

MYTHS AND FACTS ABOUT DIABETES MELLITUS AND ITS TREATMENT A HOSPITAL BASED SURVEY.

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ABSTRACT

INTRODUCTION: The frequency of Diabetes mellitus Type-II (T2DM) increased due to increased obesity, physical inactivity, aging, increase population growth and urbanization.

OBJECTIVE: The present study aimed to explore knowledge and various myths related to Diabetes mellitus and antidiabetic drugs in our population. **SUBJECTS AND METHODS:** A descriptive cross sectional survey was conducted at the weekly diabetic clinic of Liaquat University of Medical and Health Sciences Jamshoro during one-year period. A sample of 560 subjects was studied including both diabetics and non-diabetics. A pre-structured Proforma was used to gather information. The questions regarding myths and knowledge about diabetes mellitus and antidiabetic drugs were asked. The data was analyzed using the *Statistics (USA version 8.1.)* computer software statistical package. The categorical variables were analyzed by using student t - test and chi-square. **RESULTS:** Regarding the antidiabetic drug therapy, a highly aberrant behavior of diabetics was noted. Only 42.2% of the diabetics were taking antidiabetic drugs regularly, rest were using drugs as on-off or on-demand therapy. The myths were noted as; Diabetics can take honey as it alleviates the blood sugar, herbal agents completely cure diabetes mellitus and diabetes is a disease of urine. The most dangerous myths were noted for the insulin therapy. Many diabetics responded that the insulin is a poison, which once started cannot be stopped. The insulin is used for those who are near to die and is not good for health. **CONCLUSION:** The myths and lack of proper knowledge of T2DM, widespread among population might be causative factor of increased morbidity and mortality.

KEYWORDS: Knowledge, Myths Diabetes mellitus Sindh

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INTRODUCTION

The frequency of Diabetes mellitus Type-II (T2DM) increased due to increased obesity, physical inactivity, aging, increase population growth and urbanization.¹ This epidemic of DM is particularly relevant to Pakistan.² The WHO has estimated that in 2030, half of 333 million people living with DM will be from Asia. According to International Diabetes Federation (IDF), the

number of diabetics is more after forty than twenty year of age, it is rise from 285 million in 2010 to 439 million in 2030.³ The Pakistan occupies sixth position regarding diabetes burden in whole world.¹ According to an estimate of Shera, et al⁴ there are 15% Pakistani's with diagnosed DM and millions more which remain undiagnosed of having DM.⁴ ⁵Pakistan is facing diabetes as epidemic. This health related issue become pandemic. Besides the treatment of diabetes

we should have to focus on prevention of diabetes by education the people related diabetes.⁶ Stories shared by peoples or groups defined as Myths. And these myths have strong inspiration in the people's lives.⁷ These types of fabricated beliefs become part of traditional identity and used to justify themselves regarding illness and their treatment.

Myths always have social, traditional or cultural backgrounds and frequently present in all society. These have more influenced in society due to illiteracy, poverty, lack to health care facilities further more may be linguistic and cultural groups. Literacy level is protective against myths.⁸ Hence, understanding the knowledge and myths of population about diabetes mellitus and its treatment is important in providing better care and health education to both patients and healthy individuals.

SUBJECTS AND METHODS

We conducted a descriptive cross sectional survey at weekly diabetic clinic of tertiary care Hospital of Liaquat University of Medical and Health Sciences, Jamshoro/Hyderabad during the period of (September 2012 to August 2013). The study was conducted to assess the myths and knowledge related to diabetes mellitus and antidiabetic drug therapy. A sample of 560 study subjects, including both the type 2 diabetics and attendants as non-diabetic were selected irrespective of gender. Each participant was explained about the purpose of present study. A verbal consent was sought as a general ethical code from willing participants. The participants were further informed that they can withdraw at any time

if feeling anxious, worrisome and not feeling good. A pre-structured Proforma was used to gather information. The performed based on biodata, demographic characteristics, myths and knowledge about diabetes mellitus and antidiabetic drugs therapy. The proforma was structured in sindhi/urdu language. The filling the questioner/proforma in diabetic clinic. Each participant was given sufficient time to listen the questions, understand and think properly and answers in freely. The data was analyzed using the *Statistics (USA version 8.1.)* computer software statistical package.

