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Research Article

A RESEARCH STUDY ON OCCURRENCE OF DIFFERENT MISUNDERSTANDINGS OF DIET IN THE PATIENTS OF DIABETES

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Abstract:

Objective: The aim of the study is determining the occurrence of different dietary misunderstandings among the patients suffering from diabetes in our communities.

Methodology: It was a transverse research work carried out at the clinic of diabetes and medical outpatient department in the General Hospital Lahore. This case work started in January 2018 & finished in December 2018. A sum of 409 patients suffering from diabetes of any sex, having the age of 18 years or above were the part of this case work. A questionnaire about the social and demographic information and different myths about the diet was in use to obtain the information from the diabetic patients.

Result: A sum of 409 patients suffering diabetes were the part of this research work. Male patients were 50.60% (n: 207). The mean age of the patients was 51.60 ±10.40 years. Majority of patients 97.10% (n: 397) were suffering from type-2 diabetes. A large amount of the patients was either uneducated 20.30% (n: 83) or found with only primary education 27.40% (n: 112). Majority of patients 62.60% (n: 256) never got any education about the diabetes. Most of the patients 85.0% (n: 348) assumed in the particular diet to control the level of blood sugar but the large amount of the patients 81.90% (n: 335) were not using underground vegetables & same amount of the patients were having the belief in the bitter vegetables and they were considering those as remedy of the disease in a natural way. About 41.0% patients had dietary misconceptions about the use of fruits whereas 73.50% (n: 301) told about the prohibition of the use of rice. The patients of the study who were present with the belief on the use of special diet in comparison with the who did not believe in the use of special diet. In the same manner, the group of the patients who had got the education about the diabetes displayed more significant P value in comparison with the patients who did not get any information.

Conclusions: Majority of the patients suffering from diabetes particularly those who did not get any education about diabetes found with many misconceptions about diet.

Keywords: Diabetes type-2, misconceptions, patient, myths, bitter vegetables, significant.

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INTRODUCTION:

There are many restrictions in the administration of the disease of diabetes. Effectual diabetes management is in need of detailed medical care, education about diabetes & self-care of diabetics. The Awareness about the diabetes influenced the practices of self-care by a person. It is one of the major health issue of the world. The patients of diabetes requires to get a lot of knowledge about their disease [1] to know about the skills of self-management [2]. The backbone in the treatment of diabetes is diet. There is a quantity of traits having effect on the glycemic food response as carbohydrate amount [3], the sugar type [4], starch nature [5], food processing and cooking [6] and the structure of the food [7] as well as some other components of the food as fat, starch lipid and starch protein [8].

It is a faith that diabetic patients should eat special diet [9, 10]. The use of the healthy diet for diabetic patients is similar as suggested for the normal people. Currently, United Kingdom gave the warning to buy the foods which are in the market for diabetic patients because they may be costly, contains high fat levels & offering no advantages to the diabetic patients [11]. There is a very strict influence of the dietary myths on our populations. In this region of the world, it is the belief that the underground vegetables have bad impact on the health & bitter vegetables are very beneficial to decrease the level of the blood sugar. In the same manner, there is a prohibition on the use of fruits & rice which are highly beneficial while honey is better for the patients suffering from diabetes. These types of misconceptions have become restrictions in the proper administration of the diabetes. It is very important to understand these misconceptions for

proper care of diabetic patient as well as the healthy ones [12].

METHODOLOGY:

This is a transverse research work based on the misconceptions of the dietary habits. The interviews with the patients suffering from diabetes conducted in the clinic of diabetes & medical outpatient department in the General Hospital Lahore. This case study started in January 2018 and finished in December 2018. We chose 409 patients of diabetes of any gender with the age of 18 years or above. These patients gave willing to participate in the case study. A well-organized questionnaire about the social and demographic information and different misconceptions about diet in the diabetes was in use for the collection of the data. Medical experts prepare this questionnaire in Urdu language for the understanding of every patient. All the participants of the case study were new & physicians took their interview. The collection of data carried out in complete one year. The analysis of the information carried out with the utilization of SPSS V. 15. Average \pm SD values were in use for the presentation of quantitative variables. Percentages were in use for the expression of the qualitative variable of the case study. Chi square method was in use for the comparison of the variables. Statistical significant P value was < 0.050 .

