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Assess the Knowledge of Diabetic Patients Regarding Diabetes Mellitus and Diabetic Diet

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Abstract

The objectives were to assess the level of knowledge regarding diabetes mellitus and diabetic diet among diabetic patients and to find out the association between the level of knowledge of diabetic patients regarding diabetes mellitus, diabetic diet and selected demographic variable. A non-experimental descriptive study was conducted at St. Martin De-Pores Hospital, Cherukunnu, Kannur district. The samples consisted of 30 diabetic patients from St. Martin De Porres Hospital, Cherukunnuat Kannur district. The subjects were selected by purposive sampling method. The data was collected from participants using structured interview schedule and the data were analyzed using descriptive and inferential statistics. The study findings revealed that majority of diabetic patients 12 [40%] where in age group of 51 to 60 among them 21 [70%] where having primary education. 14 that is 46.7% of patients were farmers. 11 [36.7 %] belongs to middle-class family. 17 [56.7 %] belongs to Hindu religion and about previous knowledge 19 [63.3%] was having previous knowledge regarding diabetes mellitus. The study shows that 18 [60%] diabetic patient had average Knowledge regarding diabetes mellitus and diabetic diet.

Keywords: Knowledge, Diabetic patients, Diabetes Mellitus, Diabetic Diet

INTRODUCTION

One must live with diabetes mellitus for the rest of their lives. The patient should thus learn as much as they can about managing their illness on their own. It is crucial that they learn about the disease, its nature, how it progresses, how to treat it, how to choose a diet, the importance of exercise, diabetes management, how to use diabetes medications, how to self-monitor blood and urine tests, how to identify illness complications and modify treatment in day-to-day life.

In Kerala, diabetes is prevalent. According to the recent researches, 27% of those over 30 have diabetes. The most important component of diabetic management is patient education. For dietary therapy to be effective, it is assumed that understanding of diabetes is essential. 27.1% of those over 30 have diabetes, and 20% have impaired glucose tolerance. It is a matter of time until the issue becomes widespread if it is not appropriately handled.

By 2025, it is predicted that one in four people with diabetes worldwide would be Indian. Over the past few decades, diabetes has grown in importance as a health concern. India has the second place for the number of diabetics worldwide.

A major issue in public health is that Diabetes ranks as the sixth most common cause of mortality in the US. Sixty-two percent of the population, or 17 million individuals, have diabetes; around one-third of these cases go untreated. Furthermore, 15–16 million more people have pre-diabetes.

PROBLEM STATEMENT

A study to assess the knowledge regarding diabetes mellitus and diabetic diet among diabetic patients of selected hospital in Kannur district.

OBJECTIVES

- To assess the level of knowledge regarding diabetes mellitus and diabetic diet among diabetic patients
- To find out the association between the level of knowledge of diabetic patients regarding diabetes mellitus, diabetic diet and selected demographic variable

METHODOLOGY

Research Approach

Quantitative research approach was adopted to assess the knowledge of diabetic patients regarding diabetes mellitus and diabetic diet.

Research Design

The research design used to carry out research study is non- experimental research category which is the descriptive design.

Sample

In this study the samples were diabetic patientsattending inpatient department and outpatient from St. Martin De Porres Hospital, Cherukunnu, Kannur.

Sample Size

Sample size is 30 diabetic patients.

Sample Technique

In this study purposive sampling technique was used to select the samples for study.

Criteria for Sample Selection

Inclusion criteria:

- Diabetic patients in the age group of 41-61
- Diabetic patients who are available at the time of data collection

Exclusion criteria:

- Diabetic patients who are not available at the time of data collection

Data Analysis

- The data were analyzed using descriptive and inferential statistics based on the objectives and hypotheses.
- Demographic variables were analyzed using frequency and percentage.
- Association between demographic variables and knowledge were analyzed using Chi-square.

Ethical Consideration

Ethical clearance from the research committee of Canossa College of Nursing and verbal consent from the subjects were obtained. Each subject was informed about the purpose of the study and the confidentiality was promised. The ethical clearance was ensured in the study.

