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EDITORIAL

Obesity among women: A complex setting

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The prevalence of adult obesity now exceeds underweight in most countries of the world where obesity prevalence data are available, except in some Asian and sub-Saharan African countries.[1] The most recent South African Demographic and Health Survey (SADHS 2016) provides updated information on the prevalence of overweight and obesity in the adult population. Based on the body mass index (BMI) categories, 68% of South African women and 31% of men were overweight or obese.[2] The higher prevalence of overweight and obesity among women as opposed to men in South Africa is consistent with results from some other low- and middle-income countries (LMICs) and an obesity prevalence of higher than 30% among South African women is similar to the obesity prevalence in high-income English-speaking countries and in north Africa.[1] In contrast to these findings, some countries in sub-Saharan Africa still reported a higher prevalence of underweight than obesity among adults in 2014.[1] Obesity is an important risk factor for several non-communicable diseases (NCDs).[3] Therefore halting the increase in obesity prevalence is one of the global NCD targets[4] and also one of the targets of the South African Department of Health in its Strategic Plan for the Prevention and Control of NCDs.[5] In the current issue of SAJCN a high prevalence of overweight and obesity is described among two distinct groups of South African women, namely university students[6] and adult women living with HIV.[7] Although both studies had small sample sizes, similar findings were reported in studies with larger sample sizes.[2,8] People living with HIV and AIDS are noted as a vulnerable group at higher risk for developing NCDs in the South African Strategic Plan for the Prevention and Control of NCDs.[5]

The high prevalence of obesity among South African women is of public health concern. Most studies show an increase in BMI with increasing age from young adulthood, with the highest mean BMI in the 45–54-year-old group.[2,9] The recent SADHS report shows that there was already a high prevalence of overweight (32.8%) and obesity (20.1%) among young South African women, 20–24 years old. The study by Gradidge and Cohen on lifestyle and eating behaviours of a small group of female students at a South African university in this issue of SAJCN[6] shows a similar high prevalence of overweight and obesity among female students. The results of the study suggest that physical inactivity and buying food and cold drinks from vendors in the university environment were associated with a high BMI among the students. The eating behaviour of the overweight and obese group included lower fruit intakes and buying more fried foods from vendors than the normal weight group. Food vendors on campus provided a wide variety of food options, ranging from classic fast food to healthy fresh salad choices, but the less healthy fast foods were preferred, particularly by the overweight and obese group. In the university food environment food vendors were visible and easily accessible and they possibly contributed to the high prevalence of obesity among female students.[6] Another South African study has shown that students may not be following nutritional guidelines despite having sufficient knowledge, and could be basing their food choices on sensory appeal and mood, rather than nutrition knowledge and health considerations.[10]

Studies from the United States and Europe indicate that an obesity-promoting food environment with highly accessible unhealthy foods and drinks may lead to an increased risk of obesity and related chronic disease, particularly among young adults. Information identifying healthier food choices through front-of-pack nutrition labels was associated with improvements in healthy food choices. Increasing the availability of healthy foods and decreasing the portion size of unhealthy foods improved dietary quality. Price incentives and increased availability of healthy foods combined with nutrition information to increase purchases of healthy foods had a positive effect on the dietary practices of young adults. Potentially useful interventions in tertiary education settings were nutrition messages, nutrient labelling, providing healthy options and portion control of unhealthy foods. Price decreases for and the increased availability of healthy options combined with nutrition information resulted in improvements in dietary habits.[11] The effects of a behavioural weight management programme on weight loss of the study participants were estimated in a study in the USA.[12] The programme was significantly less effective among men living near fast food restaurants or convenience stores, while the food environment had a smaller effect on changes in BMI among the women. The results of these studies provide evidence that the food environment may promote or hinder weight loss among obese adults, including university students.[11,12] However, availability of healthier food choices and nutrition knowledge may not be sufficient to increase the intake of healthier foods compared to less healthy fast foods

in all settings.[10] Additional research comparing the long-term effectiveness of the food environment and combinations of environmental and behavioural interventions on changes in BMI among overweight and obese groups is warranted.

Overweight and obesity is a multidimensional setting and not only a public health problem among "healthy" individuals. Two decades ago HIV/AIDS was known as the 'wasting disease' and most diagnosed HIV-infected patients were underweight.[13] Recently a high prevalence of overweight and obesity among HIV-positive South African women has been described in Johannesburg,[8] as well as in Durban.[7] People living with HIV and AIDS were identified as a vulnerable group at increased risk for the development of NCDs in the South African Strategic Plan for the Prevention and Control of NCDs[5] due to chronic inflammation and the long-term use of antiretroviral therapy.[14] A high body fat percentage will increase the risk for NCDs further due to the known association between excessive body fat and risk for several NCDs.[3]

Anaemia is also a frequent complication of HIV infection and is associated with progression of HIV disease, as well as with shorter survival of HIV-infected patients. However, the initiation of antiretroviral therapy has been associated with a significant increase in haemoglobin in HIV-positive patients. The mechanisms whereby antiretroviral therapy may be associated with the correction of anaemia and malnutrition are not yet fully understood, but the reduction of opportunistic infections may play a role.[15] Women in the study of Biggs and Spooner were antiretroviral therapy naïve[7] but would probably start to use antiretroviral therapy soon after diagnosis. The treatment would help to correct anaemia among the women[15] but attention to iron deficiency would still be necessary. A study in HIV-positive South African children also showed that the initiation of antiretroviral therapy was associated with a decrease in prevalence of anaemia from 31.7% at baseline to only 3.8% after 18 months of antiretroviral therapy. Over the same period children with animal protein intakes > 20 g/day had significantly lower odds for iron deficiency after 18 months of follow-up than children with lower intakes (OR = 0.40, 95% CI 0.21, 0.77). Although anaemia prevalence decreased, dietary iron intake was insufficient to protect against iron deficiency among these children.[16]

People living with HIV and AIDS are now living longer due to the availability of antiretroviral therapy.[15] More attention is necessary to improve their nutritional status, with measures to treat and prevent both overweight and related cardiometabolic risk, as well as micronutrient undernutrition and anaemia. Dietitians and nutritionists can play an important role in the nutritional management of this compounding problem of obesity and HIV infection.

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