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MYTHS AND MISCONCEPTIONS REGARDING DIABETES MELLITUS AMONG DIABETIC AND NON-DIABETIC INDIAN POPULATION

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ABSTRACT

Myths prevailing about diabetes in the society have become a major hurdle for its proper treatment and control¹. **Aim:** To determine the myths and misconception about diabetes mellitus and its prevention and treatment among diabetic and non-diabetic population. **Research Methodology:** It was a cross sectional study conducted in a teaching hospital of Hyderabad (Deccan College of Medical Sciences) during April, May and June 2009. A self explained, semi-structured and pretested proforma was used to collect data from purposively selected 300 Diabetic and 300 Non diabetic patients who accompanied them while visiting this institute for their treatment. Information was collected regarding sociodemographic background and their myths and misconceptions regarding diabetes after oral, verbal and written consent. Data was analyzed using SPSS software. **Results:** Commonest myth among diabetic (40%) and non diabetic patients (71%) was that eating more sweets and sugar causes diabetes. Others were, diabetes is a contagious or inherited disease, diabetes can affect sexual life, insulin causes impotence and it is the only available cure for diabetes. Myths were significantly more common among females, non-diabetics and less educated group. 20 % of the diabetics and 29% of non diabetics were unaware of the complications of diabetes. 21% diabetics 29 % of non-diabetics were unaware of the role of diet in control of diabetes. **Conclusion:** The prevalence of myths about diabetes is high among both diabetic and non diabetic population which could be associated with poor health seeking behavior and poor compliance with treatment

Keywords: Diabetes, Myths, treatment

INTRODUCTION

Diabetes mellitus is the most common metabolic disorder, its prevalence varying widely worldwide and ranging from as low as <1% to >50% The World Health Organization (WHO) estimates that more than 180 million people worldwide have diabetes. This number is likely to more than double by 2030². In Keeping with scenarios of most developing countries, India has long passed the stage of diabetes epidemic. The problem has now reached pandemic proportions. It is a large public health problem growing astronomically every year. Apart from treatment of diabetes we need to pay

attention to the prevention and health education of people about the diseases. Myths are defined as stories shared by a group of people which are a part of their cultural identity. They have a strong influence in the life of individuals and their way of living including seeking treatment during illness³. This false collective beliefs become part of cultural identity and used to justify a social behavior. They have a strong influence in the life of Individuals and their way of living including seeking treatment during Illness. Myths have usually cultural and social backgrounds and usually they stay in a certain society if not challenged by scientific discourse. Lack of

education, poverty, lack to health care facilities added with multiple ethnic, linguistic and cultural groups add up to the emergence of many myths. Educational level is protective against myths⁴. Therefore, understanding the myths and misconceptions about diabetes mellitus is important in providing better care and health education to both patients and healthy individuals.

OBJECTIVE

To determine the myths and misconception about diabetes mellitus and its prevention and treatment among diabetic and non-diabetic population.

SETTINGS AND DESIGN

It was a cross sectional study conducted in a teaching hospital of Hyderabad (Deccan College of Medical Sciences) during April, May & June 2009. A self explained, semi-structured and pretested proforma was used to collect data from purposively selected 300 Diabetic and 300 Non diabetic patients who accompanied them while visiting this institute for their treatment. Information was collected regarding sociodemographic background and their myths and misconceptions regarding diabetes after oral, verbal and written consent. Data were analyzed using SPSS software. The questionnaire was developed based on international standards concerning the prevailing myths and misconceptions about diabetes mellitus⁵. Total of 650 people approached our institute for their diabetes treatment which includes diabetic patients as well as non diabetic relatives or friends accompanying patients during the study period. Out of them 600 people got agree to participate in this research including diabetic patients as well as non diabetics. Ethical approval was obtained by ethical review committee of the study institute.

RESULTS

The current study was conducted in a tertiary care institution focusing on 300 diabetic and 300 non diabetic subjects visiting hospital along with patients and majority of them were males (58%). As shown in the table No.1 below, Majority of study group (39%) comprised of 30 to 50 years of age, while 20 % of the subjects were less than 30 years of age and 41 % of the subjects were of more than 50 years of age. Surprisingly, 31% of the subjects were illiterate and 41 % of them were educated up till 10th grade. High number of study subjects (45 %) were unemployed while out of those subjects, who were suffering from diabetes (300), 20 % were not on any treatment, 50 % were on drugs and 30 % were on insulin.

Table 1: Demographic profile of study population

Sr. No	Characteristics	Percentage (Number = 600)	
1	Diabetic/ Non diabetic	300/300	
2.	Sex	Male	58 %
		Female	42 %
3.	Age	<30	20 %
		30-50	39 %
		>50	41 %
4.	Education	Uneducated	31 %
		Upto 10 th Class	41 %
		Higher Secondary	10 %
		Graduation	10 %
		Post Graduation	8 %
5.	Occupation	Un-employed	45%
		Govt.	23%
		Private	11%
		House wife	16%
		Retired	5%
6.	Diabetes (out of 300 Diabetic patients)	No Treatment	20%
		On drugs	50%
		On Insulin	30%

Table 2: Common myths about diabetes mellitus among diabetics and non diabetics.

