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Letter to the Editor

Response to letter by Visaria et al regarding our article, "Standardizing hypertension management in a primary care setting in India through a protocol based model."

We appreciate the thoughtful comments by Visaria et al. First, they point out the need to address social determinants of hypertension. We agree wholeheartedly on the need to address education, income, and nutrition (of which salt intake is one part), among other socioeconomic variables. However, these variables are part of a broad issue of social development, which need to be addressed largely by government and civil society. While slow and steady progress continues to be made on these variables, the presence of gaps in socioeconomic development cannot be an excuse for inaction in the treatment of hypertension. Drug-based treatment of hypertension undoubtedly saves lives, and improving use of these therapies is part of socioeconomic development, especially given that hypertension is a leading cause of death in India. In fact, use of a standardized, protocol-based treatment model can potentially accelerate control of morbidity and mortality from hypertension, even as progress in other socioeconomic spheres continues. We see no reason to pit treatment of hypertension against socioeconomic development, rather see treatment of hypertension as part of a broader narrative of improved health, and consequent socioeconomic development.

The second point they make is with regards to blood pressure (BP) treatment targets and recommend a lower target of <130/80 mmHg, in addition to calculating overall cardiovascular disease (CVD) risk. However, a lower treatment target comes at the cost of lower tolerability, in addition to increased medication burden. We therefore recommend an initial target of <140/90 mmHg for everyone, a target that should be tolerated by most people. In addition, we clearly mention that once a person has achieved a target of <140/90 mmHg, a lower BP of <130/80 should be considered. We write in the training handout, "For people at high cardiovascular risk (prior CAD, stroke, DM or CKD), consider a lower goal blood pressure of <130/80 mmHg if drug therapy is well tolerated, especially in younger individuals".[1] We strongly believe that perfect should not be the enemy of good, and given abysmal hypertension control rates of <20% for India as a whole (at the higher cutoff of <140/90 mmHg), we need to focus on progress, and simplified protocols can be a substantial asset in that direction.[2]

The third point they make is with regards to the increased effectiveness of thiazide diuretics and the high rate of adverse effects with calcium channel blockers (CCBs). Thiazide diuretics require laboratory monitoring for hypokalemia and, in some individuals, potassium supplementation. In a tropical country such as India, where people are predisposed to potassium losses through sweat (especially in the summer), laboratory monitoring and supplementation become even more crucial. This will substantially increase the costs of thiazide therapy, not to mention the burden of laboratory monitoring and potassium supplementation. Most importantly, there is no conclusive evidence that thiazide diuretics are more effective than CCBs or angiotensin converting enzyme inhibitors/angiotension receptor blockers (ACEi/ARBs), as shown by multiple meta-analyses of randomized controlled trials.[3,4] In addition, recent guidelines also recommend one of CCBs, ACEi/ARB, or diuretics as first-line therapy.[5] The authors mention a large observational study that shows that thiazide diuretics have a slightly higher effectiveness than other classes. Observational studies have limitations, and these findings have to be interpreted in the context of the overall body of evidence. The adverse effects of CCBs the authors mention refers to nondihydropyridine CCBs, which have been found to be inferior to other classes of drugs in multiple studies. However, amlodipine (which is the CCB used in our protocol) is a dihydropyridine CCB, which has a very different effectiveness and adverse effect profile, and has been found to be equivalent to other classes in multiple studies, along with being recommended as first-line therapy in multiple guidelines.[5,6]

Conflicts of interest

The authors declare that they have no conflicts of interest to declare.

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