Original Research Article

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Knowledge attitude and practice about diabetes among patients with diabetes attending medicine OPD of tertiary care hospital at Kulasekharam

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ABSTRACT

Background: Diabetes will be the 7th leading cause of death as per the World Health Organisation in the year 2030. The public health concern in developing countries is diabetes. In adults the prevalence of diabetes globally has risen from 4.7% in 1980 to 8.5% in 2014. The knowledge regarding the diabetic drugs can be improved by group education and patient counselling.

Methods: The study was conducted on diagnosed cases of diabetic patients visiting Medicine OPD SMIMS, Kulasekharam, Tamil Nadu. In this study, convenient sampling was done and was conducted from May 2016 to October 2016 using a pre tested, semi-structured questionnaire.

Results: 200 diabetic mellitus patients were enrolled during the study period. The knowledge score of the patients was found to be 23.00±1.22, attitude score was 8.00±1.22 and practice score was 8.00±1.22 out of maximum possible scores of 25, 10 and 10 for knowledge, attitude and practices respectively. Knowledge scores had a strong association both with attitude as well as practice scores (p<0.05).

Conclusions: Knowledge, Attitude, Practice of diabetic patients was very good.

Keywords: Diabetes mellitus, SMIMS, KAP study

INTRODUCTION

Diabetes will be the 7th leading cause of death as per the World Health Organisation in the year 2030. The public health concern in developing countries is diabetes. In adults the prevalence of Diabetes globally has risen from 4.7% in 1980 to 8.5% in 2014. Unhealthy lifestyle, rapid westernization, poor knowledge, negative attitude, poor practices towards DM are the reason an increase in the prevalence of diabetes mellitus in developing countries. There is a large gap between the knowledge, attitude, practices towards diabetes among patients with diabetes. Knowledge about diabetes mellitus, attitude, and practices are important to reduce the prevalence and

morbidity associated with diabetes mellitus. A systematic review concluded that patients with diabetes might perceive better self-efficacy in disease management with self-monitoring of blood glucose, and would have a better understanding about the possible factors that affect diabetes management Improving knowledge level of the patients regarding the diabetic drugs can be done by many ways including group education as well as through patient counselling.³

Aims and objectives

 To assess the knowledge, attitude and practices (KAP) about diabetes among patients with diabetes attending Medicine OPD in SMIMS, Kulasekharam.

METHODS

Study design

Cross-sectional study.

Study area

Medicine OPD of SMIMS Hospital.

Study period

May 2016 to October 2016 -6 months.

Participants

Diagnosed cases of type 2 diabetic patients treated for past 6 months visiting SMIMS hospital, aged more than 18 years.

Sampling method

A convenient sampling method.

Study instruments

Pre-tested, semi-structured questionnaire regarding knowledge attitude and practice among diabetic questionnaire containing 25 knowledge, 10 attitudes, 10 practice questions. Score 1 was given for correct answer, 0 for the wrong answer after getting informed written consent questionnaire was given to the participant.

Sample size

200 and p value taken from the Gupta et al study p=33.91% substituting in 4PQ/d² rounded to 200.⁶

Inclusion criteria

Inclusion criteria were all diagnosed diabetic patients treated more than 6 months and attending medicine OPD of SMIMS hospital.

Exclusion criteria

Exclusion criteria were people who are not willing.

Statistical analysis

Results expressed in mean and standard deviation and percentages.

Chi-square test used to establish the relationship between KAP scores with p<0.05 taken statistically significant

Data were entered in Microsoft Excel 2013 spread sheet and analyzed using SPSS trial Version 20.0.

