

A Descriptive Study to Assess Knowledge and Practice of Diabetes Mellitus Care Among Diabetes Mellitus Patients in Selected Hospital at Bhuj – Kachchh

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Abstract

A Descriptive study to assess knowledge and practice of diabetes mellitus care among diabetes mellitus patients in selected hospital at Bhuj-Kachchh. A total of 50 diabetes Mellitus patient's age between 30 – 60 years residing at G.K. General Hospital at Bhuj were included in the study after obtaining informed consent by using convenient sampling technique. The study result shows that the overall knowledge 30% of diabetic patients having moderately adequate knowledge and 18% of patients having adequate knowledge and 52% of patients having inadequate knowledge. Hence, 48% of diabetic patients having unsatisfactory practice and 46% of patients having moderately practice and 6% of patients having satisfactory practice. The finding of this study concluded that most of the diabetes mellitus patients having inadequate knowledge regarding diabetes mellitus care and practice. Proper guidance and education should be given in order to maintain their health.

Introduction

Diabetes mellitus is a disease in which the pancreas, or in which the body cell fluid to respond appropriately to insulin. Insulin is the hormone that helps body's cells to absorb glucose so it can be used as a source of energy. In people with diabetes glucose levels build up in the blood and urine, causing excessive urination, thirst and problems with fat and protein metabolism. Prevalence of diabetes mellitus in India been growing by leaps bounds in the last 20 years Here has been a three-fold increase in the Prevalence of Diabetes and today it is estimated that there are over 50 million diabetic population now ranks first in the world.

Need for the study

Diabetes is the global epidemic of the 21st century and is now the fourth leading cause of death in most developed countries. It is now thought to be in excess of 200 million. This figure is predicted to reach 333 million by 2025 as a consequence of stress, sedentary lifestyle and changing dietary patterns WHO estimates that every fifth diabetic is an Indian. At present there is no cure. This global epidemic will affect everyone, everywhere.

Journal of American medical association (2004) emphasize that diabetes mellitus is a major health problem which require multi-disciplinary approach with permanent patient education as is essential part and a specific co-operation of all level and different health care specialties

Statement of the problem

A Descriptive study to assess knowledge and practice of diabetes mellitus care among diabetes mellitus patients in selected hospital at Bhuj-Kachchh.

Objectives of the study

- To assess the level of knowledge of diabetes mellitus care among diabetes mellitus patients.
- To assess the level of practice regarding diabetes mellitus care among diabetes mellitus patients.
- To find out the relationship between knowledge and practice of diabetes mellitus care among diabetes mellitus patients.

- To find out the association between the level of knowledge on diabetes mellitus care and selected demographic variables such as age, sex, education, occupation family income, type of family, religion, setting, nativity, duration of illness.
- To find out the association between the level of practice regarding diabetes mellitus care and selected demographic variables such as age, sex, education, occupation, family income, type of family, religion, setting, nativity, duration of illness

Hypotheses

H₁:- There will be a significant relationship between knowledge and practice of diabetes mellitus care among diabetes mellitus patients.

H₂:- There will be a significant association between level of knowledge among diabetes mellitus care with selected demographic variable such as age, sex, education, occupation, family income, type of family.

H₃:- There will be a significant association between level of practice regarding diabetes mellitus care and selected demographic variable such as age, sex, education, occupation, family income, type of family.

Methodology

Research Approach: Qualitative approach

Research Design : Non experimental Descriptive research design

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Research Method : Descriptive research design

Setting : The study will be conducted at G.K. General Hospital at Bhuj

Population : Diabetes Mellitus patients age group between 30-60 years.

Sample : Diabetes Mellitus patient's age between 30-60 years residing at G.K. General Hospital at Bhuj.

Sample size : 50 samples

Sampling Technique: Convenient sampling technique.

Criteria for Sample Collection

Inclusive criteria

- Those who are willing to participate in this study.
- Those who are in age group of 30 to 60 years.
- Those who can read and write Gujarati and English.
- Those who are present at the time of data collection.

