



Research Article

To assess awareness regarding Diabetes Mellitus and factors affecting, in a tertiary care teaching hospital of Agra

Authors

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Abstract

Introduction: *It is important to know about the awareness level of a disease condition in a population, which plays a vitole role in future development, early detection and prevention of disease.*

Objective: *To Assess awareness regarding Diabetes Mellitus and factors affecting the awareness levels.*

Methods: *A prospective observational study was done in 126 diabetic patients. All in-patients and out-patients either gender, of age 20-80 years were included in the study.*

Results: *After analysing the scores, it was found that 46% diabetic patients had poor knowledge, 45% had medium knowledge and 9% had good knowledge regarding Diabetes Mellitus.*

Conclusion: *Present study emphasizes the need for improvement in knowledge and awareness on Diabetes Mellitus.*

Introduction

In India, thirty five million people have Diabetes—a number expected to more than double by 2025, disproportionately affecting working-age people⁽¹⁾. The economic impact of this increase could be devastating to India's emerging economy⁽²⁾.

It is important to know about the awareness level of a disease condition in a population, which plays a vital role in future development, early detection and prevention of disease.

Methods

Design: A prospective observational study was done in 100 diabetic patients.

Setting: This study was conducted at at tertiary care teaching institute, F.H. Medical College,

Agra. The study was carried out over a period of six months from October 2017 to March 2018.

Inclusion criteria

All in-patients and out-patients either gender, of age 20-80 years were included in the study.

Exclusion criteria

Paediatric patients, pregnant/lactating women were excluded.

Patients who did not fulfil the inclusion criteria requirements

Study Procedure

A 23 item questionnaire prepare according to steps given in United States National Diabetes Education Programme⁽³⁾. The questionnaire included demographic variables like age, sex, marital status, education, occupation and years

with diabetes, family history of DM etc. Questions on awareness regarding DM divide under three headings, namely knowledge of DM, self care practices and knowledge regarding complications of DM.

After inform consent. The questionnaire will self administer to them. The responses will in the format of yes, No and Don't know. and will score as 2,1,0 points respectively. Scores will calculated

separately for knowledge, self care practices and complications.

All the patients will be made to answer a set of questionnaire. The questionnaire is translated in local language. (Hindi). Participants who were illiterate assisted by medical and paramedical staff. Questions on awareness regarding D.M. are divided under three headings-

Knowledge of DM

Knowledge of self care practices

Knowledge regarding complications of D.M

Knowledge of diabetes.	Good (score 14-20)
	Fair (score 7-13)
	Poor (score 0-6)
Knowledge of self care practice for diabetes.	Good (score 14-20)
	Fair (score 7-13)
	Poor (score 0-6)
Knowledge of complications.	Good (score 14-20)
	Fair (score 7-13)
	Poor(score 0-6)

Sr.no.	Questions	Yes	No	Do not know
Points		2	1	0
Knowledge of Diabetes				
1	Is the diabetes meliitus life style related disease?			
2	Is it important to do both fasting as well as post prandial blood sugar level for diagnosis and monitoring?			
3	Apart from blood sugar level are you aware about HbA1c?			
Self care practices				
1	Are you aware of self monitoring of blood glucose in Diabetes?			
2	Is it necessary to consume high fibre diet in D.M. care?			
3	Is foot care necessary in D.M.?			
Knowledge regarding complications of D.M.				
1	Unmanaged D.M. can cause eye problems or even blindness?			
2	Uncontrolled D.M. can affect your kidneys?			
3	Uncontrolled D.M. can cause Ischemic Heart disese?			
4	Uncontrolled D.M. can cause stroke?			

Data entry and Analysis

Mean + Standard deviation (Min-max).One way ANOVA and P value as well as percentages.

Sample size calculated by:

$$= \frac{Z_{1-\alpha/2}(2)P(1-p)}{D^2}$$

P=Expected proportion in population based on previous studies (8.8%)

So the sample size is calculated as 126.

Results and Discussion

Table 1 shows the demographic characteristics of participants. Male participants were Eighty (63.49%) and Female participants were Forty six (36.50%). Most of the patients were in the age group of 41-59 years and lowest age group was 20-40 years. In our study knowledge regarding Diabetes Mellitus was increase in graduates which was consistent with the study done by (Nehad M. Hamoundi et al 2012). The mean and standard

deviation of educational status of diabetic patients was 20.8 and 5.44 respectively.

After analysing the scores, it was found that 46% diabetic patients had poor knowledge, 45% had medium knowledge and 9% had good knowledge regarding Diabetes Mellitus.

Table : 1 Demographic profile of participants.

Gender	Male	Female	Total
Male	80		80
Female		46	46
Total	80	46	126

Table: 2 Educational status of participants.

Education	Diabetic patients (n=126)	Diabetic patients (%)
Illiterate	26	20.6
Primary school	33	26.19
Secondary school	20	15.87
Graduate	27	21.42
Post graduate	20	15.87
Mean	20.8	
Standard Deviation	5.4497	

Table: 3 Knowledge regarding Diabetes Mellitus

Knowledge	Diabetic Patients (%)
Poor Knowledge	46%
Medium Knowledge	45%
Good Knowledge	9%

Conclusion

Present study emphasizes the need for improvement in knowledge and awareness on Diabetes Mellitus. It is important to know about the awareness level of a disease condition in a population, which plays a vital role in future development, early detection and prevention of disease.

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