

## Using child health checks to assess the prevalence of overweight and obesity among urban Indigenous children

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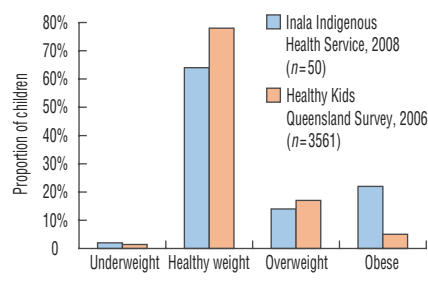
**TO THE EDITOR:** Childhood obesity is a growing concern, with an estimated 22% of Australian children considered to be overweight or obese.<sup>1</sup> Overweight and obese Indigenous children are at high risk of developing chronic conditions such as ischaemic heart disease and type 2 diabetes,<sup>2</sup> contributing to increased mortality.<sup>3</sup>

Given the paucity of studies assessing rates of overweight and obesity in Indigenous children in urban areas, we conducted a pilot study to determine whether the Aboriginal and Torres Strait Islander child health check (Medicare item 708) is a useful tool for opportunistically assessing dietary habits, blood pressure and rates of overweight and obesity in children attending the Inala Indigenous Health Service. Data were collected from April 2008 to September 2008, and were compared with the 2006 Healthy Kids Queensland (HKQ) Survey.<sup>4</sup>

Of the 129 children aged 5–14 years who had health checks during the study period, 50 (39%) participated in our study (25 girls). Of those who participated, 36% (18 of 50) were overweight or obese, compared with 21% (751 of 3561) in the HKQ Survey ( $\chi^2 = 6.54$ ;  $P = 0.01$ ) (Box). Of the 41 participants for whom z scores for waist circumference could be calculated, 19 were  $\geq 90$ th centile. Half of the Inala participants (23 of 46 for whom data were available) consumed takeaway food at least once a week, compared with 33% (1048 of 3185) in the HKQ Survey ( $\chi^2 = 5.98$ ;  $P = 0.01$ ). Non-diet soft drinks were consumed at least once a week by 38% (18 of 47 for whom data were available) of Inala participants, compared with 24% (750 of 3129) of the HKQ population ( $\chi^2 = 5.19$ ;  $P = 0.02$ ). Fewer than two-thirds of Inala participants consumed the minimum recommended amounts of fruit, and fewer than half consumed the minimum recommended amounts of vegetables.

Our study demonstrates that the Aboriginal and Torres Strait Islander child health checks are a worthwhile screening tool for overweight and obesity. However, recruitment was slow. Even with practice nurses actively inviting potential participants by telephone, only 5% of school-aged children on

**Weight categories of children from the Inala Indigenous Health Service study and the Healthy Kids Queensland Survey**



the clinic's register attended during the study period suggesting that most of them were well. Opportunistic recruitment of children attending the clinic to see the doctor was difficult, with only one-third participating. Furthermore, addition of the food frequency questionnaire to the child health check increased consultation length, which was at times frustrating for families and clinic staff.

What could we do differently? Promoting child health checks to families through fun campaigns, which aim to educate families on the benefits of preventive health checks, and using a quicker health check tool could boost recruitment. Child health check clinics could be run within schools or as special child-friendly clinics during out-of-school hours or school holidays.

Our results, limitations notwithstanding, are alarming for this Indigenous community. The addition of waist circumference and blood pressure measurement (with age-

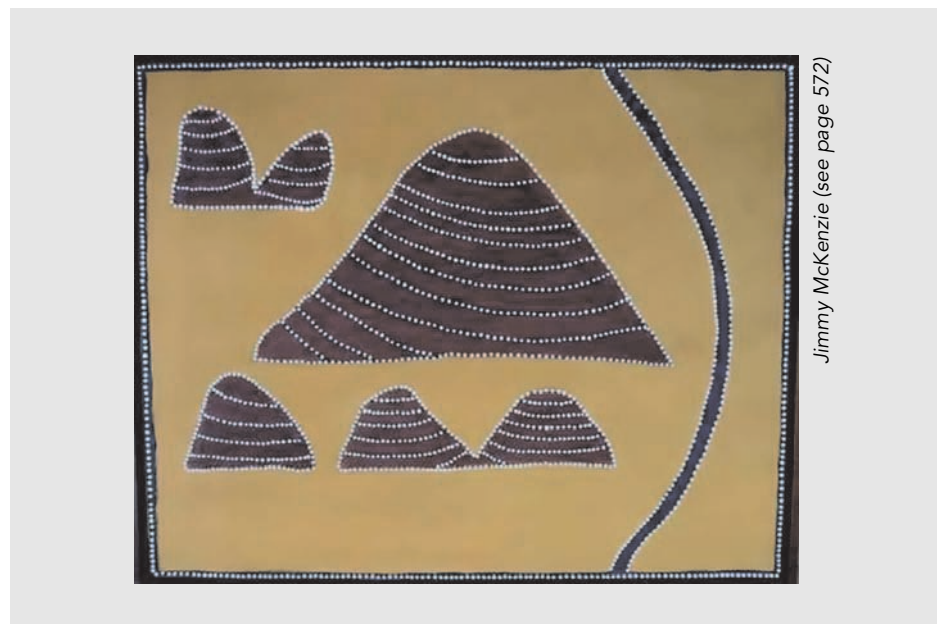
appropriate tables) would enhance an already valuable tool — the Aboriginal and Torres Strait Islander child health check — in the early detection of chronic disease risk factors.

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Jimmy McKenzie (see page 572)

