

## SUMMARY

### Rationale of the study

This research study was undertaken to bring to light the extent of obesity in an 'apparently healthy' adult population living in an urban locality in Sri Lanka. The rationale for this study was based on three facts drawn from an extensive literature survey. One was the mounting evidence that urban dweller, world over, is predisposed to obesity. The second was that the urban dweller in particular, succumbs to a spectrum of comorbidities associated with obesity that degrade the quality of life. The third was, paucity of information pertinent to the urban dweller in Sri Lanka, with regards to obesity and obesity related comorbidities.

### Overall objective

The overall objective was to determine the degree of obesity and abdominal obesity by BMI and WHR, respectively, in an adult urban population and to find associations with relevant socio-economic conditions and also, determine the impact of obesity and abdominal obesity on hypertension, hyperglycaemia and dyslipidaemias.

### Study locality

This study was based in the author's practice (a single-handed family practice) which is situated in a *Gramaseva Division* (smallest administrative unit in the country). This *Gramaseva Division* of *Wattegedara*, which has an adult population of 3700 people approximately, is situated in the District of Colombo, Sri Lanka.

### Study population and study sample

At the commencement of the study, the author invited all persons between the ages 20 to 70 years in *Wattegedara* to participate in the study. 1620 persons responded

giving consent and participated in the initial screening for selection of 'apparently healthy' persons. 1241 persons were found to be apparently healthy and out of them a study sample of 414 persons (=study subjects) was randomly selected.

#### **Methods used to obtain data**

In the study proper, socio-economic data was gathered according to a structured – validated information-gathering questionnaire. General obesity was determined with the body mass index (weight in kg / [height in meter]<sup>2</sup> ) and truncal or abdominal obesity with the waist to hip circumference ratio (waist circumference in centimetres / hip circumference in centimetres).

Physical activity level was obtained by summing up physical activities, occupational, leisure-time and household chores (PARs × time in hours). Familial predisposition was determined by 'figural stimuli relating to BMI' method. Blood pressure was determined using the authentic techniques. Plasma glucose concentration and the lipid profile were determined using enzymatic methods (pages 72, 73). Statistical analyses were done with a SPSS software package.

#### **Data collected**

Data obtained from the study subjects were,

- (i) Demographic data such as age, sex, occupation and monthly income.
- (ii) Familial predisposition.
- (iii) Data on physical activity level (PAL).
- (iv) Anthropometric measurements such as body weight, standing height, waist circumference and hip circumference.
- (v) Clinical measurements such as blood pressure.
- (vi) Biochemical estimations such as plasma glucose (fasting and 2-hour-post-glucose-load) and serum lipids.