

Myths About Medical nutrition therapy (MNT) in Kashmiri diabetics

Sakina Akhter, M.Sc*, Mushtaq Ahmad, M.D.**

*Nutrition educationist Dept. of Endocrinology, **Associate Professor, Department of Medicine SKIMS

ABSTRACT

Background: Myths about MNT in diabetics is a major hurdle not only about management of DM but also changes the ease of life of diabetic.

Aim: To find out Myths about MNT in Kashmiri Diabetics.

Methods: 50 patients of diabetes who were attending OPD Endocrinology Department were taken randomly over 3 months in the study. patients were enquired about the diet they were avoiding or taking with the belief of Glycaemic control.

Result: Of the 50 patients of the study 17 were males and 33 females. 32 belonged to rural and 18 urban areas. 32 were illiterate and only 18 were literate. 43(86%) patients were avoiding sweet fruits like Banana, Mango and Apple. 42 (84%) were found avoiding underground vegetables like Potato, Turnip, Radish, Carrots and Onions. 17 (34%) were taking unlimited rice. 22(44%) were consuming refined oils. 22 (44%) had tried bitter melon for glycaemic control. 12(24%) had tried Fenugreek seeds for Glycaemic control. 22 (44%) were avoiding lunch. 45(90%) were avoiding Dhals like Rajma. 11(22%) were having Miscellaneous beliefs.

Conclusion: The myths about MNT for DM are about certain food items which patients avoid and take certain conventionally unedible items for the belief of sugar control and don't even take drugs and land in complications. Thus it is important to know about such myths so that patients are educated about such disbeliefs so that DM is optimally managed without interfering much to the food item intake which we take as per our culture and geographical location. JMS 2017; 20 (2):69-72

Keywords: Diabetes, Myths, Medical nutrition therapy.

INTRODUCTION

Diabetes-a metabolic disorder is a major health hazard, it is fast gaining potential epidemic in India with 62 million patients of diabetes^{1&2}. The prevalence of diabetes mellitus in Kashmir is 6.1%³. To control the glycaemic outbursts and consequent acute and chronic complications MNT has a significant role of the outcome of the consequences. Medical nutrition therapy recommendations for adults with diabetes should provide 45%-65% of calories from carbohydrates, 10%-35% from proteins and 20%-35% from fats⁴.

Myths are defined as stories shared by a group of people which are part of their cultural identity. They have a strong

influence in the life of individuals and their way of living including seeking treatment during illness. Therefore, understanding the myths and misconceptions about the MNT is important in providing scientific and ideal management of diabetes. There are no studies and thus no data related to this subject. Thus we have tried to find out the prevalence of common myths about MNT and correlated it with sociodemographic characteristics.

METHODS

50 patients were selected randomly over a period of 3 months. Each patient was asked about age, demography (rural/urban), education status and about the food items being avoided or being taken to control diabetes.

Statistics: The recorded data was compiled and entered in a spreadsheet (Microsoft Excel) and then exported to data editor of SPSS Version 20.0 (SPSS Inc. Chicago, Illinois, USA). Continuous variables were summarized as Mean +

Correspondence

Dr Mushtaq Ahmad, M.D.

Associate professor General Medicine SKIMS, Srinagar

E mail: drmushtaq_01@yahoo.co.in

SD and categorical variables were summarized as percentages. Chi-square test or Fisher's exact test, whichever appropriate, was employed to determine the association of various myths about diabetes with gender and educational status. P-value less 0.05 was considered statistically significant. All p-values were two tailed.

RESULTS

Of the 50 patients of the study 17 were males and 33 females. 32 belonged to rural and 18 urban areas. 32 were illiterate and only 18 were literate. 43 (80%) patients were avoiding sweet fruits like Banana, Mango and Apple. 42 (84%) were found avoiding underground vegetables like Potato, Turnip, Radish, Carrots and Onions. 17 (34%) were taking unlimited rice. 22 (44%) were consuming refined oils. 22 (44%) had tried bitter gourd for glycaemic control. 12 (24%) had tried Fenugreek seeds for Glycaemic control. 22 (44%) were avoiding lunch.⁴⁵ (90%) were avoiding Dhals like Rajma. 11 (22%) were having Miscellaneous beliefs. 17 (34%) were amazed to be diabetic even though not taking abundant sugars before diagnosis of diabetes. Among the gender 16(94.1%) males and 27 (81.8%) were females avoiding sweet fruits. Among them 26(81.3%) were illiterate and 17(94.4%) were literate. (TABLES:1-7)

Table 1: Age Distribution of study patients

Age(years)	Frequency	Percentage
25-34	5	10
35-44	8	16
45-54	11	22
55-64	17	34
> 65	9	18
Total	50	100
Mean+SD=52.5+11.98		

Table 2: Gender Distribution of study patients

Gender	Frequency	Percentage
Male	17	34
Female	33	66
Total	50	100

Table 3: Distribution of study patients as per residence

Residence	Frequency	Percentage
Rural	32	64
Urban	18	36
Total	50	100

Table 4: Educational status of study patients

Educational Status	Frequency	Percentage
Illiterate	32	64
Middle	1	2
Matric	9	18
Graduate	3	6
Post Graduate	5	10
Total	50	100

Table 5: Showing Prevalence of Myths in the study population

	Frequency	%age
Avoiding sweet fruits: Banana, Mangoes, Apple	43	86
Avoiding underground vegetables: Potato, Turnip, Raddish, Carrots, Onions	42	84
Taking unlimited rice.	17	34
Refined Oils	22	44
Consumption of Bitter Gourd for DM(Glycaemic Control) control	22	44
Consumption of Fenugreek seeds for DM control	12	24
Skiping Lunch	22	44
Other myths like avoiding Dhals like Rajma	45	90
No H/O taking sugars in abundance	17	34
Miscellaneous Myths	11	22

