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A study to assess the Knowledge and Practice regarding Diabetic diet among old age people at selected area at Bangalore

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Abstract

Introduction: The burden of Diabetes Mellitus is considerably higher in general population. Diabetic Mellitus and its complications are the leading causes of morbidity. Risk factors for diabetes are well established but little is known about the knowledge regarding diet among diabetic patients. Dietary management is considered as a major step in assessing a patient's knowledge. Conversely, the challenge for the patients is how to maintain the effective dietary pattern to manage their diabetes. Diabetes patients need many dietary and life style changes simultaneously.

Material & Methods: Across sectional survey was applied upon 100 old age patients with diabetes. A validated structured questionnaire was used. Questionnaire comprised of two sections. Section-I: Consist of socio-demographic data which includes 11 items of demographic variables and section-II: Consists of 34 structured items for assessing the knowledge of diabetic patients regarding diabetic diet. **Results:** Poor knowledge of the patient regarding diabetic diet with mean knowledge score of 14.46 SD ± 4.52 (maximum knowledge score was 34) was found. Statistically significant inverse correlation was found between Knowledge score and age of the patient (P = 0.001.) whereas it was found in-line with the level of educational qualification (P = 0.001). The subjects from pukka house were more aware about diabetic diet (P = 0.004). Subjects who attended any educational activity related to diabetes mellitus and diabetic diet had more knowledge (P = 0.010). The knowledge score was independent of gender, religion, marital status, occupation, and type of family, area of residence and monthly family income of the patient. **Conclusion:** Enhancement in the level of knowledge is the felt need for the patient to adhere healthy diabetes diet. Public awareness campaign has to be started at every level to educate the diabetic population about diabetic diet.

Key words: Assess, Knowledge, Practice, Diabetic diet, Old age diabetic patients.

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Introduction

Hypoglycemia, defined as a blood glucose level <70 mg/dL (3.9 mmol/L), is the most common and highly feared acute complication of diabetes mellitus, particularly in patients with insulin therapy. Hypoglycemia is the major limiting factor in the glycemic management of type 1 and type 2. Although there is a lack of real-world data on hypoglycemia, a recent analysis of the existing literature has shown that hypoglycemia is more common in clinical practice.

Diabetes mellitus is one among the most common non communicable disease as like hypertension. Diabetes mellitus is an endocrine disorder that develops either due to inability of the pancreas to produce adequate Insulin or the body cannot utilize the Insulin appropriately. Diabetes increases the risk of numerous serious health problems including Cardio vascular disorders, Kidney disorders, and Neurological disorders.

Various factors make the management of diabetes difficult in our population such as suboptimal health literacy, hindered health accessibility, poor socioeconomic status, etc. One of the important factors quoted for aforesaid statement is less awareness and practice of self-care for diabetes in our population It carries huge importance in diabetes management as it is an individual tool to control diabetes and achieves good quality of life.

Globally, according to World Health Organization (WHO), an estimated 422 million adults are living with diabetes mellitus. It is prevalent throughout the world, but is more common in developed countries. However, the greatest increase in prevalence is being observed in low- and middle-income countries where most patients will probably be found by 2030.

India is one of the Asian countries represented by the International Diabetes Federation (IDF). Diabetes affects 463 million people worldwide, including more than 35 million in India. It will be around 47 million by 2045. This study tried to assess the knowledge and practices regarding diabetic diet among old age patients with diabetes mellitus in public of the selected community areas at Bangalore.

Statement of the problem

A study to assess the Knowledge and Practice regarding Diabetic diet among old age people at selected area at Bangalore.

Objectives

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1. To assess the knowledge regarding Diabetic Diet among old age diabetic patients in selected community area Bangalore.
2. To assess the practice regarding Diabetic Diet among old age diabetic patients in selected community area Bangalore.
3. To determine the association between the level of the knowledge on diabetic diet and their selected personnel variable.

Hypothesis

H1: There will be a significant association between the knowledge and practice regarding Diabetic diet among old age diabetic patients in selected community area Bangalore.

Methodology

The study was conducted among 100 old age diabetic patients in Hosakote village. Participants were selected based on purposive sampling technique. Across sectional survey was applied upon 100 old age patients with diabetes. A validated structured questionnaire was used. Questionnaire comprised of two sections. Section-I: Consist of socio-demographic data which includes 11 items of demographic variables and section-II: Consists of 34 structured items for assessing the knowledge of diabetic patients regarding diabetic diet. Data were collected through a face to face interview using the structured questionnaire.

