International Conference and Exhibition on
Obesity & Weight Management
December 3-5, 2012 DoubleTree by Hilton Philadelphia, USA

Are rural South African children abdominally obese?

Daniel T Goon

University of Venda, South Africa

Abstract

While available data exist on total body fat of rural South African children, as measured by body mass index, little is known concerning the abdominal obesity of rural South African children. The aim of this study was to determine the prevalence of abdominal obesity among rural South African children. Participants involved 1 172 rural black school children (541 boys and 631 girls) aged 10–16 years, residing in Mankweng and Toronto, both rural black settlements in Capricorn district, Limpopo province, South Africa. Height, weight and waist circumference were measured using standard techniques. Waist-to-height ratio (WHtR) was calculated. A WHtR ≤ 0.50 was used to determine abdominal obesity. Results were analysed using student t-test and Chi-squared statistics, with a p-value of < 0.05. Waist-to-height ratio showed inconsistent results in both sexes and across age groups, with no significant differences among boys and girls in all age groups. The proportion of boys with a WHtR ≥ 0.5 was 69 (12.8%), while girls were 92 (14.6%). The highest proportion of WHtR occurs at age 11 in boys, while this proportionality increases with age in girls, peaking at ages 14-16 years. Overall, 161 (13.7%) children had central obesity. This study indicates that abdominal obesity as measured by WHtR is prevalent among rural black South African children. The prevalence of WHtR ≥ 0.5 (13.7%) among the children is worrisome, as its signals the presence of obesity-related problems and the likely susceptibility of these sample children to future health risks. Therefore, interventions strategies are needed to reduce central obesity among children. Thus, the simple message: *keep your waist circumference to less than your height*, becomes imperative.

Biography

Daniel T Goon is a Lecturer at Centre for Biokinetics, Recreation and Sport Science, University of Venda, Thohoyandou, South Africa. His research interests include body composition assessment and physical fitness testing. He is a level II accredited International Society for the Advancement of Kinantropometry (ISAK II). He has authored and co-authored more than 54 scientific publications in peer-reviewed journals and a reviewer to several journals.