Table6: Showing comparison of myths with respect to gender

	Male [n=17]	Female [n=33]	P-Value
Avoiding sweet fruits: Banana, Mangoes, Apple	16(94.1)	27(81.8)	0.398
Avoiding underground vegetables: Potato, Turnip, Raddish, Carrots, Onions	15(88.2)	27(81.8)	0.699
Taking unlimited rice.	7(41.2)	10(30.3)	0.534
Refined Oils	7(41.2)	15(45.5)	0.773
Consumption of Bitter Gourd for DM(Glycaemic Control) control	6(35.3)	16(48.5)	0.548
Consumption of Fenugreek seeds for DM control	5(29.4)	7(21.2)	0.728
Skiping Lunch	6(35.3)	16(48.5)	0.548
Other myths like avoiding Dhals like Rajma	15(88.2)	30(90.9)	0.765
No H/O taking sugars in abundance	7(41.2)	10(30.3)	0.534
Miscellaneous Myths	1(5.9)	12(36.4)	0.038*

*Statistically Significant Difference (P-value<0.05)

Table7: Showing association of myths with the educational status			
	Illiterate [n=32]	Literate [n=18]	P- Value
Avoiding sweet fruits: Banana, Mangoes, Apple	26(81.3)	17(94.4)	0.398
Avoiding underground vegetables: Potato, Turnip, Raddish, Carrots, Onions	25(78.1)	17(94.4)	0.231
Taking unlimited rice.	12(37.5)	5(27.8)	0.486
Refined Oils	10(31.3)	12(66.7)	0.015*
Consumption of Bitter Gourd for DM(Glycaemic Control) control	11(34.4)	11(61.1)	0.068
Consumption of Fenugreek seeds for DM control	4(12.5)	8(44.4)	0.028*
Skipping Lunch	15(46.9)	7(38.9)	0.585
Other myths like avoiding Dhals like Rajma	30(93.8)	15(83.3)	0.336
No H/O taking sugars in abundance	9(28.1)	8(44.4)	0.242
Miscellaneous Myths	10(31.3)	3(16.7)	0.328

**Statistically significant Difference (P-Value<0.05)*

DISCUSSION

Myth can be prevalent in a population due to a variety of reasons like poor education, cultural beliefs and social misconceptions. They are usually passed on from one generation to the next. It is difficult to break this chain as it is deep seated in the society. We need to change the mindset and the behavior of the population and educate them about MNT to optimally control DM without making their life cumbersome by non scientific disbeliefs about DM management.

It is important first to identify the myths so that corrective measures are taken by imparting scientific bases of their misconceptions. From our society 43 patients were avoiding sweet fruits. Since 50% calories of a meal should be from carbohydrates one can take them as per part of food serving yielding that much carbohydrates. If a patient is on Insulin one can calculate the carbohydrate count and take the insulin in accordance with carbohydrate content determined by carbohydrate counting.

42(84%) were avoiding underground vegetables though not scientifically warranted as the Glycaemic Index is in moderation and again depending upon the food serving that provides the required carbohydrate should not be avoided.

From our study 17 (34%) were surprised about having Diabetes as they were of the belief it occurs only in those who take lot of sugars. In the study conducted by Mridula Raj and Jugal Kishore 22% were believing taking too much sugar causes Diabetes (5). 17% were taking rice unlimited as they believed rice has no effect on Glycaemic excursions.

22(44%) were taking refined oils with the belief they are good for CVS irrespective of quantity and caloric value.

22(44%) were using bittergourd with the belief it will control blood sugar and will save them from even taking medicines for Diabetes control.

12(24%) had consumed fenugreek seeds with the belief that consumption of same will control sugars. 45(90%) were avoiding dhals like Rajma for fear of raising blood sugars.

Among the above misconceptions most were more in females and illiterates. The above finding (female predominance) is consistent with the study of Raj Mridula et al but contrary to study of Nisar et al in Pakistan.⁶

The concern about taking bitter gourd and fenugreek seeds was that consumers of such items were avoiding using these to prevent them from requiring drugs for Glycaemic control which at many points leads to acute complications of Diabetes. From our study myths about MNT are about avoiding some food items which is unnecessary and makes life of Diabetics tough.

CONCLUSION

The myths about MNT for DM are about certain food items which patients avoid and take certain conventionally unedible items for the belief of sugar control and don't even take drugs and land in complications. Thus it is important to know about such myths so that patients are educated about such disbeliefs so that DM is optimally managed without interfering much to the food item intake which we take as per our culture and geographical location.

REFERENCES

1. Joshi SR, parikh RM, India diabetes capital of the world: now heading towards hypertension. J Assoc physicians India. 2007;55:323-4.
2. Kumar A, Goel MK, Jain RB, Khanna P, Chaudhary V. India towards diabetes control: Key issues. Australas Med J. 2013;6(10):524-31.
3. Zargar AH, Khan Ak, Masoodi SR, Laway BA, Wani

AI,basher MI,Dar FA,Prevalence of type 2 diabetes mellitus and impaired glucose tolerance in the Kashmir valley of the sub-continent.Diabetes Res Clin Pract.2000;47(2):135-46.

4. Nutrition Recommendation and interventions for diabetes-2006.Diabetes care 30:2729,2006
5. Raj Mridula;Jugal Kishore Int J Diabetes Dev

ctries:2009July-Aug,29(3):129-13.

6. Nisar N, Khan IA, Qadri MH, Sher SA. Myths about Diabetes Mellitus among non diabetic individuals attending primary health care centers of Karachi suburbs.J Coll Physicians Surg Pak. 2007;17:398-401