

# International Journal of Medical Science and Innovative Research (IJMSIR)

IJMSIR: A Medical Publication Hub Available Online at: www.ijmsir.com

Volume - 4, Issue - 6, November - 2019, Page No.: 219 - 221

# Assessment of Knowledge about Diabetes among Diabetic Patients of Tertiary Care Centre in Bikaner Rajasthan

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**Type of Publication:** Original Research Article

**Conflicts Of Interest:** Nil

### **Abstract**

**Background:** Diabetes mellitus (DM) is one of the major non-communicable diseases (NCD) and no of patients are increasing day by day which is causing threats to global public health. So we conducted a study to determine how much in the knowledge in person who is suffering from Diabetes mellitus.

**Methods:** The present cross sectional study was conducted at the Department of Medicine, S P Medical college, Bikaner during a period of 6 months. The subjects who were more than 18 years of age and willing to participate were included in the study.

**Results:** In present study 16% of the participants scored 15 or more out of total score of 25, and were categorised as having good level of knowledge, 25.60% of participants scored less than or 9 (poor knowledge) and 58.40% scored between10 to 14 points (moderate knowledge).

Conclusion: In our study the knowledge about diabetes was poor. If this condition continues to prevail like this then soon diabetes will become an epidemic. Awareness and screening programmes should be conducted at a large scale to make people aware about DM.

**Keywords:** Diabetes mellitus, Knowledge, Awareness.

# Introduction

Diabetes mellitus (DM) is one of the major fast growing non-communicable diseases (NCD) and causes threats to global public health. Progression of diabetes in most cases results in chronic complications, which lowers patients' quality of life and increases their morbidity and mortality; it also leads to a great economic burden on our health systems.<sup>1</sup> It has been proved that self-care is the cornerstone of diabetes management, since this has been proven in various studies and populations.<sup>2</sup> Prior to initiating an educational program or interventions for diabetic patients, their current level of knowledge (K), attitude (A), and practice (P) should be evaluated.<sup>3</sup>

As per International federation (IDF) atlas seventh edition 2015, there are 415 million people worldwide and 69.2 million in India people with type 2 diabetes and, and these numbers are projected to increase to 642 million and 123.5 101 million by the year 2040.<sup>4</sup>

A large gap between knowledge, attitude, and practices among the diabetes patients exist that can be minimized by assessing their current knowledge, attitude, and practices and their determinants that can be helpful in future planning for preparation of better educational interventional program for diabetic patients.

The purpose of this study was thus to determined current diabetes-related knowledge of adults with Diabetes mellitus.

# Material and methods

The present cross sectional study was conducted at the Department of Medicine, S P Medical college, Bikaner during a period of 6 months. The subjects who were more than 18 years of age and willing to participate were included in the study. The study was approved by the Institute's ethical committee and all the subjects were informed about the study and a written consent was obtained from all. A total of 500 subjects were interviewed and made to fill a pretested, predesigned questionnaire. The questionnaire consisted of two parts. In the first part there was information regarding the demographic detail of the subject like age, gender, education level etc. In the 2nd part they were tested about the knowledge of diabetes and in the third part attitude of the individuals were tested. All the questions had three options- yes, no, don't know. Percentage of the answers was established.

All the data was arranged in a tabulated form and analysed using SPSS software. Descriptive statistics like mean and percentages were used to interpret the data.

### **Results**

Table 1: Socio-demographic profile

Variable	No of subject	Percentage
Male	340	68.00
Female	160	32.00
Mean age	49.23±8.34	
0-20 Yrs	80	16.00
21-30	100	20.0
31-40	104	20.8
41-50	190	38.00
>50	76	15.2

Rural	190	38.00
Urban	310	62.00
Hindu	420	84.00
Muslim	80	16.00

There were 68.00% males and 32.00% females who were enrolled in the study. Majority of the subjects were between 41-50years of age. Mean age was 49.23±8.34Yrs. Majority of subject hindu and from urban area.

Table 2: Knowledge regarding DM

Knowledge	No of subject	Percentage
Good	80	16.00
Moderate	292	58.40
Poor	128	25.60
Total	500	100.00

In present study 16% of the participants scored 15 or more out of total score of 25, and were categorised as having good level of knowledge, 25.60% of participants scored less than or 9 (poor knowledge) and 58.40% scored between 10 to 14 points (moderate knowledge).

76.00% patients were aware that diabetes is characterised by raised blood sugar.

## Discussion

In present study 16% of the participants scored 15 or more out of total score of 25, and were categorised as having good level of knowledge, 25.60% of participants scored less than or 9 (poor knowledge) and 58.40% scored between10 to 14 points (moderate knowledge).

Various studies conducted in the past have shown that knowledge about diabetes is poor amongst diabetic patients of developed and developing countries.<sup>5-9</sup> In a study conducted by Shah VN et al<sup>9</sup>, amongst patients who attended tertiary care hospital at Gujarat found that

there were 51% of the patients who had knowledge that exercise helped in diabetes control.

In a study conducted by Kassahun CW et al,<sup>10</sup> at south east ethopia, there were 49.5% subjects who thought that diabetes can affect any body part with 49% knowing that it is related to high blood sugar. There were 40.2% who knew that it is incurable.

### Conclusion

In our study the knowledge about diabetes was poor. If this condition continues to prevail like this then soon diabetes will become an epidemic. Awareness and screening programmes should be conducted at a large scale to solve this issue.

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