RESULTS

The demographic characteristics of the study population are shown in table. I. The male was the dominant population in both the diabetics and non-diabetics. Most of the individual's belonged to poor social class and were uneducated, however graduates were also interviewed. The antidiabetic drug intake habits showed a highly aberrant behavior. Only 42.2% of the diabetics were taking antidiabetic drugs regularly, rest were using them as on-off or on-demand drug therapy. The details of myths and knowledge about diabetes mellitus and antidiabetic drug therapy are shown in table II, with astonishing results. The myths explored were that the; Diabetics can take honey as it alleviates the blood sugar, herbal agents completely cure diabetes mellitus, and diabetes is a disease of urine. The most dangerous myths were noted for the insulin therapy. Many diabetics responded that insulin is a poison, which once started cannot be stopped. The insulin is used for those who are near to die and is not good for health.

Table. I. Demographic characteristics of the study population (n=560)		
	Diabetic(n=310)	Non-Diabetic(n=250)
Age (years)	49.3±17.5	47.4±19.7
Male	209	147
Female	101	103
Occupation		
• House wife	101	103
• Private	60	37
• Retired	47	13
• Government servant	90	67
• Self-employed	12	30
Education		
• Uneducated	109	49
• Primary	43	15
• Secondary	37	55
• Higher secondary	52	67
• Graduate	69	64

Table.II. Myths and Knowledge about Diabetes mellitus and antidiabetic drugs among study population (n=560)			
		Diabetic(n=310)	Non-Diabetic(n=250)
1. Diabetes is disease of urine	Yes	291	119
	No	19	131
2. Sugar intake causes Diabetes	Yes	290	211
	No	20	39
3. Diabetes is contagious	Yes	211	119
	No	99	131
4. Diabetes is an inherited disease	Yes	193	191
	No	117	59
5. Diabetics must not take sugar and sweet	Yes	278	156
	No	32	94
6. Diabetics cannot live normal life	Yes	301	120
	No	09	130
7. Diabetics can take honey	Yes	156	209
	No	154	41
8. Diabetes is completely curable	Yes	109	49
	No	201	201
9. Honey alleviates blood sugar	Yes	302	119
	No	08	131
10. Herbal agents are better to treat diabetes mellitus	Yes	198	199
	No	112	51
11. Herbal agents completely cure diabetes mellitus	Yes	212	110
	No	98	140
12. Allopathic drugs are not good	Yes	267	207
	No	43	43

DISCUSSION

Myths have strong influence in society due to a many reasons illiteracy, social misconception, and traditional beliefs for the treatment of many diseases.⁹they are typically passed on from one generation to another. It is difficult to disruption of this chain as it is deep placed in the society. It is very important to change the mindset and behavior of the people to eradicate the myths and educate the people about T2DM. The knowledge and myth about a most common disease are better to explored to overcome the problem; as it is a social hindrance to the proper management of DM hence it is essential to provide good care as well as health education to the people. The present study focused on the common myths prevalent in our diabetic community. The most common myths are shown in the table II. Most common myths noted were that the; Diabetics can take honey as it alleviates the blood sugar, diabetes is contagious and diabetes is a disease of urine. However more severe myths were noted for the insulin therapy. Many diabetics responded that the insulin is a poison, which once started cannot be stopped. The insulin is used for those who are near to die and is not good for health. Some considered that herbal medicines play very effective role in the treatment of diabetes mellitus. These peoples approach medical doctor with complications because they prefer herbal treatment first. A previous study⁹ has reported similar myths about diabetes

mellitus from India. Similarly, another previous study¹⁰ reported high prevalence of spiritual treatment myths about DM. One more study of Pakistan, revealed similar findings that patients having uncontrolled serum glucose due to took traditional medicine.¹¹A study from India by Jijomon et al¹² reported surprising myths and misconceptions were reported like, DM is a God's curse, DM is caused by eating more sugar and DM is a communicable disease. All these are similar to note in our present study. Another myth is more common that T2DM is a communicable disease. Similar results were found in former study,¹⁰ even people were not aware about the normal level of blood sugar levels, lifestyle modifications and how to control and treat the diabetes complications. The concept of false myths was found to be higher in females.⁹The increase frequency of myths in females can be accredited to the fact that females are typically less educated than males. The false myth regarding disease is less present in educated society. Similar results were reported previously.^{9,10} The present study clearly reflects the myths and factual lack of knowledge about DM. It is concluded that the traditional myths are major obstacles in the proper drug therapy of DM which is rising this moment in the country.

CONCLUSION

The myths and lack of proper knowledge of Diabetes mellitus is prevalent among

population that is most probably associated with poor disease control. Rigorous public campaigns about Diabetes mellitus, antidiabetic drug and insulin therapy must urgently be warranted by public health department to overcome the aberrant social behavior.

ETHICS APPROVAL: The ERC gave ethical review approval

CONSENT TO PARTICIPATE: written and verbal consent was taken from subjects and next of kin

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