

Effectiveness of Health Care System in the Controlling of Type (II) Diabetic Patients in Basra City

Noor Mohammed Abdulrahman¹, Jubran Khaleel Hassan¹,
Noor Kadhim Mohammed¹, H. N. K. Al-Salman²

¹Department of Clinical Pharmacy, College of Pharmacy, University of Basrah, Basrah, Iraq, ²Department of Pharmaceutical Chemistry, College of Pharmacy, Basrah University, Basrah, Iraq

Abstract

Objective: Diabetes (diabetes mellitus [DM]) is a chronic disease affecting millions of people around the world with increment in its rate of incidence every year. Complications of diabetes are not only as health problem but also effect on the economic state of either patient himself or the whole society. Diabetes patients make several activities during their life because of DM, such as daily blood glucose measurement, regular physician visits, and others. In this study, we want to focus on the effect of health-care system and cost for the disease. **Materials and Methods:** This study involved the participation of 88 patients with diabetes type II. Their mean age was 53.37 ± 16.65 . Mean body mass index was 31.17 ± 6.54 . Several health status parameters were collected through specific formula made for this, method for measuring blood glucose level and patients' monthly visits to the clinic or medical center were studied. **Results:** Health status of participated patients shows high level of glycated hemoglobin (HbA1c); the complications (neuropathy and blurred vision) were higher than other complications. Chronic diseases were associated with diabetes also seen. Patients on regular physician visit have lower HbA1c in compare with other patients. **Conclusions:** Diabetes needs further and continuous work to get good results in their health and continuous education to encourage measuring blood glucose measuring, notice any complication occurrence and regular with scheduled physician visits.

Key words: Cost, diabetes, glucose meter, glycated hemoglobin, middle East area, monthly income

INTRODUCTION

Diabetes, a chronic metabolic defect, is characterized by elevated blood sugar levels accompanied by an abnormality in lipid and carbohydrate metabolism. The effect of diabetes mellitus (DM) is not only on the health status of affected patients but also its economic effect.^[1,2] DM characterized by complications, either microvascular or macrovascular, that their discovery usually at late stage of its prognosis. The risk of complications occurrence increases as the level of glycated hemoglobin (HbA1c) is higher than 6.5%.^[2-4] Lifestyle factors effect on the great pathway on developing of diabetes, especially type II DM (DMII), by their effect on insulin resistance. As the patients follow healthy regimen, either in their diet composition or daily habits through exercises, this will give great result on developing and prognosis of DM through decrease mortality and morbidity factors.^[5] Besides the complications of DM

on the vascular system, DM has a greater effect on the economic status of patients, using more than one medication, insulin besides oral treatment and the development of other complications that need further treatment. This costly disease can be one of the leading causes of other disease such as cardiovascular disease, loss of vision, and renal problems. The outcomes of almost diabetic patients' families are less than the cost of DM treatment.^[6,7] As the percentage of diabetes patients increased over each period, the cost of DM increased also. In the United States, there is about 26% of economic cost of this disease in the period 2012–2017. The total cost spent on DM in 2017 was 327 billion dollars, dividing into

Address for correspondence:

H. N. K. Al-Salman, Department of Pharmaceutical Chemistry, College of Pharmacy, Basrah University, Basrah, Iraq. Phone: +9647702683703. E-mail: hsennaserh@yahoo.com

Received: 18-04-2019

Revised: 06-05-2019

Accepted: 11-05-2019