

ASSESSMENT OF A HOME HEALTH CARE PROGRAM POST-HOSPITALIZATION TO REDUCE GLYCATED HEMOGLOBIN LEVELS AMONG PATIENTS WITH TYPE 2 DIABETES MELLITUS

Wadi B Alonazi¹, Guzayel S Alaisa¹, Abdulaziz A Alotaibi¹, Hani M Alenezi², Abdulaziz T Almutairi³ and Ibrahim S Lubbad⁴

¹College of Business Administration, King Saud University; ²King Abdulaziz Medical City, Riyadh, KSA; ³King Khalid Eye Specialist Hospital, Riyadh, KSA; ⁴Almaarefa University, Riyadh, KSA

Abstract. A variety of interventions can influence blood sugar levels among patients with diabetes mellitus. The aim of this study was to evaluate the effectiveness of a home health care program post-hospitalization on glycated hemoglobin (HbA1c) levels among type 2 diabetics in Riyadh, Saudi Arabia in order to inform future plans for this program. We retrospectively reviewed the charts of the patients who went through this program from January to December 2018. This program consisted of customized health care, including nursing services, medication management, education, social support, nutrition management, physiotherapy, and physician care post-hospitalization. We compared the level of HbA1c pre- and post-participation in this program. A total of 171 subjects were included in the study: 67 males and 104 females. The mean (\pm standard deviation (SD)) age of study subjects was 57 (\pm 22) years. Forty-one subjects were fed by feeding-tube, showing the majority of our study subjects were medically compromised and invalids. Thirty-two percent of subjects required an additional oral supplement in addition to their regular meals. The mean HbA1c level among study subjects prior to the home care program was 8.0% and after the program was 7.2% (95% confidence interval: -0.52 to -1.09; $p < 0.0003$). The home health care program resulted in a significant improvement in HbA1c levels among study subjects. Further studies are needed to determine if this program will be effective among patients who are not invalids.

Key words: diet glycated hemoglobin (HbA1c), health education, home health care program, type 2 diabetes mellitus.

Correspondence: Wadi B Alonazi, Department of Health Administration, Faculty of Business Administration, Riyadh 11587, PO Box 71115, King Saud University, Riyadh, Kingdom of Saudi Arabia.

Tel: +96 6114693484; Fax: +96 6114693412;
E-mail: waalonazi@ksu.edu.sa