ABSTRACT

**Background:** In many countries in the developing world overweight and under-nutrition co-exist together as these countries undergo both nutritional and epidemiological transitions. In Jamaica where there is increasing overall prevalence of obesity there has been little or no focus on this problem in younger children.

**Objective:** To determine the prevalence of overweight/obesity among 6-9 year old children in urban Jamaica and it association with socio-demographic factors, dietary and physical practices.

**Design:** A cross-sectional survey of 6-9 year olds school children was done coupled with key informant interviews of staff of the schools. Data was collected by self-administered questionnaire completed by parents/guardians followed by anthropometry of students.

**Subjects:** 490 students ages 6 to 9 years old were randomly selected from five government primary schools in the Kingston Metropolitan Area in Jamaica. The parents/guardians of 201 of these children consented to their participation in the study.

**Main Outcome Measure:** Overweight/obesity was defined as body mass index (BMI) $\geq 85^{th}$ percentile relative to reference data for the US population in 2000. Under-weight was defined as BMI $\leq 5^{th}$ percentile relative to the same reference population.

**Results:** Eleven point five percent of the sample had BMI values below the 5$^{th}$ percentile (boys, 12.3 %; girls, 10.9%), this was almost twice the regional estimate for the Caribbean. The prevalence of overweight/obesity was 14.5% (boys, 11.0%; girls, 17.8 %), which was similar to rates seen among the US population of the same age. BMI was inversely associated with crowding but the converse was true for possession score, which
was a proxy for socioeconomic status. There was no significant difference in the dietary and physical practices between the different weight categories.

**Conclusion:** Under- and over-nutrition are of public health significance among the population 6-9 year olds studied. There is a need to address both nutritional problems with preventive and rehabilitative strategies.