ABSTRACT

This community study compared obese (Quetelet index $\geq$ 25 kg/m^2) and non-obese (Quetelet index 20 - 24.9 kg/m^2) women in two lower-middle income suburbs of Kingston, Elleston Flats and Mona Commons. Weight, height, mid-upper-arm circumference and skinfold thickness at 4 sites (triceps, biceps, subscapular and suprailiac) were measured. Factors associated with obesity, prevalences of, knowledge of and attitudes to degenerative diseases; and of possible aetiological significance, obstetric history, dietary and activity patterns, were investigated using a questionnaire.

The sample comprised 140 obese and 137 non-obese women aged 20 - 81 years, stratified by decade.

The majority (71.2%) of the obese women were overweight, (25 - 29.9 kg/m^2) and 28.8% were moderately (30 - 39.9% kg/m^2) obese. The obese were significantly shorter, heavier and had larger mid-upper arm circumferences and skinfold thicknesses than the non-obese women. Younger women were significantly taller but had smaller mid-upper arm circumferences, Quetelet indices and suprailiac skinfold thicknesses than the 40+ year olds. The triceps skinfold thicknesses ranked highest among the skinfold thicknesses of both groups.

The study also indicated an obesity prevalence of 32% and 49% among 30+ and 20+ year olds in Elleston Flats and Mona Commons respectively.

Socio-economic status, parity and number of meals eaten showed no association with obesity while number of snacks eaten showed a positive association ($P = 0.002$). More obese (36.4%) than non-obese (12.4%) women had a preference for sweet foods while more non-obese preferred fruits and vegetables and meat and fish.

Obesity was not associated with the women's obstetric and gynaecological history. However, although more obese women said they had gained weight during pregnancy 43% of obese women perceived themselves as being fat since they were young (< 10 years old). More obese than non-obese women had a family history of obesity ($P < 0.001$).

The obese had significantly more complaints ($P = 0.003$), more of them were taking prescribed drugs ($P < 0.001$) and attended public health facilities more often than the non-obese women. Diabetes mellitus, heart disease and varicose veins were not associated with obesity but there was an increased prevalence of arthritis and hypertension among the obese ($P < 0.001$).

Moreover, obese women were cognizant of the relationship between overweight and ill health and had attempted to slim, presumably more for health than social reasons. Overall activity patterns showed no association with obesity although more controls (34.3%) than obese women (19.3%) undertook moderately active pursuits during their leisure time ($P < 0.005$).

It can therefore be concluded that frequent snacking, preference for sweet foods, maintenance of weight after delivery and family history

of obesity are factors contributing to the genesis of obesity in this community. Although there was an association between morbidity and obesity, especially moderate obesity, the similarity between obese women and controls in disease experience was striking. This suggests that mild obesity or overweight is a benign condition in Jamaican women. Multiparity cannot be used to explain obesity in these women.

There is need for further epidemiological research aimed at elucidating the aetiological, and consequences of obesity in Jamaican women.