

An audit on the care of patients with type 2 diabetes mellitus in a tertiary care medical clinic in Sri Lanka

Dear Sir,

Type 2 diabetes is on the rise in Sri Lanka. Katulanda *et al.*^[1] estimate that the prevalence of diabetes in adults over 20 years of age in Sri Lanka is 10.3% and is expected to rise to 13.9% in the year 2030. We conducted an audit on the care of patients with type 2 diabetes mellitus in the out-patient setting in the University Medical Unit of the National Hospital of Sri Lanka, which is the premier tertiary care teaching hospital in Sri Lanka.

All patients with type 2 diabetes mellitus presenting to the clinics of the unit were included in the first phase of the audit [n = 224 (males 97, females 127)]. The audit tool was an interviewer administered questionnaire. After the first cycle, all attending doctors were educated on clinical practice recommendations with an interactive lecture. Two months later, the second phase was carried out using a randomly selected portion of the previous sample (n = 94). Diagnosis of diabetes and clinical standards of treatment were defined according to the clinical practice recommendations of the Ministry of Healthcare and Nutrition of Sri Lanka^[2] and the American Diabetes Association (ADA).^[3]

The mean age of the sample subjects was 60 years. Local guidelines that recommend fasting blood glucose (FBG) and postprandial blood glucose (PPBG) to assess glycemic control were used to identify satisfactory control as self-monitoring of blood glucose as recommended by ADA is too expensive for patients in our setting. Between the audit cycles, the percentage of patients with satisfactory glycemic control showed no improvement (39.3–40.4%, $P = 0.849$). However, the percentage in whom HbA1c level was measured within 1 year increased significantly from 1.3% to 5.3% ($P = 0.038$).

There was no improvement in patients screened for nephropathy. The numbers with a full urine report (45.5–51.1%, $P = 0.367$), urinary microalbumin levels (17.2–16.3%, $P = 0.888$) and renal function tests (47.3% vs. 44.7%, $P = 0.666$) (where indicated) had not improved significantly.

However, there were significant improvements in patients screened for retinopathy with dilated funduscopy (42.4% vs. 60.6%, $P = 0.003$), having a cardiac risk assessment (80.8% vs. 94.7%, $P = 0.002$), having

satisfactory blood pressure control (65.6–77.7%, $P = 0.034$) and getting prophylactic aspirin therapy (76.7–87.2%, $P = 0.033$). Numbers on angiotensin converting enzyme inhibitors (where indicated) had increased from 83% to 86.2% ($P = 0.487$). All patients interviewed during the second cycle had been referred to the Health Education Unit of the hospital and were educated on diet, glycemic control, foot care and lifestyle modification.

While there are improvements in some aspects, the overall care of patients with diabetes remains unsatisfactory. Limited time for consultations (average time per patient 7 minutes) and high cost of investigations were the main barriers for improvement of service.

Our proposals for improvement include: continuous medical education for doctors, a dedicated clinic for diabetic patients and referral of patients with uncomplicated disease to local hospitals to reduce congestion. More audits are encouraged as it is only by self-appraisal and criticism that patient care is improved.

C. C. Ranasinghe, P. C. Rodrigo, S. Premaratne, A. M. M. C. Adikari¹, Senaka Rajapakse¹

University Medical Unit, National Hospital of Sri Lanka
¹Department of Clinical Medicine, Faculty of Medicine, University of Colombo, Sri Lanka

Correspondence to: Senaka Rajapakse,
Consultant Physician and Head of Department,
Department of Clinical Medicine, Faculty of Medicine,
University of Colombo, 25, Kynsey Road,
Colombo 8, Sri Lanka
E-mail: senaka.ucfm@gmail.com

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