Exclusive criteria

- Who are not willing to participate.
- Those who are less than 30 and more than 60 years.
- Those who are unable to follow instructions.
- Those who all are absent while conducting study.

Development and Description of Tool

The instrument was developed after an extensive review of literature and discussion from experts. By referring various textbooks and network the investigator had developed a structure interview questionnaire to assess the knowledge and practice on Diabetes Mellitus Care among diabetes mellitus patients in G. K. General Hospital at Bhuj. The tool was edited by experts of various disciplines such as nursing and medical profession. The tool consisted of the following.

Tool 1 – Socio demographic data

It deals with the selected socio demographic data of diabetes Mellitus patients such as age, sex, education, occupation, family income type of family, religion, setting, nativity and duration of illness.

Tool 2 – Knowledge

It consist of 20 structured question regarding knowledge on diabetes Mellitus care. Each question carries score of 1 for correct answer and 0 for wrong answer. The maximum possible score is 20.

Tool 3 – Practice

It consists of 20 questions regarding practice on diabetes Mellitus care. Each question carries score of 1 for correct answer and 0 for wrong answer. The Maximum possible score is 20.

Result

Section A

Indicates that 38% of patients are in age group of 38 – 45 years. 26% of patient's are in 46 – 53 years. 22% of patients are in age group of 54 – 60

years and 14% of patients in are group of 30 – 37 years. 58 % are male and 42% of patients are female. 50% of patients are illiterate, 36% of patients having under graduate education, 10% of patients having diploma education and 41% of patients are post graduate. 34% of patients are labour worker, 38% of patients are having business, 24% of patients having non – government job and 4 % of patients having government job. 50% of family income is 2000 – 5000, 34% of family income 5000 – 10000, 10% of family income is >10000 and 6% of family income <2000. 58% of patients are living in joint family and 42% of patients are living in nuclear family. 70% are from Hindu religion, 28% patients are from Muslim Religion and 2% of patients from Christian. 50% of patients are from rural area and 50% of patients are from urban area. 94% of patients from Gujarat and 6% of patients from other state. 32% of patients are having <2 years of duration of illness. 50% of patients are having 2 – 5 year of duration of illness and 10% of patient are >8 years of duration of illness and 8% of patients are 5 – 8 years of duration of illness.

Section B

Table 1 shows that 30% of diabetic patients having moderately adequate knowledge and 18% of patients having adequate knowledge and 52% of patients having inadequate knowledge.

Table 1: Distribution of knowledge on diabetes mellitus care on diabetes mellitus care among diabetes mellitus patients (n=50).

S. No.	Level of Knowledge	Knowledge on diabetes mellitus care	
		Frequency	Percentage
1	Adequate Knowledge [75–100 %]	9	18%
2	Moderately Adequate Knowledge [50 – 74 %]	15	30%
3	Inadequate Knowledge [Below 49 %]	26	52%

Section C

Figure 1 shows that 48% of diabetic patients having unsatisfactory practice and 46% of patients having moderately practice and 6% of patients having satisfactory practice.

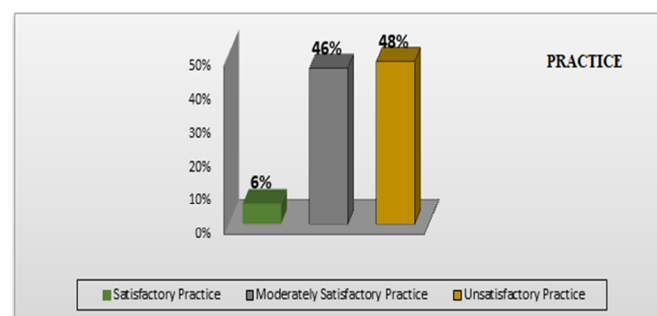


Figure 1: Distribution of level of Practice on diabetes mellitus care on diabetes mellitus care among diabetes mellitus patients (n=50).

