Obesity and the associated comorbidities among urban residents of Karen/Langata and Kibra Constituencies in Nairobi, Kenya

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Background: Obesity is known to impact negatively the functioning of the cardiovascular system. According to the Kenya Ministry of Health Report (2012), up to 13.3% of males and 24% females are overweight and obese while 46.2% males and 42.7% females have high blood pressure. The aim of this study was to determine the prevalence of obesity and the associated factors among urban residents of Karen/Langata and Kibra Constituencies in Nairobi, Kenya.

Methods: This was a cross-sectional study based on a three-stage cluster sampling methodology across the socio-economic strata. Assessments included measurement of weight and height, blood pressure (BP) check, fasting blood glucose, the lipid profile and C-reactive protein concentrations. Information on demographics was also collected using a structured questionnaire. Data was weighted and analyzed with values of p<0.05 considered statistically significant.

Results: A total of 537 adults (m: 50.3%; w: 49.7%) aged 18 years and above participated in the study. The mean age was 38.09±13.4 years. The prevalence of obesity was 16.3% and higher in women than men (w: 27.3% vs. m: 5.9%). A significant positive association (p<0.001) was observed between BMI and increasing age in both sexes. In men, obesity was significantly associated with the lipid profile (p<0.001), higher socio-economic status (p<0.001), BP (p=0.004) and fasting blood glucose concentration (p=0.003), whereas in women, BMI was strongly associated with CRP (p=0.002), the lipid profile (p<0.05) and BP (p=0.001).

Conclusions: The gender disparity observed in the presentation of obesity and concomitant comorbidities calls for health promotion and intervention efforts geared not only towards the observed cardiovascular risk factors but also the social cultural and economic factors that may be responsible for the observed findings.

Biography
Lydia Kaduka holds a Ph.D. in Medical Biochemistry from Kenyatta University (Kenya) and a Masters in Clinical Biochemistry and Molecular Biology from University of Surrey (UK). She works as a senior research officer at Centre for Public Health Research in Kenya Medical Research Institute (KEMRI). Her research interests are in cardiovascular disease, nutrition and public health. She has published in many reputed journals. She currently serves on the KEMRI/National NCD Programme.

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