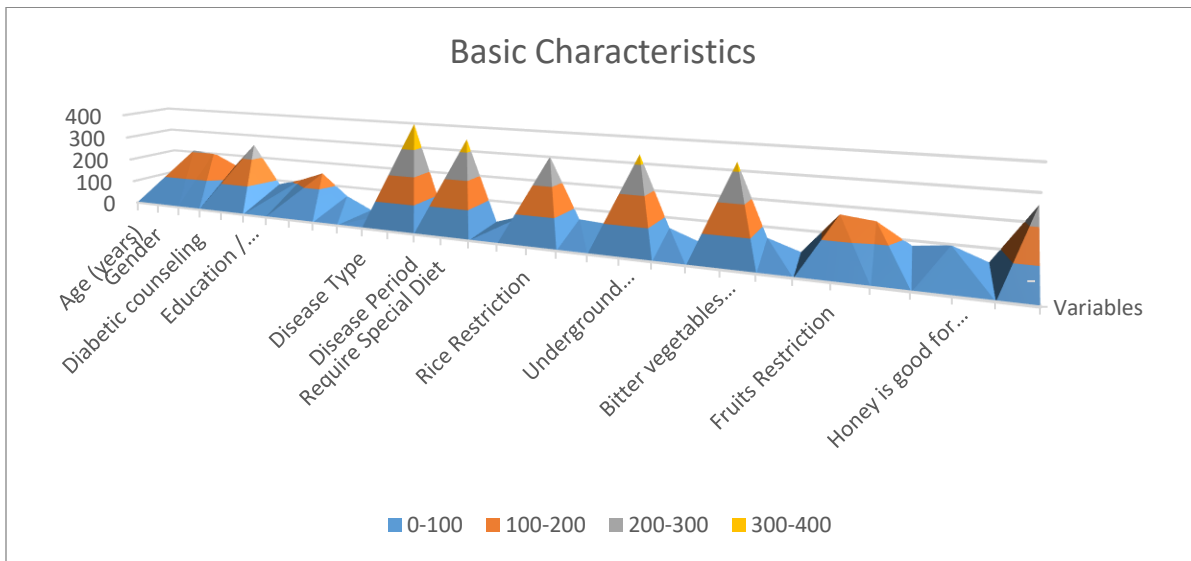
RESULTS:

Interview of 409 patients suffering from diabetes carried out. Out of these, 50.6% (n: 207) were men. The mean age of the patients was 51.60 ± 10.40 years. Table-1 provide detail about the sex, level of education, diabetes type & misconceptions of the participants about different dietary habits.

Table-I: Basic characteristic of study subjects

	Variables	Mean	\pm SD / %age
Age (years)		51.6	10.4
Gender	Male	207	50.6
	Female	202	49.4
Diabetic counseling	Affirmative	153	37.4
	Negative	256	62.6
Education / Qualification	Illiterate	83	20.3
	Primary	112	27.4
	Secondary	151	36.9
	Graduate	58	14.2
	Postgraduate	5	1.2
Disease Type	Type 1 DM	12	2.9
	Type 2 DM	397	97.1

Disease Period		6.9	3.6
Require Special Diet	Affirmative	348	85
	Negative	12	3
	Unknown	49	12
Rice Restriction	Affirmative	301	73.6
	Negative	58	14.2
	Unknown	50	12.2
Underground Vegetables Restriction	Affirmative	335	81.9
	Negative	59	14.4
	Unknown	15	3.7
Bitter vegetables decrease blood sugar level	Affirmative	332	81.1
	Negative	59	14.4
	Unknown	18	14.5
Fruits Restriction	Affirmative	170	41.3
	Negative	157	38.4
	Unknown	82	20
Honey is good for diabetics	Affirmative	97	23.7
	Negative	51	12.5
	Unknown	259	63.3

