

Assessment of Patients' Information towards Diabetic Self-Management in Mosul City

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ABSTRACT

Background: Diabetes self-management which includes a holistic lifestyle, medication adherence, and self-monitoring glucose levels, allows individuals with diabetes to maintain optimal, tailored glycemic control. The aims of the study to assess the patient's information about diabetic self-management.

Methodology: A study design that was descriptive was used in Al-Wafaa primary health care center for diabetes and endocrinology in Mosul city. Purposive sampling technique used to select (383) male and female patients with diabetic type II who aged 20 years or more. Data were collected through a face-to-face interview from period 20 November 2023 until February 15, 2024. The study used developed diabetic self-management scale to assess patients' information.

Results: the study found the patient's information about diabetic self-management were good except the information about blood glucose monitoring was inadequate It appeared that most of the answers were mean rank (I don't know), (9.25), followed by the correct answers (7.75) and finally the incorrect answers (2.5).

Conclusion & recommendation: The researcher concluded that the patient's information about diabetic self-management were good except the information about blood glucose monitoring was inadequate. Diabetic patients should be encouraged to understand diabetes self-management and adhere to all medical recommendations and guidelines from the doctor and health educator, especially adherence to treatment and self-monitoring of blood sugar.

KEYWORDS: Patient, Information, Diabetic, Self-Management.

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INTRODUCTION

Diabetes self-management which includes a holistic lifestyle, medication adherence, and self-monitoring glucose levels, allows individuals with diabetes to maintain optimal, tailored glycemic control. (Mandecote, 2022) One of the four main non-communicable illnesses, along with cancer, cardiovascular disease, and chronic respiratory disorders, is diabetes mellitus (DM) in the world. As per the International Diabetes Federation, 9.3% of the global population, or 463 million individuals aged 20-79, have diabetes mellitus, and the prevalence of this condition has been rising yearly. (Nguyen et al., 2022)

Self-care practices include things like sticking to a diet, avoiding foods high in fat, exercising more, checking one's blood sugar, and taking care of one's feet. The ultimate

goal of diabetic self-management may be lowering the patient's glycosylated hemoglobin level, but this cannot be the patient's main goal in their care. (Shrivastava et al., 2013)

Diabetes mellitus is becoming a more significant health issue. By 2040, there will be 642 million adults globally with diabetes, up from the current 415 million.(Allawi & Ahmed, 2023 , Atlas, 2015) Roughly ninety percent of individuals have type 2 diabetes. Rapid economic expansion and related lifestyle modifications, such as a decrease in physical activity and an increase in calorie intake, are to blame for this tendency.(Al Omar et al., 2020) The lifestyle modification component of diabetes care is reinforced with diabetes self-management education. Individuals with type 2 diabetes are more likely to experience consequences from their diabetes, including retinopathy,

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renal disease, and cardiovascular disorders. (Allawi & Ahmed, 2023b, Brannon et al., 2017)

Without a sufficient grasp of the current state of knowledge, attitude, and practice linked to self-management, effectively managing diabetes is a challenging undertaking. Health policymakers may find it useful to know the degree of knowledge, attitude, and practice around self-management in order to develop and execute efficient interventions aimed at lowering diabetes-related morbidity and death. (Mekonen, 2021) Poor glycemic control is caused by a lack of information and unfavorable attitudes about diabetes and its complications. The main thing standing in the way of diabetes self-management was thought to be ignorance about diabetes and diabetes treatment. (Kousoulis et al., 2014) The study aims to assess patients' information for diabetic self-management for patients with diabetic type II.

METHODOLOGY

A study design that was descriptive was used in Al-Wafaa primary health care center for diabetes and endocrinology in Mosul city. Purposive sampling technique used to select (383) male and female patients with diabetic type II who aged 20 years or more. Data were collected through a face-to-face interview from period 20 November 2023 until February 15, 2024. The study used developed diabetic self-management scale to assess patients' information based on previous study. (Dai et al., 2023) the scale consists of two parts, part one for demographic variables includes (Age, gender, marital status, education level, employment occupation, family history, and period of type II) part two consist of three sections to assess the patient's information regarding diabetic self-management includes: information about dieting, physical activity, medication adherence, and, monitoring blood glucose. The score of patient's response for correct (3). Don't know (2), and incorrect answer (1). Descriptive statistics were used by SPSS software version 26.

