

Comment: Prevalence of hypertension and prehypertension in schoolchildren from Central India

Sir,

I have read an interesting study by Patel *et al.*^[1] published in May–August 2019 issue of the *Annals of Pediatric Cardiology*. The authors studied the distribution of blood pressure (BP) and the prevalence of hypertension and prehypertension among Indian schoolchildren. They found that prehypertension was detected in 6.9% and 6.5% and hypertension was found in 6.8% and 7.0% of boys and girls, respectively. Height and weight were found to be the significant predictor of systolic and diastolic BP among both genders.^[1] The authors addressed a few study limitations. I assume that the following methodological limitation might be additionally relevant and could cast suspicions on the accuracy of the study results. The authors mentioned in the study methodology that the “Fourth Report on The Diagnosis, Evaluation, and Treatment of High BP in Children and Adolescents” was used as reference standard in evaluating BP. Actually, the employed BP standard is old and dated back to 2004,^[2] and its implication in the current clinical practice and researches is no more valid. As BP levels might differ in populations due to different factors, namely genetic, nutritional, ethnic, and socioeconomic standards, establishing BP reference ranges based on the above-mentioned factors has been suggested to better define BP profiles and stages of hypertension in a particular population.^[3] To my knowledge, the reference intervals for the distribution pattern of systolic and diastolic BP for the Indian pediatric population have been constructed to be employed in the clinical settings and researches.^[4] I wonder why Patel *et al.*^[1] did not refer in their study methodology to that Indian population-specific BP reference centile curves. I assume that adopting these national curves might yield more accurate results. Despite the study limitations, the high prevalence of prehypertension and hypertension reported by Patel *et al.*^[1] urges the need to implement strategic actions to contain further staggering in the prevalence of pediatric prehypertension and hypertension as children move into adulthood.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

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REFERENCES

1. Patel A, Bharani A, Sharma M, Bhagwat A, Ganguli N, Chouhan DS. Prevalence of hypertension and prehypertension in schoolchildren from central India. *Ann Pediatr Cardiol* 2019;12:90-6.
2. National High Blood Pressure Education Program Working Group on High Blood Pressure in Children and Adolescents. The fourth report on the diagnosis, evaluation, and treatment of high blood pressure in children and adolescents. *Pediatrics* 2004;114:555-76.
3. Subhi MD. Blood pressure profiles and hypertension in Iraqi primary school children. *Saudi Med J* 2006;27:482-6.
4. Sayeemuddin M, Sharma D, Pandita A, Sultana T, Shastri S. Blood pressure profile in school children (6-16 years) of Southern India: A prospective observational study. *Front Pediatr* 2015;3:24.

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10.4103/apc.APC_64_19

How to cite this article: Al-Mendalawi MD. Comment: Prevalence of hypertension and prehypertension in schoolchildren from central India. *Ann Pediatr Card* 2019;12:348.

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