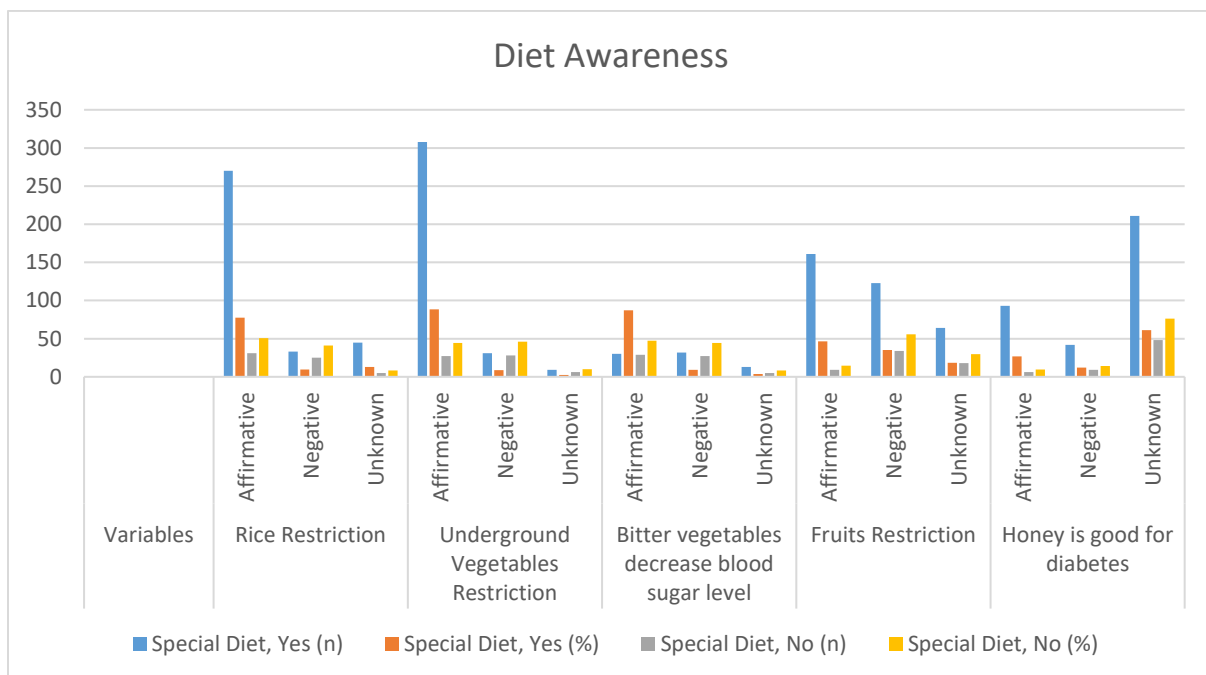


The separation of the patients of this case study carried out into 2 groups. Group-1 believed on the use of special diet & Group-2 did not believe in such concepts and the application of the Chi square method carried out to check the significance. Majority of the

patients who found with the belief on the use of special diet gave their affirmation about the myths of diet and it provided a significant P value as elaborated in Table-2.

Table-II: Awareness About Different Diets

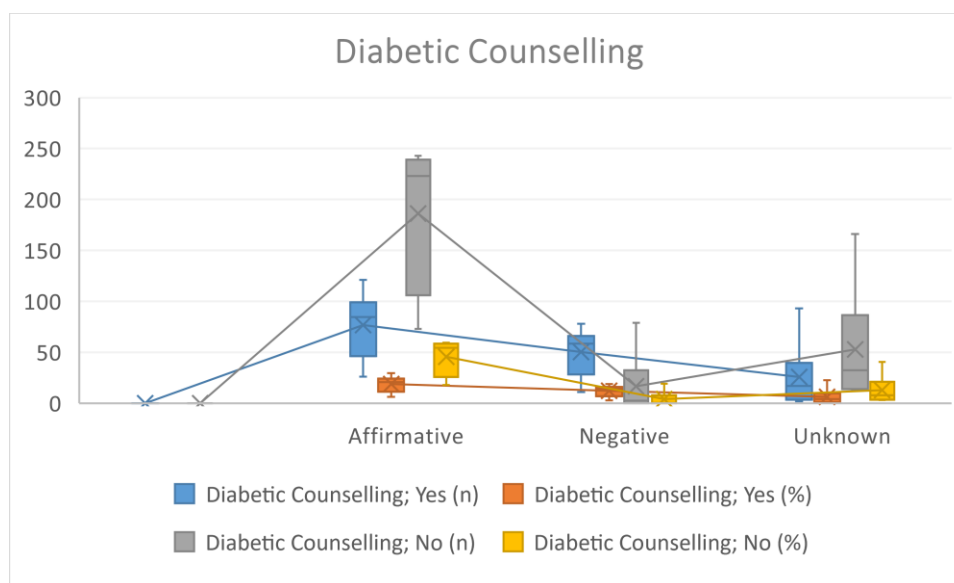
Variables		Special Diet				P-value
		Yes (n/%)		No (n/%)		
Rice Restriction	Affirmative	270	77.6	31	50.8	<0.001
	Negative	33	9.5	25	41	
	Unknown	45	12.9	5	8.2	
Underground Vegetables Restriction	Affirmative	308	88.5	27	44.3	<0.001
	Negative	31	8.9	28	45.9	
	Unknown	9	2.6	6	9.8	
Bitter vegetables decrease blood sugar level	Affirmative	30	87.1	29	47.5	<0.001
	Negative	32	9.2	27	44.3	
	Unknown	13	3.7	5	8.2	
Fruits Restriction	Affirmative	161	46.3	9	14.8	<0.001
	Negative	123	35.3	34	55.7	
	Unknown	64	18.4	18	29.5	
Honey is good for diabetes	Affirmative	93	26.9	6	9.5	<0.001
	Negative	42	12.1	9	14.2	
	Unknown	211	61	48	76.3	