RESULT

Section 1: Data of Demographic Variables

Table 1: Frequency and percentage distribution of Diabetic patients according to the demographic variables

(n=30)

SL NO	DEMOGRAPHIC VARIABLES	FREQUENCY(f)	PERCENTAGE (%)
1	**AGE**		
	41-50	9	30%
	51-60	12	40%
	Above 61	9	30%
2	**SEX**		
	Male	17	56.7%
	Female	13	43.3%
3	**EDUCATION**		
	Primary education	21	70%
	SSLC	4	13.3%
	Above SSLC	5	16.7%
4	**OCCUPATION**		
	Coolie	11	36.7%
	Farmer	14	46.7%
	Business	4	13.3%
	Others	1	3.3%
5	**MONTHLY INCOME**		
	High class	1	3.3%
	Middle class	11	36.7%
	Low class	18	60%

6	**RELIGION** **Muslim** **Hindu** **Christian**	 10 17 3	 33.3% 56.7% 10%
7	**PREVIOUS KNOWLEDGE** **Yes** **No**	 11 19	 36.7% 63.3%
8	**DIABETES** **Yes** **1 year** **1-5 years**	 0 30	 0% 100%

INFERENCE

Table 1: Reveals that majority of diabetic patients 12 [40%] where in age group of 51 to 60 among them 21 [70%] where having primary education. 14 that is 46.7% of patient were farmers. 11 [36.7 %] belongs to middle-class family. 17[56.7 %] belongs to Hindu religion and about previous knowledge 19 [63.3%] having previous knowledge regarding diabetes mellitus.

Section 2: Data on Level Of Knowledge Of Diabetic Patient

This section deals with analysis and interpretation of data to assess the level of knowledge Diabetic patients regarding diabetes mellitus and diabetic diet

Table 2: Distribution of level of knowledge among diabetic patients

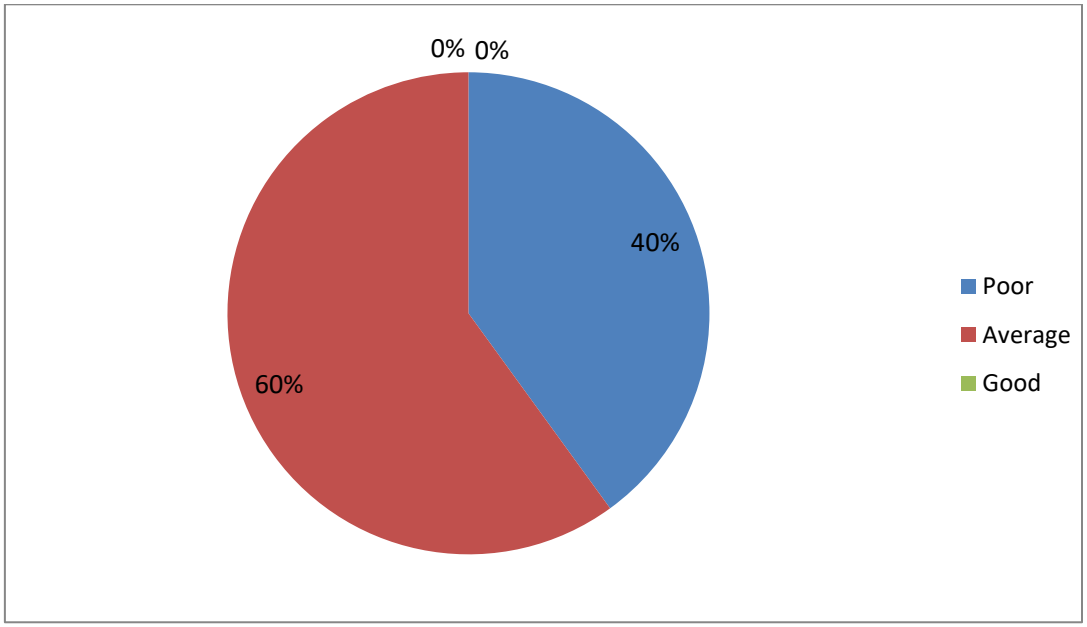
(n=37)

SL.NO.	LEVEL OF KNOWLEDGE	RANGE OF PERCENTAGE	FREQUENCY	PERCENTAGE (%)
1.	**Poor**	1-50%	12	40%
2.	**Average**	51-75%	18	60%
3.	**Good**	76-100%	0	0%

INFERENCE:

Table 2 reveals that the majority of diabetic patients 18 (60%) had average knowledge regarding diabetes mellitus.

