

Lifestyle patterns and stress among diabetics

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Abstract

Diabetes is an iceberg disease; the incidence of each type of diabetes varies widely throughout the World. Globally 90 % of cases represent type 2 diabetes which is a predominant form of metabolic disorder and has becoming a major problem worldwide. Epidemiological studies show that the prevalence rate of diabetes is through aetiological factors, sedentary lifestyles and their habits play a major role in diabetes. The present study is aimed to carry with the objectives to assess the demographic status, life style and health status among diabetics (males and females). The study results highlighted that the effective interventions, health life style practices and awareness programmes will minimize the risk on prevalence of diabetes and the study is still in progress.

Keywords: Diabetes, prevalence, socio economic status and life style

Introduction

The prevalence of diabetes is rapidly rising all over the globe at an alarming rate. Diabetes is pandemic in both developed and developing countries. In 2000, there were an estimated 175 million people with diabetes worldwide and by 2030; it is estimated to 354 million. Risk factors for developing diabetes, peculiar to the Indian population were age, family history, and life style and health status changes due to urbanization. Symptoms of the disease usually include polydipsia, polyuria and polyphagia. Recently more studies showed that complications were higher in diabetic patients with family history. Seventy percent of the Indian population live in rural areas. It is a well-known fact that urban and rural populations have different lifestyles, work patterns, and environmental and sociocultural factors. The presentation of type2 diabetes mellitus is not uniform throughout the world and there are geographical and ethnic variations in the presentation of type2 diabetes mellitus across the world. Most studies from western countries and urban studies from India point to lifestyle changes, sedentary life, diet and related epidemiological transition as the major factors in the development of diabetes. Interventions to change the lifestyle habits among peoples might reduce the risk of diabetes. In this connection a study was carried out to know the life style of the diabetics residing in Tirupati. Accumulating evidence strongly demonstrates that the majority of type 2 diabetes cases can be prevented through lifestyle modifications. Based on these the prime objective of the study is to find out the

demographic profile, assess the life style of the selected diabetics through a well-structured questionnaire method.

Methodology

Research on clinical sciences focuses mainly on degenerative diseases like diabetes mellitus which is a health problem now-a-days and it is increasing globally. Life style is precise determinants of their health status though it is a multifactorial disorder. In the present study the following data was collected. They were demographic and socio economic status, lifestyle and health status.

The present study was carried out in Tirupati. The study area covered in Tirupati hospitals. The total sample frame 120 was selected randomly and comprises of 90 diabetic subjects for the study. Hence a well-structured questionnaire was designed for collection of data through interview method. The information generated through the interview method was recorded. After completing data collection, the schedules were decoded. The collected data was pooled and tabulated. Analysis was carried out manually statistics like percentages; means were used for interpretation and presented in the tables.

Results and Discussion

The results obtained in the study were presented in the following heads.

Demographic and Socio Economic status

Table 1: Demographic and Socio Economic profile of Diabetics

S. No.	Demographic and socio economic profile	Male (%)	Female (%)	Total (%)
1.	Age			
	40-45	18(32.8)	14(40)	32(35.5)
	46-50	13(23.6)	4(11.4)	17(18.9)
	51-55	16(29)	11(31.4)	27(30)
	55-60	8(14.5)	6(17.2)	14(15.6)
	Total	55(100.00)	35(100.00)	90(100.00)
2	Education status			
	Secondary	22(40)	18(51.4)	40(44.4)
	Intermediate	12(21.8)	9(25.8)	21(23.4)
	Graduates	16(29.1)	8(22.8)	24(26.7)

	Post graduates	5(9.1)	-	5(5.5)
	Total	55(100.00)	35(100.00)	90(100.00)
3	Occupation			
	Government employees	9(16.4)	2(5.7)	11(12.2)
	Non-Governmental employees	16(29.1)	2(5.7)	18 (20)
	Business	23(41.8)	7(20)	30(33.4)
	Retired	7(12.7)	1(2.9)	8(8.8)
	Housewives	-	23(65.7)	23(25.6)
	Total	55(100.00)	35(100.00)	90(100.00)
4	Family income			
	40000-50000	2(3.7)	1(2.9)	3(3.4)
	51000-60000	13(23.6)	7(20)	20 (22.3)
	61000-70000	15(27.2)	2(5.7)	17(18.8)
	71000-80000	16(29.1)	1(2.9)	17(18.8)
	81000-90000	7(12.7)	1(2.8)	8(8.9)
	No income	2(3.7)	23(65.7)	25(27.8)
	Total	55(100.00)	35(100.00)	90(100.00)

