A Study on Awareness of Diabetes Mellitus Amongst General Population in Kolkata

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Abstract: Diabetes is growing alarmingly in India, home to more than 65,1 million people with the disease, compared to 50.8 million in 2010. Knowledge on Diabetes helps in early detection and treatment of the disease and its complications. Interview was performed in out-patient departments of Fortis Hospitals, Anandapur, on six working days. Results showed minimal knowledge and awareness about the disease and its complications **Keywords:** Diabetes, Knowledge, Awareness.

I. Introduction

Diabetes is growing alarmingly in India, home to more than 65,1 million people with the disease, compared to 50.8 million in 2010.

A recent report confirmed that increasing obesity in South Asians is primarily driven by nutrition, lifestyle and demographic transitions, increasingly faulty diets and physical inactivity, in the background of genetic predisposition.²

Obesity appears to spreading across India in part at least as a result of an invasion of processed Western food. India's economic boom has been accompanied by a meteoric increase in the number of people with diabetes – and those at risk for the disease. Prevalence rates are up to 20% in some cities, and recent figures showed surprisingly increased rates in rural areas.

In 2000, India (31.7 million) topped the world with the highest number of people with diabetes mellitus followed by China (20.8 million) with the United States (17.7 million) in second and third place respectively. According to Wild et al.³ the prevalence of diabetes is predicted to double globally from 171 million in 2000 to 366 million in 2030 with a maximum increase in India. It is predicted that by 2030 diabetes mellitus may afflict up to 79.4 million individuals in India, while China (42.3 million) and the United States (30.3 million) will also see significant increases in those affected by the disease.³⁴

The aetiology of diabetes in India is multifactorial and includes genetic factors coupled with environmental influences such as obesity associated with rising living standards, steady urban migration, and lifestyle changes.

Lifestyle is defined as the way in which a person lives. With regard to health, lifestyle refers to dietary habits, physical activity, the social use of substances such as alcohol, tobacco and illicit drugs.

Diabetes related microvascular complications like retinopathy, nephropathy and neuropathy and macrovacular complications like cardio-vascular and peripheral vascular diseases are also increasing.

Knowledge on Diabetes helps in early detection and treatment of the disease and its complications.

Various forums and discussions are delivered now a days to make people aware of the disease, though the outcome is yet to be a concern. An understanding on the level of knowledge and awareness in general population will help healthcare educators to plan for future endeavour.

This paper discusses the result of a cross-sectional survey conducted to evaluate the knowledge of general people on diabetes in Kolkata. The main objective was to identify areas of weakness, misconception and desire to know about the disease that might require additional effort to educate general people.

II. Methodology

The survey was conducted in the form of interview in out-patient departments of Fortis Hospitals, Anandapur. The subjects were selected randomly with age group above 18 years.

The participants were required to answer a total of six questions from a pre-designed, pre-tested questionnaire using "yes", "no" and "don't know" as the response. The questions were asked in 3 different languages, viz. Bengali, Hindi and English.

DOI: 10.9790/0853-1509022122 www.iosrjournals.org 21 | Page

III. Figures and Tables

Table 1: Distribution of study population according to Age (n=252)

Age group in years	Number (No.)	Percent (%)
20—29	56	22.22
30-49	82	32.54
50—69	86	34.13
>70	28	11.11
Total	252	100

Table 2: Distribution of study population according to Sex(n=252)

Sex	Number (No.)	Percent (%)
Male	150	59.50
Female	102	40.50
Total	252	100

Table 3: Distribution of study population according to the Level of education(n=252)

Level of education	Number (No.)	Percent (%)
High school	30	11.90
Graduate	148	58.73
Post graduate	36	14.29
Professionals	38	15.08
Total	252	100

Majority of study population 148 (58.73%) had graduate level of education.

Table 3: Distribution of study population according to knowledge of Diabetes mellitus(n=252)

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Questions on Diabetes	Correct	Incorrect	Don't know
Is diabetes a condition of high blood sugar?	152 (60.30%)	38 (15.10%)	62 (24.60%)
Is diabetes a condition of insufficient Insulin in	118 (46.82%)	44(17.46%)	90 (35.72%)
body?			
Is diabetes a condition of non-response to	56 (22.20%)	70 (27.80%)	126 (50.00%)
Insulin secretion in body?			
Is diabetes contagious?	176(69.84%)	6(2.38%)	70(27.78%)
Is Insulin a hormone?	110(43.65%)	44(17.46%)	98(38.89%)
Does Insulin control blood sugar?	194(76.99%)	4(1.59%)	54(21.42%)

IV. Conclusion

This study did not include people from low socio-economic status as data from educated people would reflect knowledge and conception of diabetes amongst higher socio-economic group exposing the tip of iceberg. Distribution of age group shows a maximum number of 86 (34.12%) in the age group of 50-69 years. Out of 252 study population 150(59.5%) were male and 102(40.5%) were female. 152 (60.3%) of population had correct knowledge that diabetes is a condition of high blood sugar.

118~(46.82%) of population had knowledge that diabetes is a condition of insufficient Insulin release. Only 56 (22.20%) of population had knowledge that diabetes is a condition of non-response to Insulin release in our body . 176 (69.84%) of population had knowledge that diabetes is not contagious. 110 (43.65%) of population had knowledge that Insulin is a hormone .

194 (76.99%) of population had knowledge that Insulin controls blood sugar.

As India is going to be a leading country of diabetes in near future, therefore, it is very important to increase at least basic knowledge of diabetes.

It is time for mass media and different health care support groups to initiate all kinds of campaigns to create public awareness to a great extent.

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