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DIABETIC PATIENTS;
AWARENESS ABOUT LIFE STYLE MODIFICATIONS

DR. ZULFIQAR ALI SHAIKH
MBBS, MSc. (Public Health);
Assistant Professor,
Community Medicine,
Dow International Medical College,
Dow University of Health Sciences,
(DUHS), Karachi.

DR. MUHAMMAD ZAMAN SHAIKH
FCPS, FRCP
Professor of Medicine,
National Institute of Diabetes and Endocrinology,
DUHS, Karachi.

DR. GHULAM ALI, MBBS, MD
Associate Professor,
Forensic Medicine, Sindh Medical College,
DUHS, Karachi.

ABSTRACT... Objective: To assess awareness about the role of lifestyle changes in the management of diabetes among diabetics. **Patients and Methods: Settings:** Diabetic clinics of Jinnah Postgraduate Medical Centre and Kidney Centre. Karachi. **Study Period:** From April 7, 2008 to August 31, 2008. **Study Design:** Cross Sectional. **Sampling Technique:** Convenient. Sample Size: 200 diabetic patients. **Results:** A total of 200 diabetics were interviewed. Their mean age was 48.8 years. Of these 92 (46%) were males and 108 (54%) were females. Diabetes was under control of 38% and 57% were taking regular treatment. Education sessions were attended by only 11%, counseling for lifestyle modification was done with 16%, 30% followed diet chart and 18% of the study participants were doing regular / irregular exercise. Majority of them (68%) needed social and family support to cop up the disease. **Conclusions:** There was a lack of awareness about the role of lifestyle changes in the management of diabetes among these diabetic patients. There is a need of health education programs for diabetics and general public.

Key words: Diabetes, lifestyle modifications, awareness, management

INTRODUCTION

Diabetes mellitus is a multi-systemic illness associated with a variety of short-term and long-term complications[1]. Studies indicate that genetic factors do not account entirely for the development of diabetes, and several environmental triggers have been implicated[2].

The most important environmental risk factors for diabetes are obesity and physical inactivity. The massive explosion in obesity rates worldwide has largely been responsible for the increase in diabetes, and it is estimated that up to 80% of all new cases of diabetes can be attributed to obesity[3]. Change in life style has increased the incidence of obesity[4].

Despite several advances in the field of diabetology, it is unfortunate that there exists a low awareness of the disease among public[5]. For an effective control and prevention of diabetes; 88% of Pakistanis, 87% of Bangladeshis and 71% of Indians did not meet the guidelines as compared to 52% Europeans[6].

In Pakistan prevalence of Diabetes Mellitus is 11%. Pakistan ranked seven in the world with 6.9 millions diabetics in 2007 (compared to 4.3m ranked 8th in 1995)[7]. In the year 2025, Pakistan will be 4th on the list with 14.5m people with this disease[8].

The rapid rise of diabetes mellitus is one of the major health challenges. In fact, up to 80% of type-2 diabetes is preventable by adopting a healthy diet, increasing physical activity and promoting a healthy lifestyle[9,10].

Therefore to manage diabetes, the individuals must have ample knowledge of their disease, medication, diet as well as genetic and environmental risk factors. Thus health education is integral part in the management of diabetes. The present study was designed to assess the awareness about the role of lifestyle changes in the diabetic patients attending diabetic clinics of the two major hospitals of the Karachi city.

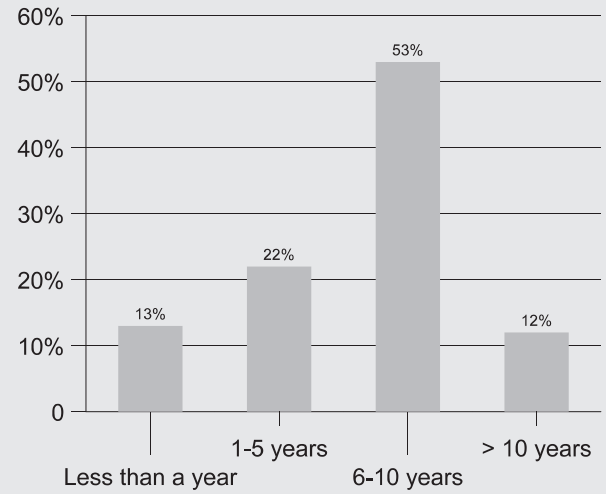
METHODOLOGY

It is a cross sectional hospital based study where a pre-tested questionnaire was used to collect the information from the diabetic patients. Convenient sampling technique was followed and a total of 200 patients attending the diabetic clinics of Jinnah Postgraduate Medical Centre and Kidney Centre, Karachi were interviewed after taking consent, from April 7, 2008 to August 31, 2008. Statistical analysis was carried out by SPSS Version 14.