Age and Sex have been found to be the most positively predominant factors for the diabetics. From the table it is clear that in the age group of 40-45 yrs diabetes 35 percent are more than from all the age groups, whereas only 15.6 percent were observed in the age group of 55-60 yrs from the total diabetics. Education is an important factor affecting the individual to build the career in his life. It also plays a major role to develop his behavior, knowledge, food habits and practices of an individual. From the table it is evident that the result reveals the educational status of women was less than males. From the total sample 44 percent were having secondary grade education, 26 percent were graduates, 23 percent were belongs to intermediate level and only 5 percent of males were having post-graduation grade of

education. From the data results reveal that unemployment were among females by 65 percent. It may be due to low literacy rate level among women. From the data the results reveal that 22 percent were earning their annual income within the range of Rs 51000-60000/- whereas only 3 percent of people were noted their annual income in the range of Rs 40000-50000/-. 18 percent of people belong to Rs 61000-80000/- per annum, 8 percent were having their annual income within the range of Rs 81000-90000/- and majority of women that means 65 percent were noted in the unemployment this is due to their educational status.

Lifestyle Profile

Table 2: Lifestyle patterns of diabetics

S. No.	Lifestyle	Male (%)	Female (%)	Total (%)
1	Type of exercise			
	Walking	24(64.9)	14(66.7)	38(65.5)
	Yoga	1(2.7)	2(9.5)	3 (5.2)
	Meditation	4(10.8)	2(9.5)	6(10.4)
	Running	3(8.1)	2(9.5)	5(8.6)
	Jogging	2(5.4)	-	2(3.5)
	Others	3(8.1)	1(4.7)	4(6.8)
	Total	37(100.00)	21(100.00)	58(100.00)
2	Habits			
	Cigarette	15(32.6)	-	15(18.6)
	Alcohol	6(13.1)	-	6(7.4)
	Coffee	7(15.2)	19(54.2)	26(32.1)
	Tea	18(39.1)	16(45.7)	34(41.9)
	Total	46(100)	35(100)	81(100)

Exercise

Lifestyle related factors play an important role in the development of diabetes. Some of the risk factors like smoking, alcohol consumption and sedentary lifestyle are modifiable. Studies have shown that these factors if effectively controlled can lead to reduce in the risk of developing further complications (Deshmuk 2002) [1]

From the table it is clear that walking, yoga, meditation and other activities were followed by both male and female subjects but male subjects were recorded high in doing the physical activities when compared with female subjects. Highest 65 percent were doing walking whereas only 3 percent were doing jogging respectively.

Habits

Information regarding the habits like consumption of coffee, tea, cigarette smoking and alcohol consumption were recorded and presented in the following table. Results reveal that the individual habits cigarette smoking and alcohol consumption were seen in males that is 32 and 13 percent clearly. Coffee consumption was seen more in females than males 54 percent and 15 percent respectively. Tea consumption was more in males than females respectively.

Health status Profile Tensions

Table 3: Distribution of the sample according to stress

S. No.	Lifestyle	Male (%)	Female (%)	Total (%)
1	Personal tensions	10(25)	8(34.8)	18(28.6)
	Professional tensions	9(22.5)	7(30.5)	16(25.4)
	Family tensions	19(47.5)	6(26.1)	25(39.7)
	Others	2(5)	2(8.6)	4(6.3)
	Total	40(100)	23(100)	63(100)

Data reveals that tensions were seen in both the sexes. 47 percent were having family tensions in males where as only 26 percent were having in females. 34 and 30 percent were having personal and professional tensions in females whereas 25 and 22 percent were having in females respectively.

Conclusion

Diabetes is an ancient disease. Clinically diabetes is defined as the most common endocrine disorder of carbohydrate metabolism characterized by hyperglycemia and glucosuria which deepens on deficiency of insulin. Demographic and epidemiological evidences suggest that in the absence of effective intervention of diabetes will continue to increase its frequency globally. There are widely divergent approaches to treat diabetes with dietary patterns, adequate physical activity, and altering lifestyle through medication. Thus prevention of diabetes is not only a major task for future but it is essential for each and every individual to safe guard their health.

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