Sr. No.	Myths and Misconceptions	Response	Diabetics (%)	Non Diabetics (%)
1.	Diabetes is an inherited disease	Yes	35	42
		No	65	58
2.	Diabetics patient should never take sugar and sweets	Yes	30	40
		No	70	60
3.	Diabetes is a contagious disease	Yes	8	25
		No	92	75
4.	Sugar causes Diabetes	Yes	40	71
		No	60	29
5.	Once treatment started, patient can take anything to eat	Yes	40	85
		No	60	15
6.	Insulin treatment is used for final stage of diabetes	Yes	60	86
		No	40	14
9	Insulin causes impotence	Yes	20	15
		No	80	85
8.	Type 1 diabetes leads to Type 2 diabetes	Yes	30	47
		No	70	53
9.	Insulin is a complete cure for diabetes	Yes	51	79
		No	49	21
10.	Once blood sugar is under control patient can stop treatment	Yes	60	75
		No	40	25
11.	Once Insulin is started, it is for long life	Yes	37	57
		No	63	43
12.	People with diabetes, eventually go blind	Yes	35	61
		No	65	39
13.	People with diabetes can't play sports	Yes	11	32
		No	89	68
14.	Herbals can treat diabetes	Yes	23	34
		No	77	66
15.	Diabetes can affect sexual life	Yes	28	49
		No	72	51

Table no 2 result shows that almost 35 % of diabetic subjects believe that diabetes is an inherited disease while almost 42 % non diabetics believed it so. 30 % of diabetics and 40 % non diabetics believed that diabetic patient should never take sugar and sweets. Surprisingly 8 % of diabetic and 25 % non diabetics thought that diabetes is a contagious disease. Almost 40 % diabetic and 71 % non diabetics said sugar causes diabetes. 40 % of diabetics believed that a patient can take anything to eat once the treatment has been started. 60 % diabetics believed that insulin is used for the final stage of diabetics and 20 % diabetics said it causes impotence. Almost 79 % of non diabetics believed insulin is a complete cure for diabetes and 57 % of it said once insulin is started, it is for life long. 30 % of diabetics said people with diabetes developed blindness at some point in time and 28 % diabetics believed that diabetes can affect sexual life too.

Table 3: Awareness regarding complication and role of diet and lifestyle

Sr. No.	Awareness	Response	Diabetics (%)	Non Diabetics (%)
1.	Awareness regarding complications of diabetes	Yes	80	71
		No	20	29
2.	Role of Diet in control of diabetes	Yes	67	49
		No	33	51
3.	Role of healthy life style in control of diabetes	Yes	67	57
		No	33	43

Above table no 3 shows awareness regarding complication of role of diet and life style in diabetes. Almost 20 % of diabetics and 29 % of non diabetics were not aware of complications of diabetes in our research while almost only 67 % diabetics and 49 % of non diabetics were aware of the role of diet in control of diabetes. Only

67% diabetics and 57 % of non diabetics were aware of the role of health life styles in the control of diabetes.

DISCUSSION

Myths prevail and stay in the societies due to lack of education, cultural beliefs and dogmas. These belief become such deep rooted that they sound true and get inculcated in successive generations. They may become slightly modified but stay in a society for a very long time unless challenged by scientific discourse. To change the behavior of the population we need to educate its masses^{6,7}.

We don't have many studies of the social aspects of many diseases and very meager literature is available based on the subject. We have however carefully collected almost all the myths and the results are surprising as these myths are common even in people who are educated, though less common than the uneducated lot. Many more such studies must be encouraged to enable us to prevent these

myths from creating hurdles for scientific understanding of such common diseases. The most widely believed myth was that eating more sugar causes diabetes. This is not entirely true as it is not directly related to eating sugar, but is very much affected by diet in general.

Some people also believe that soaking feet in water helps in decreasing blood sugar levels, a concept which is certainly not true. Some others are of opinion that herbal medicines are very effective in treatment of diabetes. These sections of people often present late to doctors and with complications as they first seek spiritual or herbal treatment. Nasir et al, reported high prevalence of such beliefs in spiritual treatment in Karachi, Pakistan. The prevalence of myths was found to be higher in females. This is almost similar to what was found in the study by Nasir et al in Pakistan⁸. Educational status of people seemed to reduce their belief in the myths and they were better informed about the disease. This is similar to what was found by Nasir et al. This study

therefore clearly reflects that prevalence of myths and misconceptions about diabetes and its treatment is high in our country and this could be a major hindrance in control and prevention of diabetes which is a disease of national importance. In a hospital based study carried out in India similar results were found. Twenty two percent of respondents believe that consuming sugar causes DM and myths were more common among females⁹.

CONCLUSION

Myths and misconceptions about diabetes are prevalent in our society and this can have consequences upon the health seeking behavior of the people. In this study education is shown to be associated with decreased belief in myths. Myths and misconceptions are found to be highly prevalent among both even diabetics as well as non diabetics, though it was little less among diabetics in our research. We need to educate people about this disease and its preventive as well as treatment options. Advocacy of Diabetes program is highly encouraged to deal with the myths and misconceptions in the society.

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