

## **Evaluation of Diabetes Service Provision in a Government Health Centre in Bahrain**

Rabha Salman, MD, FAM.MED\*

**Objective:** To examine the current diabetes service provision, initial assessment and follow-up visits during the year 2003.

**Design:** Retrospective study from January 1<sup>st</sup> to December 31<sup>st</sup> 2003.

**Setting:** Bahrain government health centre.

**Methods:** All diabetic patients who attended the laboratory for blood tests and pharmacy for medications in the determined health centre from January 1<sup>st</sup> to December 31<sup>st</sup> 2003, were included in the study. Criteria were used to define diabetes, hypertension, hyperlipidemia, and their control. Data sheet was prepared to collect information from patients' records on the diabetic care delivered for new and follow-up cases during 2003. Data were entered and analyzed using SPSS version 11.5.

**Results:** Only 430 (79.1%) patients of 543 were studied. Sixty-three of 430 were newly diagnosed during 2003. Patients were middle-aged; predominantly females, married, housewives, and one third were illiterate. The majority did not have diabetic sheets and medical history had been poorly taken. Only weight, height, and blood pressure (BP) were measured. Fasting blood sugar (FBS) was the most frequently measured test. Hemoglobin A1c (HbA1c) was done twice a year in 20.5 percent of patients. Total cholesterol and triglycerides were done once a year in more than fifty percent of patients, but lipoanalysis was done in less than 4 percent. Urine routine microscopy and 24 hours' test for proteins were rarely done. Diet and exercise advice was given to two thirds of patients, and 20.6 percent of new patients were started on drug treatment immediately. Annual eye screening was done in 9.1 percent of patients and foot examination was recorded for only one patient of the studied population. The percentage of well-controlled diabetics did not exceed 31.2 percent during follow-up visits. More than 70 percent of diabetics were found to be hypertensives, and less than 9 percent of them were controlled. Eighty to eighty nine percent of diabetics were hyperlipideamics. The level of lipid control among these patients did not exceed 5 percent.

**Conclusion:** The level of diabetic service provision in the studied health centre was below the recommended standard of Bahrain's Diabetic Committee, the British National Health Service (NHS), and American Diabetic Association (ADA). The control of diabetes and its associated co-morbidities (hypertension and hyperlipidemia) were suboptimal. Obesity, renal disease, foot and eye lesions were

**rarely screened for among diabetic patients. This study identifies potential areas of improvement in diabetic care provision and gives recommendations to improve this service.**

\* Family Physician  
Mohammed Bin Jassim Kanoo Health Centre  
Directorate of Health Centres  
Ministry of Health  
Kingdom of Bahrain