The prevalence of obesity and overweight in patients at a Bloemfontein private practice

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To the Editor: The increase in the prevalence of obesity is viewed worldwide as a health problem. Approximately one billion people are overweight, 300 million of which are obese.[1] In South Africa, Puoane et al.[2] found that, from a sample of 13 089 men and women, 29.2% of the men and 56.6% of the women were overweight or obese.

Obesity should be seen as a chronic illness associated with serious complications and early death. Although fat tissue is necessary and serves as the body's fuel reserve, too much fat tissue is harmful.[3] In developed countries, the two most important mortality risk factors, cardiovascular illness and cancer, are associated with obesity. Diabetes mellitus is the most expensive health complication associated with obesity.[4]

Almost all the systems in the body of an obese person may be affected. Obesity is also the most common clinical characteristic of the metabolic syndrome, which includes conditions such as hypertension, insulin resistance and abnormal lipid metabolism.[5]

In addition, obesity has become an increasing economic problem. Economic costs not only include the treatment of obesity and associated conditions, but also sick leave and early retirement. Sick leave and an inability to work because of obesity-related illness account for 10% of the total cost of labour loss.[4] In developed countries, obesity occurs more in lower socio-economic classes, with the opposite being true in developing countries, where obesity may be a status symbol. Obesity is, however, increasing in developed and developing countries.[6]

Therefore, because of the health risk and economic implications, it is important to diagnose obesity at an early stage and to implement prevention programmes. Health professionals are responsible for informing patients of safe and effective weight loss and weight maintenance programmes.

This descriptive study was done to determine the prevalence of obesity, overweight and associated complications at a Bloemfontein private practice. Patients older than 18 years and not pregnant were eligible for the study. The patients were given an information piece (Afrikaans and English) and were informed of the study in the consultation room. If willing to take part, the patient signed the consent form. A thorough history was taken, including current illnesses and medication. The patients' weight, height, waist and hip circumferences, and resting blood pressure were measured. Two blood samples were taken to determine glucose and cholesterol levels. The patients' body mass index (BMI; weight/length^2) and waist/hip ratio (WHR) were determined. The WHR indicates fat distribution in the body, with a value of >0.85 for women and >1.0 for men signifying an abnormal fat distribution. A BMI of 25.0-29.9 is considered overweight and a BMI of 30 is considered obese. Blood glucose and cholesterol levels were considered to be high if the values were above 6.2 mmol/l and 5.4 mmol/l respectively. A systolic and diastolic blood pressure of more than 140 mmHg and 90 mmHg respectively was considered high.

Seventy-three patients took part in the study, most of whom were female (81%). The youngest patient was 20 years old and the oldest was 71 years old (median: 44 years). Abnormal values recorded for the patients are given in Table I. Of the females, 77% were overweight, compared with 64.3% of the males. The patients' median blood glucose level was 5.2 mmol/l, and the median cholesterol level was 5 mmol/l. More than half of the patients (54.8%) were not taking any medication.

Fifteen patients (21%) had a high BMI (25) and a high glucose level, while 39 patients (53.4%) had a high BMI but a normal glucose level (3.5 to 6.2 mmol/l). Five patients (7%) had a normal BMI but an increased glucose value. Almost one-third of the patients (29%) had high BMI and cholesterol levels. Only seven patients (10%) had both a high BMI and a high blood pressure level. Almost half of the patients (47%) had normal blood pressure, in spite of a high BMI.

From the above information it can be seen that the prevalence of overweight or obesity is 75.3% (95% CI [64.4%; 83.8%]). One-quarter of the patients (24.7%) recorded a BMI 25. Approximately one-third of the women had an abnormal fat distribution, which is associated with an increased risk for diabetes, hypertension, dyslipidaemia and ischaemic heart disease. Many patients were overweight or had high cholesterol levels.

This study may be biased, as overweight patients may have been more inclined to participate in the study. We recommend that all adults should visit their general practitioner for a general check-up every year. Blood glucose and cholesterol tests should be routinely included for overweight or obese patients, as the early identification of abnormal values could prevent the occurrence of serious complications. ❧

Table I: Abnormal values recorded for the patients (n=73)

		Frequency	Percentage
Overweight patients	*BMI 25.0 – 29.9	24	32.9
Obese patients	*BMI 30	31	42.5
Abnormal fat distribution:			
Males (n=14)	**WHR >1.0	1	7.1
Females (n=59)	**WHR >0.85	18	30.5
High blood glucose	> 6.2 mmol/l	20	27.4
High cholesterol	> 5.4 mmol/l	27	37
High systolic blood pressure	> 140 mmHg	15	20.5
High diastolic blood pressure	> 90 mmHg	12	16.4

*Body mass index
**Waist/hip ratio

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