

KNOWLEDGE REGARDING DIABETIC DIET AMONG TYPE 2 DIABETIC CLIENTS

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Abstract: *Diabetes mellitus a non-communicable disease with multi – organ involvement. Diabetes mellitus is a group of metabolic disorder arising due to relative or absolute deficiency or resistance of body cells to use the available insulin. A diabetic diet is a diet that is used by people with diabetes mellitus (or) high blood glucose to minimize symptoms and dangerous consequences of the disease. Aim:* To assess the knowledge regarding diabetic diet among type – 2 diabetic clients attending to endocrinology OPD at SVIMS, Tirupati, To find out the association between knowledge of type 2 diabetic clients regarding diabetic diet with their selected socio demographic variables. **Methods:** *Non experimental descriptive research design was used. samples were selected by using non probability purposive sampling technique. Data were collected by structured questionnaire. Results:* Out of 50 type 2 diabetic clients 2(4%) type 2 had inadequate knowledge, 33(66%) type 2 diabetic clients had moderate knowledge, 15(30%) type 2 diabetic clients had adequate knowledge. There is significant association between some of the demographic variables like age and the level of knowledge at $p < 0.005$ level. **Conclusion:** Based on the obtained findings the researcher recommended that structured teaching programme on diabetic diet will improves the knowledge level of diabetic clients.

Key words: type 2 diabetic, client, endocrinology, diet.

I. INTRODUCTION

Diabetes mellitus a non-communicable disease with multi – organ involvement. Diabetes mellitus is a group of metabolic disorder arising due to relative or absolute deficiency or resistance of body cells to use the available insulin. Risk factors are family history, obesity, impaired glucose tolerance, hypertension, and history of gestational diabetes mellitus. Clinical manifestations include 3 p's- polyuria, polyphasia, and fatigue, weakness, sudden vision changes, tingling or numbness of hands & foot, dry skin. Clients with diabetes mellitus cannot be cured, but they can use drug. Proper care, regular exercises, diet can control diabetes, and prevent its complications. Undiagnosed (or) inadequately treated diabetes mellitus clients develop multiple complications leading to hospital admission.

Type 2 diabetes which results from the body's inability to respond properly to the insulin action produced by the pancreas. Type 2 diabetes occurs most frequently in adults, but is being noted increasingly in adolescents as well. (WHO 2018)

A diabetic diet is a diet that is used by people with diabetes mellitus (or) high blood glucose to minimize symptoms and dangerous consequences of the disease.

NEED FOR THE STUDY:

Type 2 diabetes is one of the most rapidly increasing chronic diseases in the world. The need for its primary prevention has been increasingly emphasized only during the past 10- 15 years. The increased knowledge about the etiology, pathogenesis & natural history of type 2 diabetes has led to primary prevention becoming a reality.

World Health Organization (2016) an estimated 422 million adults are living with diabetes mellitus. Diabetes prevalence is increasing rapidly: previous 2013 estimates from the International Diabetes Federation (IDF) put the number 381 million people having diabetes.

Region	Diabetes prevalence percentage(%)
Africa	3.3%
Europe	8.9%
Middle east & North Africa	10.5%
North America	9.4%
South East Asia	8.5%
Western pacific	8.6%

According to CDC diabetes statistics report 2017

Region	Diabetes prevalence percentage(%)
Hyderabad	16.6%
Chennai	13.3%
Karnataka	12.6%
Kolkata	11.7%
New Delhi	11.6%
Mumbai	9.3%
Maharashtra	8.7%
Jharkhand	8.5%

According to Indian diabetes federation 2016

II. METHODOLOGY

Research approach: Non experimental approach was adopted.

Research design: Descriptive research design was used

Setting: Endocrinology OPD, SVIMS, Tirupati

Population: Type 2 diabetic clients

Sample: Type 2 diabetic clients who are attending to Endocrinology OPD, SVIMS, Tirupati.

