Physician’s Compliance with Diabetic Guideline

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Objective: To assess the blood sugar control of type 2 diabetic patients at primary health care (PHC) setting and physician’s compliance to the diabetic guideline.

Setting: Bahrain Defense Force Hospital, Primary Health Care, Bahrain.

Design: A Retrospective Study.

Method: A retrospective analysis of type 2 diabetic patients from January to December 2009 and from January to December 2014 was performed. The following were documented: personal characteristics, history intake, physical assessment, investigations and patients’ education. Physician’s compliance and glycemic control were assessed.

Result: One hundred ninety-four patients in 2009 and 100 in 2014 were reviewed. In 2009, 123 (63.4%) had two visits to the diabetes clinic, compared to 43 (43%) patients in 2014. In 2009, 18 (9.3%) patients had HbA1c \( \leq 6.5\% \) and 14 (14%) patients in 2014.

In 2009, the following were assessed: weight in 175 (90.2%), blood pressure in 187 (96.4%), feet in 185 (95.4%), fundus in 173 (89.2%) and neurological examinations in 157 (80.9%), compared to 2014, 77 (77%), 95 (95%), 47 (47%), 78 (78%) and 44 (44%) respectively.

In 2009, the following investigations were performed: creatinine in 177 (92.1%), lipids in 189 (97.4%), microalbuminuria in 166 (85.6%) and HbA1c in 166 (85.6%) compared to 2014, 100 (100%), 100 (100%), 100 (100%), and 100 (100%) respectively.

Conclusion: Overall physician’s compliance with PHC diabetic guideline is 73.2% in 2009 compared to 47% in 2014. The majority of patients had poor glycemic control. Smoking history was rarely documented and foot care advice was given to 11% of the patients.


The diabetic patient is at an increased risk of cerebrovascular, atherosclerotic cardiovascular and peripheral arterial diseases. The prevalence of diabetes is increasing especially in GCC countries. The six GCC nations rank among the top 12 countries which have the highest incidence of the disease in the world. In Bahrain, the prevalence rate is 44.4% including IGT. A similar study in 1996 revealed nearly the same prevalence. Although this prevalence was based on old World Health Organization (WHO) criteria, it is very high. To reduce the risk of its long-term complications and prevent its acute complications, continuing high-quality medical care and patient self-management education are recommended.

Both United Kingdom Prospective Diabetes Study (UKPDS) trials and Diabetes Control and Complications Trial (DCCT) have shown that intensive glycemic control is associated with reduced rates of retinopathy, nephropathy and neuropathy. Regular recall and review of people with diabetes were shown to improve the outcome. Controlling hypertension in diabetic people was found to reduce the risk of both microvascular complications and cardiovascular disease. Microalbuminuria is an indicator of possible vascular disease and requires aggressive intervention to reduce cardiovascular risk. International guidelines recommended annual screening for microalbuminuria.

The aim of this study is to assess the blood sugar control of type 2 diabetic patients at primary health care (PHC) setting and physician’s compliance to the diabetic guideline.

METHOD

Type 2 diabetic patients were reviewed from January 2009 to December 2009 and from January 2014 to December 2014. Diabetic patients came for refill medications only or medical illnesses other than diabetes; type 1 diabetic patients were excluded from the study.

The following data were documented: sex, age group and the number of visits, history of smoking habits, hypoglycemic episodes, drugs, diet, exercises, weight or BMI, blood pressure, neurological assessment, fundus and feet examination. The

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