RESULTS

The mean age of study participants was 48.8 years with a standard deviation of ± 9.27.Out of 200 patients, 92 (46%) were males and 108 (54%) were females. The duration of disease is shown in figure 1.

Fig-1. Duration of diabetes of study participants



Depending upon their lifestyle and affordability, the study participants consumed mixed type of food that included vegetables, meat, chicken, fish and pulses in addition to milk, lassi, yogurt and also butter (10%). Among these diabetics, only 12% (24) were consuming fruit due to non-affording capacity (68%), personal disliking (9%) or not taking fruit as an important part of diabetic diet (11%).

Out of total respondents, 140 (70%) were using cooking oil and the rest consumed ghee for their food.

Almost daily or very frequently, 16% (32) of the study subjects had to eat food from outside, the remaining were not in the habit of eating out.

Those who were doing exercise (regularly or irregularly) were only going for a walk of 20 to 60 minutes duration. Majority of the diabetics (n=136, 68%) asked for social

Table-I. The factors related with diabetes control of study participants

Factor	Yes	No
Diabetes under control	76 (38%)	124 (62%)
Taking treatment regularly	114 (57%)	86 (43%)
Education sessions by physician / health educator	22 (11%)	178 (89%)
Counseling for lifestyle modifications	32 (16%)	168 (84%)
heave idea of diet chart	156 (78%)	44 (22%)
Follow diet chart	104 (52%)	52 (26%)
Take breakfast regularly	169 (84.5%)	31 (15.5%)
Smoking	42 (21%)	158 (79%)
Doing exercise Daily 2-4 times / week Occasionally	36(18%) 12 (6%) 16 (8%) 8 (4%)	164 (82%)

and family support to fight against the challenges of diabetes.

DISCUSSION

Diabetes education is widely accepted as integral to diabetes therapy within the diabetes community[11,12,13] In this study awareness level of the study participants was poor, which is in accordance with other studies[14,15]. The WHO also stresses for the development of diabetes education program to give patients a better knowledge of their disease, and to prevent premature morbidity and mortality associated with diabetes[16].

Most of the study participants had their disease diagnosed for more than five years. This suggested that they should have a good knowledge about management of the disease; but many of them (43%) were not taking regular treatment, their (62%) diabetes was not under control, 52% did not follow diet chart and a vast majority (82%) did not indulge in exercise.

In this study, non-compliance with defined management practices requiring lifestyle changes was reported by many participants, which is consistent with the findings of Glasgow and Colleagues[17]. Similarly, Wang et al[18] identified socio-cultural practices leading to dietary non-compliance and lack of motivation for exercise as important factors. A similar response was seen in the participants.

Health education for lifestyle modification especially with regard to diet and exercise plays very vital role in the management of diabetes. But unfortunately these diabetics did not have ample idea and information to change their behavior. The education sessions by physicians or health educators were attended only by 11% and counseling for lifestyle changes during the treatment was not done with 84% of the study participants. This suggests the need for health care providers to spare some time to health educate people to control and manage the menace of the dreaded disease.

It is surprising to note that 15.5% of the diabetics in our study were not taking breakfast properly, those who could not afford financially were consuming more vegetables and pulses, and 21% of the respondents were in the habit of smoking. Here is also a need of change through health education.

Majority (68%) needed moral support from family and society to manage the disease which was also found in the study by Anderson et al[19], where lack of family support was one of the most dominant psychosocial issues among diabetics.

CONCLUSIONS

Lifestyle modifications have key role in the management of diabetes. There was a lack of awareness about the role of lifestyle changes among the diabetic people visiting two major hospitals of Karachi; and many of them did not take diabetes seriously. There is a desperate need of health education programs for diabetics and general public by using variety of media. The vital role of family and society must be recognized. Health care providers should play their part in health educating the masses.

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Correspondence Address:
Dr. Zulfiqar Ali Shaikh
Head Community Medicine Department,
Dow International Medical College, DUHS, at Ojha Campus,
SUPARCO Road, Karachi.
drzulfiqarshaikh@gmail.com

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"Nothing endures but change."

(Heraclitus)