Further division of the patients of case study carried out in 2 groups, Group-1 consists the patients who got the education about the awareness of diabetes and Group-2 never get such education. The comparison of the results carried out and displayed that the myths of diet were more predominant in those patients who never got any education about diabetes (Table-3).

Table-III: Comparison of Dietary Routines with Diabetic Awareness

Variables		Diabetic Counselling				p value
		Yes (n/%)		No (n/%)		
Special Diet	Affirmative	121	29.5	227	55.5	<0.001
	Negative	11	2.7	1	0.2	
	Unknown	21	5.1	28	6.8	
Rice Restriction	Affirmative	82	20	219	53.5	<0.001
	Negative	58	14.2	0	0	
	Unknown	13	3.2	37	9	
Fruit Restriction	Affirmative	53	13	117	28.6	<0.001
	Negative	78	19	79	19.3	
	Unknown	22	5.4	60	14.6	
Underground Vegetable Restriction	Affirmative	92	22.4	243	59.4	<0.001
	Negative	59	14.4	0	0	
	Unknown	2	0.5	13	3.1	
Bitter vegetable reduce the blood sugar level	Affirmative	87	21.3	238	58.2	<0.001
	Negative	62	15.2	4	0.4	
	Unknown	4	0.9	14	3.4	
Honey is good for diabetes	Affirmative	26	6.3	73	17.8	<0.001
	Negative	34	8.3	17	4.2	
	Unknown	93	22.7	166	40.5	

**DISCUSSION:**

There are different reasons for the prevailing of the misconception of diet in our communities. This concepts have a deep root in community that only awareness is unnecessary to bring a change in the behavior of the people of our communities [13]. The social, economic, cultural & health factors can influence the attitude toward self-care [14, 15]. There

are many changes in the concept of diet for the patients of diabetes from last fifteen years and based on the large use of complex carbohydrate as well as fiber, with a control in the use of fat [16]. In this case study 85.0% patients found with the concept of special diet to restrict the level of sugar of blood and it is also the belief of other regions of world [9] whereas in our country Pakistan, Nighat Nisar [10] displayed that

55.0% non-diabetic people had this kind of conception. Healthy diet has the same importance for both the patients of diabetes and non-diabetics. The optimum macronutrient structure of food for the diabetic patients is a controversy [17-19]. ADA suggests a food that consists carbohydrates from fruits, vegetables, grains and milk with low fat [20]. The special diet for the diabetics offer no advantages and they are able to till rise the level of sugar as well as very costly and they can have purgative impact if they consists of the alcohols.

In our region, they are many fallacies about the use of vegetables and 81.90% patients were not using the ground vegetables. About 41.0% patients of this case study viewed against the use of fruits which is false. Nisar N [10] in his study described that 42.0% non-diabetic people found with the view that diabetic persons should take excess quantity of fruits. The prohibition of the rice was another misconception. There are information describing that the use of the rich fiber food (Fifty gram fiber per day) decreases glycemia in the patients suffering from type-1 diabetes & reduces the glycemia, hyperinsulinemia & lipemia in the patients suffering from type-2 diabetes [21]. Majority of patients from outside Lahore found with less awareness of the vital issue of the disease as administration of the insulin [22]. In Quetta. 77.10% patients of diabetes found with zero awareness about the disease and its complications in a case study conducted there [22]. Asha [24] stated that the knowledge of patient about diet & diabetes control improved the management of the disease. These programs of diabetic education in groups are very vital to enhance the knowledge of patients and the programs should be specific to culture not to the knowledge only [25, 26].

CONCLUSIONS:

Majority of the patients suffering from diabetes in or population particularly those who never got any awareness education about the disease found with valid misconceptions and myths about diet. The programs for the diabetic education are necessary for the management of this disease in better way.

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