RESULTS

Table (1): The demographic characteristic of the study participants.

information	Categories	F	%
Age	20-29 years old	14	4.1
	30-39 years old	19	5.1
	40-49 years old	69	17.2
	50-59 years old	131	34.1
	60 or more old	149	39
Sex	Female	204	53
	Male	178	47
Marital Status	Married	303	79.1
	Single	8	1.9
	Divorced	4	1
	Widower	67	18
Educational level	Unable read writes	140	36.8
	Able reads and writes	81	21.2
	Primary school	77	20.1
	High school	58	15.1
	University	27	7.2
Occupation	Government employee	22	6.1
	Private sector employee	48	13.1
	Unemployed	54	13.9
	Retired	65	17.1
	Housewife	190	50.2
Family history of diabetes	Yes	204	54.1
	No	178	45.9
Period of type 2 diabetes	less than one year	47	12.1
	1 - 5 years	152	40.1
	5 - 10 years	62	17
	More than 10 years	121	31.1

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Table (2): The patient's information about diabetic self-management

Patients' information about dieting (4 items)		
Mean Rank		
Correct	I don't know	Incorrect
8.00	3.67	3.33
Chi-square=7.422		
P-value=0.046		
Patients' information about regarding physical activity. (3 items)		
Mean Rank		
Correct	I don't know	Incorrect
7.25	9.75	2.50
Chi-square=8.375		
P-value=0.015		
Information related to medications adherence. (4 items)		
Mean Rank		
Correct	I don't know	Incorrect
4.50	3.00	3.00
Chi-square = 7.857		
P-value=0.035		
Patients' information related to monitoring of blood glucose. (4 items)		
Mean Rank		
Correct	I don't know	Incorrect
7.75	9.25	2.50
Chi-square=7.731		
P-value=0.021		

DISCUSSION

The study's findings revealed that the majority of participants (149), or (39%) of the total were older than 60 (mean age of 149), more often than not, they were women (204, or 53%), married (303, or 79%), and more than a third of them (141), or (37%) did not read or write. The study found that 40% of the participants had diabetes for a duration of 1 to 5 years, with housewives making up the majority of participants (50%) and those who were unable to work coming in second (14%).

The study result showed that there are significance differences between the levels of answers patients' information about dieting [(correct), (I do not know), and (incorrect)] in terms at (P-value=0.05) accompanying the (Chi-square) test, which amounted to (0.046), which is less than (0.05). The sequence of answers was from highest to

lowest (correct), (I do not know), and (incorrect), in terms of the average values mean of ranks, which amounted to (8), (3.67), and (3.33), respectively. previous study indicated that about 81% and 81.5% of diabetic patients understand the importance of nutrition, and that eating large portion sizes may lead to increased blood sugar, respectively. (Mphasha et al., 2021)

The study result showed that there are significance differences between the levels of information regarding physical activity answers [(correct), (I do not know), and (incorrect)] in terms at (P-value=0.05) accompanying the (Chi-square) test, which amounted to (0.015), which is less than (0.05). People with type 2 diabetes report receiving less support, education, and encouragement for physical activity compared with any other aspect of diabetes management and

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Information is required to determine how to promote physical activity. (Yom-Tov et al., 2017)

The study indicated that the patient's information regarding adherence of medication is highest answers were from mean rank (correct answer), (4.50), while (3.00) for each answer (I don't know), and (incorrect answer). Previous study showed that nonadherence is common among patients with chronic conditions. Adherence rates among seven different chronic conditions ranged from 36.8% to 80%, with 65.4% of diabetes patients adhering to their medication. (Längst et al., 2015)

The study found that the highest answers regarding glucose level monitoring were from mean rank (I don't know), (9.25), followed by the correct answers (7.75) and finally the incorrect answers (2.5). Previous survey indicated that the out of 153 patients ed, only 37 (24.1%) (20 males, 17 females) patients were aware and have been following self-blood glucose monitoring appropriately. About 116 (75.8%) (64 males, 52 females) of patients were devoid of adequate knowledge and did not practice self-blood glucose monitoring in a proper way. (Krishnan & Thirunavukkarasu, 2016)

The researcher concluded that the patient's information about diabetic self-management were good except the information about blood glucose monitoring was inadequate. Diabetic patients should be encouraged to understand diabetes self-management and adhere to all medical recommendations and guidelines from the doctor and health educator, especially adherence to treatment and self-monitoring of blood sugar.

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