Data analysis and results

The study sample consisted of 100 diabetic patients, data were collected and analyzed, the study findings revealed the following, based on the demographic status Majority of the samples were above 60- 70 years of age 64(64%), 20(20%) belongs to the age group of 71-60, 16 (16%) belongs to above 81 years, Majority of the samples were males 64(64%) remaining 36(36%) were female Majority of the samples were nuclear type of family 42(42%) Majority of the samples were above 20,000 of salary 52(52%). Majority of the samples were living in urban 72(72%). Majority of the persons 64(64%) were working in private sector. Majority of samples 42(42%) had a history of Diabetes for 6-10 years.

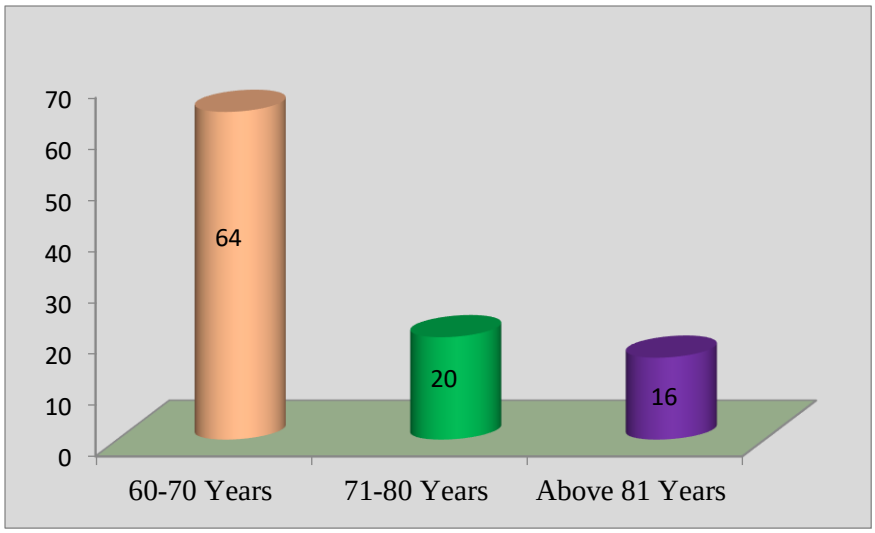

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Figure 1: Frequency and percentage distribution of samples regard to Age.

Table 1: Frequency and percentage distribution of samples knowledge level regarding Diabetic diet

S.No	Poor knowledge		Average knowledge		Good knowledge	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
1	56	56%	30	30%	14	14%

This table revealed that 56% of the respondents had poor knowledge, 30% had average knowledge, and only 14% had good knowledge regarding Diabetic diet.

Table 2: Frequency and percentage distribution of samples Practice regarding Diabetic diet

S.No	Deplorable Practice		Poor Practice		Moderately Good Practice		Perfect practice	
	F	**P**	**F**	**P**	**F**	**P**	**F**	**P**
1	20	20%	40	40%	18	18%	22	22%

Based on the data collected 20% had a deplorable practice, around half of the population 40% had poor practice, 18% had moderately good practice, while only 22% had a perfect practice regard Diabetic diet..

Poor knowledge of the patient regarding diabetic diet with mean knowledge score of 14.46 SD ± 4.52 (maximum knowledge score was 34) was found. Statistically significant inverse correlation was found between Knowledge score and age of the patient (P = 0.001.) whereas it was found in-line with the level of educational qualification (P = 0.001). The subjects from pukka house were more aware about diabetic diet (P = 0.004). Subjects who attended any educational activity related to diabetes mellitus and diabetic diet had more knowledge (P = 0.010). The knowledge score was independent of gender, religion, marital status, occupation, and type of family, area of residence and monthly family income of the patient.

Conclusion

Majority of the study participants were found to be poor knowledge on Diabetic diet. Many of the samples had poor practice Regarding Diabetic diet therefore, healthcare personnel should educate and promote the patients' practice towards prevention of hypoglycemia by strengthening information, education, and communication program. We recognize the necessity for education initiatives and strongly encourage them to assist individuals in managing diabetes.

Limitations of the study

During the current study, majority of the data was self reported, which is susceptible to social desirability bias. Some errors of reporting in knowledge, attitudes, and practices may have occurred due to memory loss and reporting bias of the participants. These biases may have influenced the precisions and accuracy of the findings. Better results could be achieved by a more longitudinal approach to remove these biases in future studies.

Recommendations

The following recommendation were made based on the results of the present study

1. A large scale study can be conducted to generalize the findings.
2. A large scale study can be conducted to assess the attitude and practice to treat diabetes.

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