Figure 1: level of knowledge of diabetic patients regarding diabetes mellitus and diabetic diet



SECTION 3:

This section deals with the data on association between knowledge regarding diabetes mellitus, diabetic diet and demographic variables of Diabetic patients inorder to test the association between diabetes mellitus, diabetic diet and demographic variables of diabetic patients then the following hypothesis was formed.

HYPOTHESIS

H^1: There will be no significant association between knowledge of diabetic patients regarding diabetes mellitus, diabetic diet and selected demographic variables of diabetic patients.

Table 3: Association between the Level of Knowledge and Demographic Variables of diabetic patients

SL. NO	DEMOGRAPHIC VARIABLES	LEVEL OF KNOWLEDGE			CHI-SQUARE	INFERENCE
		POOR	AVERAGE	GOOD		
1.	**AGE**					
	41-50	5	4	0		Table value
	51-60	4	8	0	1.33	9.49

	Above 61	3	6	0		Not significant
2.	**SEX**					Table value
	Male	7	10	0	0.02	5.99
	Female	5	8	0		Not significant
3.	**EDUCATION**					
	Primary education	6	15	0		Table value
	SSLC	2	2	0	5.29	9.49
	Above SSLC	4	1	0		Not significant
4.	**OCCUPATION**					
	Coolie	3	8	0		Table value
	Farmer	0	1	0	3.43	12.59
	Business	3	1	0		Not significant
	Others	6	8	0		
5.	**MONTHLY INCOME**					
	High class	1	0	0		Table value
	Middle class	7	4	0	6.33	9.49
	Low class	4	14	0		Not significant
6.	**RELIGION**					
	Muslim	6	4	0		Table value
	Hindu	5	12	0	9.7	9.49
	Christian	1	12	0		Significant

7.	**PREVIOUS KNOWLEDGE** **Yes** **No**	 5 7	 6 12	 0 0	 0.2	 Table value 5.99 Not significant
8.	**DIABETES** **Yes** **1-5 year** **6-10 years** **Above 10 years**	 8 4 0	 10 7 1	 0 0 0	 1	 Table value 7.82 Not significant

INFERENCE

Table 3: Reveals that the calculated chisquare value of demographic variable such as age, sex, education, occupation, monthly income, and previous knowledge are lower than value at (P>0.05) level of significance. Hence there is no significant association between knowledge of diabetic patient and selected demographic variables. The research hypothesis is rejected for these variables and the null hypothesis accepted.

The calculated chisquare value of knowledge regarding diabetes mellitus and religion is higher than the table value at (P<0.05) level of significance. Hence the formulated research hypothesis is accepted for this variable and there is significant association between their religion and knowledge regarding diabetes mellitus. The null hypothesis is rejected for this variable.

DISCUSSION

The present study shows that majority of diabetic patients have average knowledge regarding diabetes mellitus and diabetic diet.

The relationship and impact of diabetes knowledge and health belief were examined in a similar study by Samuel Ojima Adejoh (2010) on diabetes, knowledge, health belief, and diabetes management among the Igala, Nigeria. A systematic questionnaire was used to gather data from 152 individuals who had diabetes. Nearly 50% of respondents knew very little about diabetes, diabetes management and knowledge of the disease were significantly correlated. Perceived benefits, perceived severity, and diabetes management were significantly positively correlated. The findings indicate that diabetes management was significantly impacted by health views and diabetes knowledge.

CONCLUSION

Diabetes mellitus is prevalent worldwide. The most important component of diabetic management is patient education. For food therapy to be effective, it is assumed that understanding of diabetes is

essential. All clients, whether they have diabetes or not, should follow a balanced diet,stressing to the client and their family that they are following a balanced food plan rather than a "diabetic diet." One of the most difficult parts of managing diabetes is following dietary guidelines. It calls for teamwork. The burden of diabetes mellitus is concerning, but there is good news: early detection, better case management, and enhanced diabetes self-management education can all help to reduce the burden of this serious public health issue.

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