Section D

Figure 2 shows that, mean and standard deviation of knowledge and practice on diabetes mellitus care among diabetes mellitus patients,

knowledge mean (10.42), standard deviation (3.325), practice mean (9.54), standard deviation (3.177)

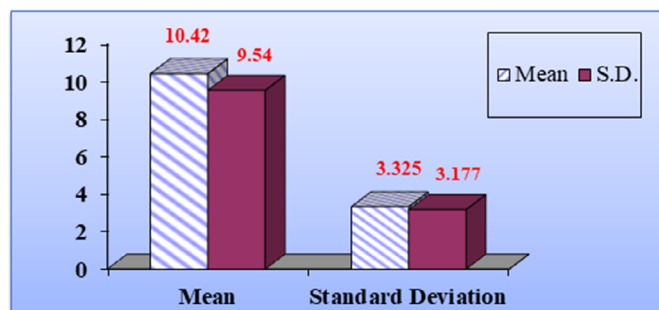


Figure 2: Mean and S.D of knowledge and practice on diabetes mellitus care on diabetes mellitus care among diabetes mellitus patients (n=50).

Section E

Table 2 shows that, mean and standard deviation of knowledge and practice on diabetes mellitus care among diabetes mellitus patients, knowledge mean (10.42), standard deviation (3.325), and practice mean (9.54), standard deviation (3.177)

Table 2: Co-relation between knowledge and practice regarding diabetes Mellitus Care among diabetes Mellitus patients.

S. No.	Category	Value
1	Co-relation and co-efficient	$r = 0.0007$

H₁: The study finally concluded by analyzing correlation between knowledge and practice regarding diabetes Mellitus Care among diabetes Mellitus patients and it is found that $r = 0.0007$ Hence the H is accepted (Table 2).

H₂: It shows that for age distribution, family income and duration of illness among diabetes mellitus patients in that the calculated chi square value is greater than the table chi square. Hence the null hypothesis is rejected. There is significant relationship between age, family income and duration of illness and knowledge level of diabetes mellitus patients. Hence, in other socio demographic variables there is no relationship with the knowledge.

H₃: The study shows that, all socio-demographic variables among diabetes mellitus patient in level of practice, in that the calculated chi-square value is less than the table chi-square value. Hence, the null hypothesis is accepted. The researcher accepts that there is no significant relationship between their socio demographic among diabetes mellitus patient with practice on diabetes mellitus.

Discussion

Findings of the study was compared in this study for knowledge, 30% of diabetic patients having moderately adequate knowledge and 18% of patients having adequate knowledge and 52% of patients having inadequate knowledge. Hence the 48% of diabetic patients having unsatisfactory practice and 46% of patients having moderately practice and 6% of patients having satisfactory practice. The findings were supported by O O Desalu (2010) the result of study showed that 30.1% had good knowledge and 10.2 had good practice of diabetes.

Conclusion

The finding of this study indicate that most of the diabetes mellitus patients having inadequate knowledge regarding diabetes mellitus care and practice. Proper guidance and education should be given in order to maintain their health.

Recommendations

- Community health nurse should organize health education camps to facilitate the adequate information and encourage the diabetes Mellitus patients on care of diabetes Mellitus.
- In hospital nurse should insist and provide information to diabetic patients for maintenance of blood glucose level.
- The community health nurse should enhance the co-operation of local charity group like rotary club to educate the diabetic patients about diabetes Mellitus care.

Acknowledgments

None.

Competing Interests

All authors declare no competing interests.

References

- Bell RA, Camacho F, Goonam K, Duren-Winfield V, Anderson RT, et al. (2001) Quality of diabetes care among low-income patients in North Carolina. Am J Prev Med. 21(2):124-131
- Adil MM, Alam AY, Jaffari T (2005) Knowledge of diabetes patients about their illness pilot project. J Pak Med Assoc. 55(5):221-224
- Black JM, Hawks JH (2009) Medical surgical nursing. 8th Edition, New Delhi, Elsevier Publication.
- Rao KS (2009) Community health nursing. 4th Edition, New Delhi, Jaypee Brothers Publication.
- Basvanthappa BT (2007) Nursing theories. Jaypee Publication.