RESULTS

200 patients with diabetes were enrolled during the study period. 54% of the patients belong to the age group of 46 to 55 years. 64.5% of the patients belong to Hindu religion.53.5% of the patients have a duration of disease more than 15 years. 72% of the patients have a family history of the disease. Three-fourth of diabetic patients knew about the causes and symptoms and treatment of diabetic mellitus. 85% had knowledge about an accurate method to monitor DM (Table 2). 85% follow wellbalanced diet which was a very good knowledge especially in rural patients. (85%) know about regular urine glucose testing and consequences of diabetes mellitus if not treated (85%). Only 85% of the diabetic patients undertook physical exercise (Table 3). 85% of the patients know that missing of diabetic medication can have a negative effect in disease. 85% replied they should keep in touch with their physician. Only 85% study subjects were getting blood pressure checked regularly. 85% of them had a urine examination a month ago. Blood-sugar examination done regularly by 85% (Table 4). Increased knowledge score is associated with higher education and upper socioeconomic status. Knowledge scores had a strong association both with attitude as well as practice scores (p<0.05). As per (Table 5) the mean knowledge, attitude and practice score of the type two patients with diabetes is knowledge 23±1.22, attitude 8±1.22 and practice 8±1.22 and the total score is 39±3.683.

Table 1: Source of information.

Source of information	Frequency	Percentage (%)
Doctor	150	75
Media	16	8
Relatives/friends	10	5
Internet	24	12

Table 2: Response to knowledge questions.

Knowledge	Our study (%)
Monitor diabetes by accurate method	85
Causes for diabetes	85
Symptoms for diabetes	85
what blood contain	85

Table 3: Response to attitude questions.

Attitude	Our study (%)
Exercise regularly	85
Follow controlled and planned diet	85

Table 4: Response to practice questions.

Practice	Our study (%)
Blood pressure checked	85
Last eye examination	85
Last urine examination	85

Table 5: Mean knowledge, attitude and practice score of the T2DM patients.

Parameter	Mean±SD
Knowledge	23±1.22
Attitude	8±1.22
Practice	8±1.22
Total	39±3.683

DISCUSSION

In this study, the response to knowledge question for 'monitoring diabetes by an accurate method' was 85% which is good compared to Sangra et al it was 58.24% and in Upadhyay et al it was 58.24%. In this study, the response to knowledge question for 'causes of diabetes' was 85% which is good compared to Sangra et al it was 20.33% and in Upadhyay et al it was 20.33%. In this study, the response to knowledge question for 'symptoms of diabetes' was 85% which is good compared to Sangra et al it was 37.91% and in Upadhyay et al it was 37.91%. In this study, the response to knowledge question 'for what blood contain' was 85% which is good compared to Sangra et al it was 37.91% and in Upadhyay et al it was 37.91%. 2.3

In this study, the response to attitude question 'for do you have exercised regularly' was 85% which is good compared to Sangra et al it was 66.48% and in Upadhyay et al it was 66.48%. In this study the response to attitude question 'for do you follow a controlled and planned diet' was 85% which is good compared to Sangra et al it was 85.71% and for Upadhyay et al it was 85.71%.

In this study the response to practice question 'for when you have last checked your blood pressure' was 85% which is good compared to Sangra et al it was 46.15% and in Upadhyay et al it was 38.46%. In this study response to practice question 'for when you have last checked your eye examination' was 85% which is good compared to Sangra et al it was 28.71% and in Upadhyay et al it was 23.07%. In this study the response to practice question 'for when you have last checked your urine examination was 85% which is good compared to Sangra et al it was 26.92% and in Upadhyay et al was 26.92%. 2.3

The result of our study showed a statistical association between knowledge and practice and knowledge and attitude (p<0.05) our result is in agreement with Ng et al.⁴ The knowledge and attitude score in the current study is

in agreement with those reported by Ng et al and Ambigapathy et al. ^{4,5} Our interesting feature in our study is the sage of internet as the source of information among the patients 12% were using it to get information about the disease this reflects a healthy trend of internet penetration in rural areas of India. ⁶

CONCLUSION

Knowledge attitude and practices of patients with diabetes was good.

Limitation of the study

As this study was done among the outpatients hence may not be generalizable to the overall diabetic population

Recommendation of the study

- Improvement in modifying lifestyle by providing diabetic leaflets, direct education programs,
- Improvement in attitude: to do regular BP check-up, to do self- monitoring of blood glucose.
- Improvement in practice: Doing health check-up regularly, educated through mass media on diabetes mellitus and its risk factors for its effective control in the community can be done.

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