

## ASSESS THE KNOWLEDGE REGARDING MANAGEMENT OF DIABETIC MELLITUS AMONG TYPE II DIABETIC PATIENTS AT SELECTED CHORANAHALLI VILLAGE OF MYSURU DIST

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### ABSTRACT

Diabetes mellitus is a chronic metabolic disorder characterized by persistent hyperglycemia. It may be due to impaired insulin secretion, resistance to peripheral actions of insulin, or both. Type 2 diabetes mellitus accounts for around 90% of all cases of diabetes. In Type II, the response to insulin is diminished, and this is defined as insulin resistance. During this state, insulin is ineffective and is initially countered by an increase in insulin production to maintain glucose homeostasis, but over time, insulin production decreases, resulting in type II. 1. To assess the level of knowledge regarding management of diabetes among Diabetic patients in selected village of Mysuru dist. 2. To find the association between level of knowledge regarding management of diabetes among Diabetic patients with their selected personal variables. The research design selected for this study was descriptive design. Non Probability convenient sampling technique was adopted to select 60 diabetes patients in ChoranaHalli village under Varuna PHC, at Mysuru. Result revealed that majority of sample are have average knowledge on management of diabetes mellitus among of Diabetic patients but there is there is significant association between level of knowledge of diabetes patients regarding management of diabetes with selected personal variable like age, education awareness, and source of information. It was concluded that level of knowledge on management of diabetes was average and there is a statistical significance association between the knowledge and demographic variable.

**Key words:** knowledge, management of diabetes mellitus, Diabetic patients, PHC

### Introduction:

The global burden of diabetes is high and increasing globally and in developing economies like India. India is consider as capital of diabetes .The prevention and management of diabetes and associated complications is a huge challenge in India due to several issues including lack of surveillance data, awareness regarding diabetes, multispectral approach its risk factors and complications, access to health care settings, access to affordable medicines etc.

Diabetes is a progressive disorder that leads to serious complications, which are associated with increased costs to the family, community, and healthcare system.

Diabetes has steadily increased in India and around the world over the last three decades, with India accounting for a sizable portion of the global burden. India's disease patterns have shown a switch due to an epidemiological transition: thus mortality from communicable, maternal, neonatal, and nutritional diseases (CMNNDs) has

decreased significantly, while NCDs and injuries have markedly increased their contribution to overall disease burden and mortality. According to WHO, Diabetes is a growing challenge in India with estimated 8.7% diabetic population in the age group of 20 and 70 years. The rising prevalence of diabetes and other non-communicable diseases is driven by a combination of factors - rapid urbanization, sedentary lifestyles, unhealthy diets, tobacco use, and increasing life expectancy.

### Objectives:

1. To assess the level of knowledge regarding management of diabetic mellitus among diabetic patients in selected village of Mysuru dist.
2. To find the association between level of knowledge regarding management of diabetic mellitus among diabetic patients with their selected personal variables.

### Hypotheses

H1- There will be significant association between the level of knowledge regarding management of diabetes mellitus among diabetic patients with their selected personal variables.

### Assumptions

Rural elders may have some knowledge regarding management of diabetes mellitus.

### Delimitation

Study is delimited to the people who are residing in rural community at ChoranaHalli, Mysore dist.

## METHODOLOGY

### Research Approach

Descriptive quantitative approach was adopted for the present study.

### Research Design

Descriptive design was adopted for present study.

### Variables of the Study

Research variables: Knowledge regarding management of diabetes mellitus.

**Other variables:** Selected personal variables viz., age, gender, educational qualification, treatment of diabetes and previous exposure to educational program me regarding management of diabetes.

### Sources of the data

### Setting of the Study

The present study was conducted in ChoranaHalli village at Mysuru.

### Population

Population comprised of Diabetic patients at ChoranaHalli Mysuru dist.

### Sample and Sampling

Diabetes patients were selected as samples for the present study.

### Sampling Technique

Non- probability convenient sampling technique was used in the present study to select 60 Rural elders in Mysuru district.

### Sampling Criteria

#### Inclusion criteria:

Diabetic patients who are:

- Available during the period of data collection.
- Willing to participate in the study

#### Exclusion criteria:

- Diabetic patients who were not available at the time of data collection.

