heart Association (ACC/-AHA) has published its first set of guidelines since 2003, which lowered BP target to <130 mm Hg in patients with high CV risk. Those guidelines outline the validity of SPRINT and the consistency of the existing evidence, including the linear relationship of BP and mortality.[3]
4. SPRINT was halted early specifically because of the mortality benefit in the intensive treatment group, which is ethically appropriate.[4] It is unclear to us how this compromises the validity of the trial. There is often concern for bias from early cessation in small trials, but this was a large, well-powered trial.
5. The ACC/AHA guidelines also address some of the nuances of ACCORD, which is specific to patients with diabetes (whom we excluded from our first Practice Recommendation). Although no overall mortality benefit was found, there was stroke reduction in this group and additional benefit in the standard glycemia group.[3,5] A meta-analysis of SPRINT and ACCORD showed CV disease reduction with a BP target <120 mm Hg.[6]

Although we do believe that SPRINT is a landmark trial contributing a great deal to our recommendations, we strongly emphasized that comorbidities, frailty, and dementia greatly impact treatment decisions. We stressed that prescribers use caution and slow titration because of adverse effects. Geriatric medicine is a complex art, and one of the goals of our article was to highlight this complexity and emphasize the importance of considering goals of care, comorbidity, frailty, and cognitive function when choosing optimal BP targets.

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