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KNOWLEDGE ABOUT DIABETES MELLITUS AND ITS CONTROL AMONG COLLEGE STUDENTS

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ABSTRACT

Background -Non communicable diseases like hypertension and diabetes mellitus are common due to unhealthy life style .The complications of these diseases can be prevented by early diagnosis and treatment. Indian population has an increased susceptibility to diabetes mellitus. Various modifiable and non modifiable risk factors give rise to the condition of which modifiable one are important as it can be minimized. Hence it is essential for the youth community to be aware about diabetes mellitus. Objective - To assess the knowledge on diabetes mellitus and its control. Results - A total of 264 students participated. 42% of the students knew about DM through mass media.Excessive urination was the most common symptoms reported by 34% of the students.42% of the students said that it will affect to the kidney. Majority of the students reveals that diabetes can be controlled through medication.

Conclusion - The study confirms that students knowledge about signs, symptoms, causes, complications and control of diabetes is limited.

Key words - Awareness, Knowledge, Diabetes Mellitus.

INTRODUCTION

Diabetes has emerged as one of the world's biggest health problem. Two thirds of the global diabetes population lives in developing world. The number of persons with diabetes is expected to increase in developed countries by 41%and 170% in developing countries by the year 2025[1].

According to International Diabetes Federation, there were 40 million persons with diabetes in India in 2001 and this number is predicted to rise to almost 70 million people by 2025 by which time every fifth diabetic subject in the world would be an Indian.[2] Keeping in the view the alarming increase in the incidence and prevalence of diabetes in India, the WHO has declared India as the diabetes capital of the world.[3]

The disease and the complications cause a heavy economic burden for diabetic patients, their family and the society. In the low and middle income countries the impact of the diabetes is largely unrecognized. At international and national level awareness about the public health and clinical importance of diabetes remains low. In the absence of adequate public health programmes, diabetes will pose a severe burden on the national health system in the near future.

Knowledge and awareness about DM, its risk factors, complications and management are important aspects for better control and better quality of life .As prevention is better than cure, awareness is always helpful to reduce the incidence of earlier onset of demand and its associated complications. This should be very helpful to reduce the additional burden of the disease to the nation. There is very little data on the levels of awareness and prevalence about diabetes in developing countries like India. The present study was under taken to assess level of

knowledge regarding diabetes mellitus , so that measures to improve the knowledge can be suggested and an appropriate information, education and communication(IEC) campaign based on these findings need to be designed and it will also help to plan public health programme.

MATERIAL AND METHODS

The present cross section study was carried out in B.L.D.E.A'S SHRI A.S PATIL College of Commerce, Bijapur. Study included 160 (61%) male and 104 (39%) female students. Majority of (82%) student belongs to Hindu religion. only 17% of the students belong to higher socio-economic class.

The study participants were in the age group of 18 to 22 years. Interview technique was used as a tool for collection of information. 264 students, who are studying in B.com I, II and III,were participated in this study. Information was collected in pre tested proforma. Chi-square test and percentages were used for analysing the data. The study participants were asked about their knowledge and control regarding diabetes mellitus. The variable includes the source of information, symptoms, causes and risk factors and its complications.

OBJECTIVES

To assessthe knowledge on diabetes mellitus and its control

RESULTS AND DISCUSSION

Study included 160 (61%) male and 104 (39%) female students. 98(37%) students studying in B-Com I, 86(33%) studying in B-Com II and 80(30%) students studying in B-Com III. Majority of the student belongs to Hindu religion(82%). only 17% of the students belongs to higher socio-economic class. The study participants were in the age group of 18 to 22 years.

Majority of the students (75%) were aware about diabetes mellitus. However they are not having complete knowledge about diabetes mellitus. 42% of the students knew about DM through mass media like TV, News paper and Radio. 14% came to know trough family members, 11% through neighbors' and only 8% reported that they came to know about DM through doctors.

Excessive urination was the most common identified symptoms reported by 89(34%) students fallowed by increasing thirst 38(14%), increased hunger 22(8%), weight loss15 (6%).Our results were similar to a study conducted by Mohammed A etal at Oman[4].

Study reveals that knowledge about physical activity (9%)and obesity (5%) play a major role in contributing diabetes. Only16% perceived stress as an important factor for developing diabetes and 12% of the students reporting sedentary life as one of the risk factors for diabetes. A similar study was conducted by Deepa Mohan etal at Chennai and revealed that 11.9%and 19%reported that physical inactivity and obesity are risk factors for diabetes[5].

