



Management of diabetes mellitus in outpatient facilities is achieving poor results

To the Editor: In South Africa, prevalence rates for diabetes mellitus (DM) are rising at an alarming rate. In addition, South African diabetic patients suffer from high rates of obesity, poor blood pressure (BP) control and poor glycaemic control.¹ In order to monitor management of DM, records were examined for 149 patients (76 black and 73 white) attending one of two Tshwane (formerly greater Pretoria) facilities for routine outpatient treatment. Body mass index (BMI), BP and HbA_{1c} results were used to ascertain management of DM. Controlled BMI was defined as < 25 kg/m², controlled systolic and diastolic BP as < 130/85 mmHg and glycaemic control as HbA_{1c} results < 7.0%.²

There were 31 black patients (17 males and 14 females) and 73 white patients (38 males and 35 females) at facility 1 and 45 black patients (11 males and 34 females) at facility 2. Ages ranged between 15 and 79 years (mean age 50.3 years, standard deviation (SD) 15.1). Type 2 DM was diagnosed in 79% of black male, 58% of white male, 94% of black female and 60% of white female patients. Most white patients (63%) were treated with insulin alone; black patients were treated with a combination of insulin and oral therapy (41%), or oral therapy alone. Only 37% of black patients, in comparison with 89% of white patients, monitored their blood glucose.

Twelve black patients (16%) and 18 white patients (25%) had controlled BMI. Black female patients were significantly more overweight and obese than black male patients ($p < 0.01$), similar to previous findings among black South African diabetic patients.¹ Twenty-three black patients (30%) and 33 white patients (45%) had controlled BP (< 135/85 mmHg). Good glycaemic control was achieved by 12% of black and 21% of white patients, compared with the 45% found for American diabetic patients.³ BP control was not related to glycaemic control ($p > 0.05$) for either black or white patients, indicating that good glycaemic control is more difficult to achieve than BP control. Glycaemic control was not related to monitoring status for black patients ($p > 0.05$). Poor glycaemic control was positively related to monitoring status for white patients

($p = 0.05$), indicating that these patients are not using their monitors, or are ignoring their results.

Overall findings give cause for concern, since poor management has significant implications for the long-term consequences of this chronic disease. Specific targets for interventions are weight reduction techniques, improved self-monitoring behaviour for white patients, and provision of self-monitoring aids for black patients to improve management of DM.

Margaret S Westaway

*Health and Development Research Group
Medical Research Council
Pretoria, and
School of Health Systems and Public Health
University of Pretoria*

John R Seager

*Health and Development Research Group
Medical Research Council
Cape Town, and
Faculty of Community and Health Sciences
University of the Western Cape*

Danie G van Zyl

*Kalafong Hospital and
Department of Internal Medicine
University of Pretoria*

Helena Oosthuizen

*Department of Internal Medicine
University of Pretoria*

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