

Knowledge and Practice of Self-Care Management of Persons with Type II Diabetes At a Health Centre in East Trinidad

Onuoha, P^{1*}, Vincent R¹, Boochoon D¹, Duke V¹, Ramsingh S¹, Latchman-Ragoonanan,¹ & Byron C¹, Mootoo G¹.

¹The UWISO, The University of the West Indies, St. Augustine, Trinidad and Tobago

Objectives:

1. To determine the (a) levels of knowledge, and (b) proficiency of self-care of persons with Type II Diabetes attending Manzanilla Health Center, with regards to i) glucose monitoring ii) medication compliance iii) foot care.
2. To identify relationships between (a) level of knowledge and (b) proficiency of self-care with regards to i) glucose monitoring ii) medication compliance iii) foot care, and their socio-demographic characteristics of persons with Type II Diabetes Mellitus namely age, gender, marital stays, ethnicity and Religion.

Methods:

The approach of the study is a quantitative, descriptive, and cross-sectional study of the levels self-care knowledge and proficiency of self-care practice of persons with Type II Diabetes Mellitus with regards to: (i) blood glucose monitoring (ii) medication compliance and (iii) foot care, and explore relationships between a) level of self-care knowledge and socio-demographic characteristics of patients with Type II Diabetes mellitus. 66 consented and were recruited participated in the study. A researchers'-designed and pre-tested questionnaire was used for the exploration of levels of self-care knowledge and proficiency of self-care practice with regards to (i) glucose monitoring, (ii) medication compliance and (iii) foot care. Levels of self-care knowledge was categorized into three levels 'low', medium and high using our scoring modality.

Table 1: Socio-demographic characteristic of persons with Type II Diabetes attending Manzanilla Health Center (n = 66)

Demographics	Frequency (%)
Gender	
Male	23(34.8)
Female	43(65.2)
Age	
18 to less than 29	1(1.5)
29 to less than 49	15(22.7)
49 to less than 65	31(47.0)
above 65	19(28.8)
Ethnicity	
African	16(24.2)
Indian	44(66.7)
Mixed	6(9.1)
Religion	
Christian	31(47.0)
Hindu	25(37.9)
Muslim	2(3.0)
Other	8(12.1)
Employment Status	
Employed	20(30.3)
Retired	16(24.2)
Unemployed	30(45.5)
Educational level	
Primary	34(51.5)
Secondary	27(40.9)
Tertiary	4(6.1)
Other	1(1.5)
Length of time diagnosed with T2DM	
Less than 1 year	20(10.6)
2 to 5 years	16(31.8)
More than five years	30(57.6)

Graphs and tables

Table 2: Distribution of levels of self-care knowledge and proficiency of self-care practice of persons with Type II Diabetes attending Manzanilla Health Center (n = 66)

Dependent Variables	Frequency (%)
Level of self-care knowledge on	
Glucose Monitoring	
Low	0(0)
Medium	34(51.5)
High	32(48.5)
Proficiency of self-care practice of	
Glucose Monitoring	
Novice	6(9.1)
Competent	34(51.5)
Expert	26(39.4)
Level of self-care knowledge on	
Medication Compliance	
Low	1(1.5)
Medium	21(31.8)
High	44(66.7)
Proficiency of self-care practice of	
Medication Compliance	
Novice	11(16.7)
Competent	35(53)
Expert	20(30.3)
Level of self-care knowledge on	
Foot Care	
Low	0(0)
Medium	40(60.6)
High	26(39.4)
Proficiency of self-care practice of	
Foot Care	
Novice	19(28.7)
Competent	35(53)
Expert	12(18.2)

Table 3: Relationship between Socio-demographic characteristics and Levels of Knowledge & Proficiency of Practice

	Gender	Age	Ethnicity	Religion	Employment Status	Educational Level	Length of time diagnosed with T2DM
Level of self-care knowledge on Glucose Monitoring	.106	0.086	.268	.475	.479	.818	.662
Proficiency of self-care practice of Glucose Monitoring	.105	.626	.221	.280	.244	.447	.039*
Level of self-care knowledge of Medication Compliance	.133	.586	.483	.964	.881	.711	.581
Proficiency of self-care practice of Medication Compliance	.067	.622	.402	.440	.047*	.394	.639
Level of self-care knowledge on Foot Care	.032*	.685	.492	.302	.710	.681	.166
Proficiency of self-care practice of Foot Care	0.011*	.659	.151	.625	.482	.975	.101

Results:

The result describing the characteristics of the participants are highlighted in Table 1. A total of 66 patients with Type II Diabetes Mellitus consented and participated in the study of whom 23 (34.8%) were male and 43 (65.2%) were female. Age ranged from 18 years to above 65 years, with most participants (47%) in the age group 49 years to less than 65 years among others. The levels of knowledge and the proficiency of self-care practice of the participants with regard to the dependent variables are highlighted in table 2, while the results regarding the relationship between the levels of (a) knowledge; or (b) proficiency of self-care practice of the participants with the dependent variables {(i) glucose monitoring ii) medication compliance iii) foot care} are illustrated in table 3.

Conclusions:

The results of the study concluded that there were almost twice as much female participants than male participants accessing health care at Manzanilla Health Center, the level of self-care knowledge with regards to medication compliance was generally high and regarding both blood glucose monitoring and foot care the level of self-care knowledge was generally medium, the proficiency of self-care practice with regards to blood glucose monitoring, medication compliance and foot care, were generally on the competent level and high levels of self-care knowledge on medication compliance did not liken to expert proficiency in self-care practice of medication compliance.

References:

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