66 students (25%) reveals that diabetes can be controlled through regular medication. 18% reported that it can be controlled through modifying dietary habits. 22 students (9%) felt other studies conducted in Pakistan[6].that diabetes can be controlled by increasing physical exercise at the same time 62(23%) students opined that all types of preventive measures can be control the diabetes. Similar findings have been reported by

DISCUSSION

This study aimed to assess knowledge of college students about diabetes mellitus.Even though majority of the students aware about the diabetes disease; they are not having complete knowledge. Various presenting symptoms of diabetes were also enquired from the students.34% students opined that excessive urination was most common identified symptoms. Our results were similar to a study conducted by Mohammed A etal at Oman[4].

Nearly 25% of the college students were not even aware of a condition called diabetes. Not surprisingly knowledge about complications of diabetes was even worse.Increasing public

awareness regarding diabetes symptoms and the importance of diabetic screening for high risk group can decrease the incidence of diabetes complications. It is also important to increase the public awareness regarding modification of diabetes risk factors, such as unhealthy life style, high sugar intake and obesity.

CONCLUSION

Knowledge about the disease plays a vital role in future development of disease and its early prevention and control.

The study confirms that student's knowledge about signs, symptoms, causes, complications and control of the diabetes is limited**.**

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REFERENCES

1. King H, Albert RE, Herman W H. Global Burden of diabetes 1995-2025 prevalence, numerical estimates and projection. Diabetes care 1998;21;1414-31
2. World Health Organisation World Health Report 1997
3. Sicree R Shaw J, Zimmet P. Diabetes and impaired Glucose tolerance in India. Diabetes Atlas GanD.Ed International diabetes Federation Belgium 2006;15-103.
4. Mohan D Deepa Raj etal. Awareness and knowledge of diabetes in Chennai- The Chennai Urban Rural epidemiology study [CURES-9] J. Association physician India 2005;53: 283-7
5. Abelmarouf Hassan Mohieldein, Mohammad A etal.Awareness of diabetes mellitus among Saudinondiabetic population in Al-Qassim region, SaudiArabia .Journal of Diabetes and Endo crinology. Vol.2 (2) pp14-19.April 2011.
6. RSamachandranA, Snehalata C, etal. Temporary changes in prevalence of diabetes and impaired glucose tolerance associated with lifestyle transition occurring in the rural population in India. Diabetologia.2004; 47; 860-65
7. Rafique G. Azam S I. WhiteF. Diabetes knowledge, beliefs and practices among people with diabetes attending a university hospital in Karachi Pakistan. EMHJ2006;12;590-8 Shadmamumtaz, TabindaAshfaq, HemnaSiddqui. Knowledge of medical students regarding diabetes mellitus at Ziauddin University Karachi. www.informer .org. in/conferences.
8. Nisar N Khan I A, Qudri M H, Sher S A. knowledge and risk assessment of diabetes mellitus at primary care level, A preventive approach required combating the disease in developing country. Pak J. Med. Science 2008;24;667-72R

Table 1: Source of information regarding diabetes mellitus

Sources	Male	Female	Total	Percentage
Newspaper	31	18	49	19
T V	24	16	40	15
Radio	13	08	21	08
Family member	22	15	37	14
Neighbour	17	12	29	11
Doctor	15	07	22	08
Don't know	38	28	66	25
Total	160	104	264	100

$X^2 = 1.017$ p=0.985

Table 2: Knowledge regarding signs and symptoms about diabetes mellitus

Signs & symptoms	Male	Female	Total	Percentage
Increased thirst	24	14	38	14
Sweating	05	02	07	03
Weight loss	10	05	15	06
Increased hunger	13	09	22	08
Sleep disturbance	06	07	13	05
Slow healing	05	09	14	05
Excessive urination	59	30	89	34
Don't know	38	28	66	25
TOTAL	160	104	264	100

$X^2 = 6.929$ p=0.4

Table 3: Knowledge regarding contributing factor towards development of the disease

Contributing factors	Male	Female	Total	Percentage
Obesity	08	04	12	05
Sedentary life	22	09	31	12
Stress	27	15	42	16
Decreasing physical activity	15	10	25	09
Food habit	19	11	30	11
Family history of diseases	14	14	28	11
Consuming more sweets	17	13	30	11
Don't know	38	28	66	25
TOTAL	160	104	264	100

$X^2 = 3.460$ p=0.839

Table 4: Knowledge regarding impact of diabetes on other organs

Impact on organ	Male	Female	Total	Percentage
Eyes	16	20	36	14
Kidney	70	40	110	42
Heart	07	03	10	10
Liver	03	02	05	05
Multiple organ	26	11	37	14
Don't know	38	28	66	25
TOTAL	160	104	264	100

$X^2 = 1.343$ p=0.854

Table no 5: Knowledge regarding control measures

Control measures	Male	Female	Total	Percentage
Diet	32	16	48	18
Exercise	12	10	22	09
Medication	40	26	66	25
All	38	24	62	23
Don't know	38	28	66	25
TOTAL	160	104	264	100