Sample size: 50

Sampling technique: Purposive sampling technique was adopted

Criteria for sample selection

Inclusive criteria: clients who were

- Curious and having sound mind
- Willing to participate in the study
- Can understand Telugu and English
- Attending to outpatient department SVIMS, Tirupati.

Exclusive criteria: clients who were

- Mental illness
- Inpatient department clients.

Ethical consideration: the study was approved by the appropriate Ethical committee. Subjects were informed about the purpose of the study and about their rights to refuse or withdraw at any time.

III. RESULTS

Section -I

frequency and percentage distribution of socio demographic variable among type 2 Diabetes clients

n=50

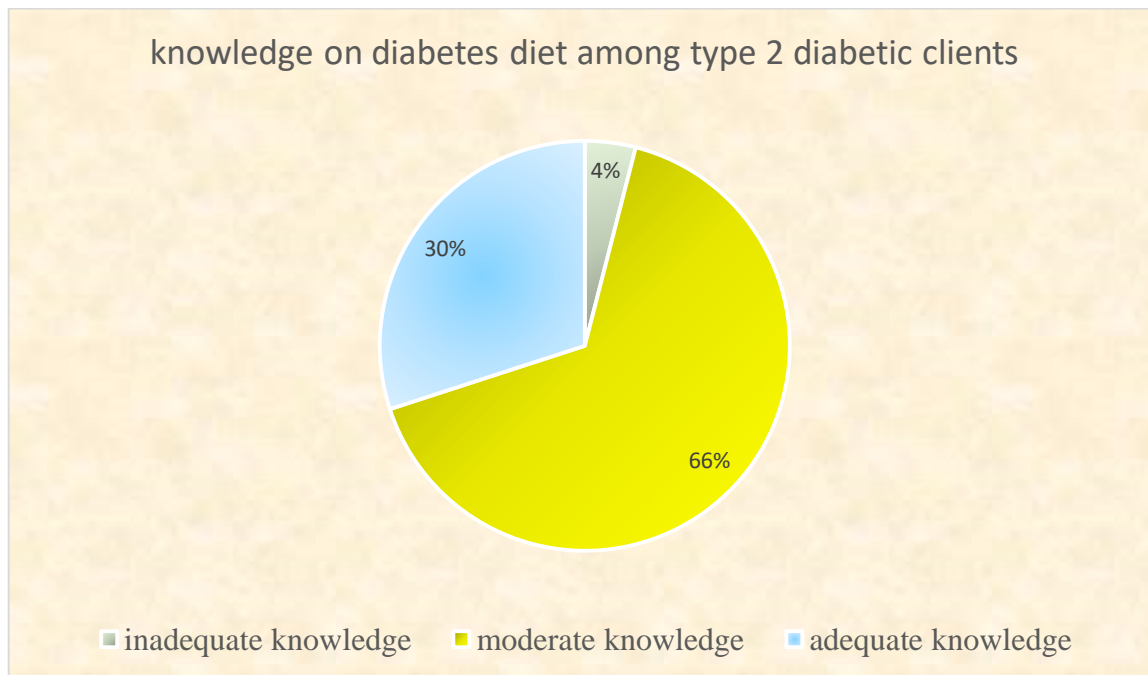
s. no	Socio demographic variable	Frequency (f)	Percentage (%)	
1	Age	40-44 years	16	32
		45-50 years	16	32
		51-60 years	11	22
		>60 years	7	14
2	Gender	Male	24	48
		Female	26	52
3	Religion	Hindu	39	78
		Muslim	6	12
		Christian	5	10
		Others	0	0
4	Education	Illiterates	18	36
		Primary prevention	16	32
		Secondary prevention	11	22
		Collegiate and above	5	10
5	Occupation	Farmer/ Coolie	23	46
		Home maker	23	46
		Employed	4	8
		Business	0	0
6	Monthly family income	Rs. 12000/-	36	72
		Rs. 12001 -24000/-	2	4
		Rs. 24001 – 36000/-	12	24
		>Rs. 36000/-	0	0

