



The World Health Organization (WHO) defines obesity as a disease in which excess body fat has accumulated to such an extent that health may be adversely affected. The adverse health consequences of obesity include insulin resistance, type 2 diabetes, dyslipidaemia, hypertension, coronary heart disease, hyperuricaemia, osteoarthritis and even malignancies such as cancer of the breast (in postmenopausal women), endometrium and colon.¹

The body mass index (BMI) has long been established as the preferred method of measuring adiposity in epidemiological studies,² and for most populations a good correlation exists between BMI and percentage body fat for all ages and both sexes. Appropriate cut-points for the classification of adults¹ and children^{4,5} according to BMI are now available.

South Africa is following the global trend of an alarming increase in the prevalence of overweight and obesity among all its citizens. The prevalences of overweight and obesity in male South Africans aged 15 years and older were 19.4% and 9.1% respectively, while the corresponding rates for females were 25.5% and 29.4%.⁶ The highest prevalence of obesity was found in urban African women (35.7%).

In this edition of *JEMDSA* Armstrong *et al.*⁷ report on the prevalence of obesity and overweight in South African primary school children aged 6 - 13 years. They found that after adjusting rates to the demographics of South Africa the prevalence of obesity was 2.4% for boys and 4.8% for girls while the prevalence of overweight was 10.9% for boys and 17.5% for girls. An interesting observation was that the combined prevalence of overweight and obesity for black girls increased from 12% at 6 years to 22% at 13 years while in white girls the prevalence decreased from 25% to 15% over the corresponding age range. The authors observed that South African children showed very similar overweight and obesity values to children in the USA between 1976 and 1980. If the same increase in the prevalence of overweight and obesity that was observed in the USA for the period 1976 - 1980 to 1988 - 1994 is also destined for South African children, it can be expected that up to 24% of these children will have a BMI greater than 25 kg/m² in less than a decade. Indeed, this prediction has already borne out for white children (Armstrong *et al.*). Since childhood obesity is an important predictor of obesity in adults, the rates of obesity reported in the paper by Armstrong *et al.* are very disturbing.

Obesity is a complex disease with both genetic and environmental components.⁸ While the former may predispose an individual to obesity, prolonged exposure to environmental factors such as high-fat diets⁹ and physical inactivity¹⁰ is necessary for overweight and obesity to develop. Among urban blacks in South Africa fat intakes have increased from 16.4% to 26.2% of total energy over a period of 50 years while carbohydrate intakes have decreased from 69.3% to 61.7% over the same period.¹¹ In the THUSA study black women with higher incomes and lower physical activity were at the greatest risk of increased BMI.¹² Other environmental factors including socio-cultural factors, level of education, parity and stress were also implicated in the escalating obesity epidemic in South Africa.¹³

During the past 10 years chronic diseases of lifestyle (CDL) associated with obesity have received increasing attention in South Africa, and a second Medical Research Council report on CDL was published recently.¹⁴ Revised guidelines for the detection and management of hypertension¹⁵ and dyslipidaemia¹⁶ also became available this year while guidelines for the detection, diagnosis and management of diabetes are currently being updated. Following in the wake of the report of the WHO consultation on obesity¹ the Southern African Association for the Study of Obesity released its guidelines for the prevention and management of overweight and obesity.¹⁷ In addition the Ministry of Health also consulted widely and developed its own guidelines for non-communicable diseases.¹³

While some guidelines have undoubtedly been implemented with some measure of success, mostly in the private sector, the same cannot be said about the public sector. A focused and well-orchestrated effort is needed to harness all South Africa's resources to tackle the challenge posed by the escalating epidemic of obesity. South Africa cannot afford to compartmentalise the approach to CDL. A more logical approach may be for all stakeholders, public and private, to join forces and develop a co-ordinated and workable strategy to combat obesity, a key feature of most CDL. **Vuka South Africa, Move for Your Health.**¹⁸

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