

## Correspondence

### Paediatric hypertension in Iraq

Sir,

The interesting study by Borah *et al*<sup>1</sup> has inspired me to throw light on paediatric hypertension (HT) in Iraq and compare it with that reported in India.

First, Borah *et al*<sup>1</sup> did well in addressing four study limitations. I presume that there is another important methodological limitation. Borah *et al*<sup>1</sup> mentioned that the overweight and obesity were assessed by body mass index (BMI) percentiles for age based on Centers for Disease Control (CDC) 2000 dataset for both genders. It is noteworthy that obesity prevalence in a given population can be determined using four different diagnostic criteria namely, International Obesity Task Force reference, CDC2000 dataset, World Health Organization reference 2007, and national reference<sup>2</sup>. Applying different BMI references could result in marked differences in obesity prevalence. To my knowledge, no Indian sex- specific BMI-for-age references are yet constructed to be employed. On the other hand, I presume that the studied Indian population is polygenetic. This is important to be considered as significant differences in BMI among different ethnic groups exist<sup>2</sup>. If so, this methodological limitation might cast suspicions on the reported HT prevalence, blood pressure (BP) distribution, and HT correlates in this study<sup>1</sup>.

Second, HT prevalence and the pattern of distribution of systolic BP (SBP) and diastolic BP (DBP) in both genders are quite different<sup>1</sup> compared to that reported in Iraq<sup>3</sup>. Borah *et al* reported that girl children had significantly higher mean SBP ( $104.2 \pm 12.0$  vs.  $103.2 \pm 11.6$  mmHg,  $P < 0.001$ ) than boys. With increase of age, there was a gradual rise in both SBP and DBP in boys and girls<sup>1</sup>. In Iraq, there were no significant differences noted with respect to SBP and DBP among boys and girls except at the age range of 10-12 yr, where girls manifested higher SBP ( $P < 0.01$ )

and DBP ( $P < 0.05$ ) than boys<sup>3</sup>. The reported HT prevalence (7.6%) in Borah *et al* study<sup>1</sup> is higher than 1.7 per cent reported in Iraq<sup>3</sup>. This difference might be attributed to the variations in study design, definition of HT, methods of BP recording, observer effect, age range, sample size, ethnicity, and socio-economic class<sup>4</sup> as well as the preponderance of obesity among Iraqi children (7.3%)<sup>3</sup> compared to the low obesity prevalence reported by Borah *et al* (2.9%)<sup>1</sup>.

Third, I agree with Borah *et al*<sup>1</sup> that strengthening of school health programme is fundamental to prevent future epidemic and complications of HT. Actually, implementing a school-based intervention to teach children on the healthy heart has shown improvement in their knowledge, increasing their awareness on healthy lifestyles, and has the potential to reduce the risk of atherosclerosis in both the individual child and the population at large<sup>5</sup>. In Iraq, a school-based heart health curriculum has been launched and the results of evaluating its impact on awareness and HT prevalence are to be shortly addressed.

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### References

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