7	Marital status	Married	48	96
		Unmarried	2	4
		Widow/ widower	0	0
		Divorced / separated	0	0
8	Type of family	Nuclear family	14	28
		Joint family	26	52
		Extended family	10	20
9	Source of information	Mass media	5	10
		Health care personnel	15	30
		Family & friends	30	60
10	Family history of diabetes mellitus	Yes	21	42
		No	29	58
11	If yes type relation	1 st degree relatives	16	32
		2 nd degree relatives	5	10
		None	29	58
12	Type of treatment	Insulin	39	78
		Oral hypoglycaemic agents	9	18
		Insulin & oral drugs	2	4
		Diet only	0	0
13	Duration of treatment	< 5 years	45	90
		6 – 10 years	4	8
		11 – 15 years	1	2
		>15 years	0	0
14	Associated disease	None associated disease	31	62
		Coronary heart disease	12	24
		Renal disease	4	8
		Any other disease	3	6

The above table show that out of 50 diabetic client 16 (32%) were age group of 40-44 & 45- 50 years, 26(52%) were females, 39 (78%) were Hindu, 18 (36%) were illiterates, 23(46%) of them were farmer as well as homemakers 36(72%) were having income of < Rs 12000/-, 48(96%) were married 26(52%) were adapted nuclear family, 30(60%) of them were getting information from friends and family, 29 (58%) were having history of diabetes mellitus, in that 29(58%) were not having any relationship with their family history 39(78%) were under the treatment of insulin, 45 (90%) were of them having diabetes since 5 years and 31(62%) were not associated any diseases.

Section –II

frequency and percentage distribution of knowledge on diabetes diet among type 2 diabetes clients



Section –III: Distribution of mean and standard deviation of knowledge on diabetes diet among type 2 diabetes clients

Knowledge level	Mean	Standard deviation
Inadequate knowledge	18.58	2.73
Moderate knowledge		
Adequate knowledge		

Section –IV: Association between demographic variables with knowledge on Diabetic diet among type 2 Diabetic clients

- There was a significant association between level of knowledge regarding Diabetic diet among type 2 diabetic clients with education, occupation, monthly family income, marital status, source of information, family history of Diabetes, if yes relation at 0.001 level.
- There was no significant association with the other socio demographic variables such as (age, gender, religion, type of family, type of treatment, duration of diabetes and associated diseases)

IV. DISCUSSION

Objective 1: To assess the knowledge regarding diabetic diet among type – 2 diabetic clients attending to endocrinology OPD at SVIMS, Tirupati.

Out of 50 type 2 diabetic clients 2(4%) type 2 had inadequate knowledge, 33(66%) type 2 diabetic clients had moderate knowledge, 15(30%) type 2 diabetic clients had adequate knowledge

Objective 2: To find out the association between knowledge of type 2 diabetic clients regarding diabetic diet with their selected socio demographic variables.

There is significant association between some of the demographic variables like age and the level of knowledge at $p < 0.005$ level.

V. CONCLUSION

- ◆ Regarding the level of knowledge on diabetic diet out of 50 type 2 diabetic clients 2(4%) type 2 had inadequate knowledge, 33(66%) type 2 diabetic clients had moderate knowledge, 15(30%) type 2 diabetic clients had adequate knowledge
- ◆ There is significant association between some of the demographic variables like age and the level of knowledge at $p < 0.005$ level.
- ◆ The mean knowledge scores were 18.58 and standard deviation was 2.73.

SUGGESTIONS

- A similar study needs to be conducted on a large sample size with the same problem.
- A comparative study can be taken in urban and rural areas to find out the effectiveness of self-instructional module.
- A comprehensive study can be done to assess the knowledge, attitude and practices related to diabetic diet among type 2 diabetic clients.

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