### Data collection techniques and instruments

#### Development of tool:

The tool was developed through following steps:

1. Review of research and non research literature related to management of diabetic mellitus.
2. Opinion of experts from the nursing fraternity.

**Description of tool**

The tool consists of two sections.

**Section A:** Consists of Proforma for selected personal variables of respondents seeking information such as age, gender, educational status, previous exposure to educational programme.

**Section B:** Includes 30 items of structured knowledge questionnaire regarding management of diabetic mellitus.

**Scoring**

Section B consists of 30 items (knowledge questionnaires) regarding diabetic mellitus. Each question carries 4 distracters out of which one distracter will be the right answer. Answering the right distracter will carry one mark.

**For the total score obtained, grades will be assigned as mentioned below:**

- < 50% Poor knowledge
- 50-75% Average knowledge
- > 75% Adequate knowledge

**Reliability**

The reliability was established through split half method by administering it to 30 diabetic patients at Mysuru. Co-efficient correlation for structured knowledge questionnaire was 0.67 Hence the tool was found to be reliable.

**Procedure for The Data Collection**

Permission for conducting the study was obtained from consent authority. The subjects were explained about the purpose and usefulness of the study and assurance about the confidentiality of the responses was also provided. An informed consent was obtained from each subject to indicate their willingness to participate in the study. The data collection process was terminated after thanking each respondent for their participation and their co operation.

Table 01: Distribution of demographic variables of diabetic patients.			n = 60
Sl. No	Demographic variables	Frequency	Percentage (%)
1.	<b>Age (in years)</b>		
	• 31-40	21	35.00
	• 41-45	26	43.33
	• Above 45	13	21.66
2.	<b>Gender</b>		
	• Male	47	78.33
	• Female	13	21.66

3.	<b>Religion</b>		
	• Hindu	60	100
	• Muslim	0	0
	• Christian	0	0
	• Others	0	0
4.	<b>Education</b>		
	• Illiterate	15	25.00
	• Primary	11	18.33
	• Secondary	26	43.33
	• Graduate	08	13.33
5.	<b>Family income (Rs /Month)</b>		
	• Below 15000	0	0
	• 15001-30000	21	35.00
	• 30001-50000	11	18.33
	• Above 50000	28	46.66
6.	<b>Awareness of diabetic mellitus</b>		
	• Yes	60	100
	• No	00	00
7.	<b>Source Of Information</b>		00
	• None	00	
	• Mass Media	27	45
	• Health professionals	22	36.00
	• Family members & neighbors	11	18.33

**Table-02: Assessment of level of knowledge regarding management of diabetes mellitus among diabetes patients. n=60**

Knowledge level	f (%)	(%)
Inadequate knowledge (<13)	08	13.33
Average knowledge (13-20)	24	40%
Adequate knowledge (>20)	28	46.66%

**Table 03: Mean, Standard Deviation and mean percentage of level of knowledge regarding Management of Diabetes among diabetic patients. n = 60**

Sl. No.	Knowledge Aspects	Statements	Max. Score	Range Score	Mean	SD	Mean (%)
1		30	30	8-29	22.21	6.73	71.74

### SECTION- 3

Association between the level of knowledge regarding management of diabetes mellitus among Diabetic patients with their selected personal variables.

To find out the association between the levels of knowledge regarding the management of diabetes with their selected personal variables, chi square was computed and following hypothesis is stated.

$H_{01}$ : There will be no significant association between the level of knowledge regarding management of diabetes among Diabetic patients with their selected personal variables.

Calculated chi square value showed that there was

significant association found between the level of knowledge regarding management of diabetes with their selected personal variables. Hence the null hypothesis is rejected and it is inferred that there is there is significant association between level of knowledge of diabetes mellitus regarding management of diabetes with selected personal variable like age, education awareness, and source of information.

### Recommendations

1. Similar study can be carried out on a large scale to generalize the findings.
2. A Similar study can be conducted among type I Diabetes also.
3. A comparative study can be conducted between type I and type II Diabetes patients.

### Conclusion

It was concluded that diabetic patients was having moderate knowledge regarding management of diabetes. Study finding also emphasizes that there is a significance association between the level of knowledge and personnel demographic variable such as age, education, source of information.

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