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Original Article

An observatory study about Diabetic Screening and Counseling OPD

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ABSTRACT

Diabetes is one of the most costly and burdensome chronic diseases of contempraroy era. Individuals with type 2 diabetes are also at a significantly higher risk for coronary heart disease, peripheral vascular disease, hypertension, obesity etc. There is also growing evidence that at glucose levels above normal but below the threshold diagnostic for diabetes, there is a substantially increased risk of cardiovascular disease (CVD) and death. It was found worth to collect relavant data about the disease to understand the problem and to search out various ways to solve the same. In the above said context, the following paper is about observational study data collected from the Diabetes screening and counselling OPD of A&U Tibbia college & hospital for the year 2012 (From Jan to Dec 12). Realtionship of the disease with obesity, hypertension, age etc were observed and collected down.

Keywords: Diabetes, Metabolic disorder, Obesity, Life style modification

INTRODUCTION

Diabetes Mellitus is a metabolic disorder that arises out of lesser secretion of Insulin in the Pancreas[1]. It may occur due to hereditary factor or on individual's life style[2]. In a general survey, it was found that every fourth person in Delhi is suffering from this deadly disease[3]. It is not only related with raised BGL only, but is having long term effect on vital organs too, like Heart, Kidney, Eyes or Peripheral nerves etc[4]. In light of above milliard facts Delhi Government decided to launch a diabetic screening and counseling campaign. A separate OPD for Diabetes screening and Counseling was decided to set up in all six Delhi Administration Hospitals. A&U Tibbia College & Hospital, is one of them. The purpose was to detect Diabetes at an earlier stage and also to counsel patients for letting them know about the disease, its prevention and complications.

The following paper is based on observational study. Data was collected from the OPD for the year 2012 (From Jan to Dec 12).

Objectives

The objectives of the study were-

1. Analyzing predominance of the problem in the area.
2. Finding relationship between BMI and Diabetes mellitus.
3. Relationship between smoking/ alcohol and blood sugar levels.
4. Finding relationship between Hypertension and Diabetes
5. General information about age, gender, physical exercise and status of the Diabetes found in the OPD for the specified time period

Abbreviations-
IDRS-Indian Diabetic Risk Score
BGL/F or PP-Blood Sugar level (Fasting/PP)
HTN-Hypertension
BMI-Body Mass Index

METHODOLOGY

Simple Random Sampling Technique was used for selection of all the patients coming to the OPD. The Patients were registered on a proforma, specially designed by experts from Govt and hence provided to all the centers.

Proforma was filled up, in the form of one to one interview. BMI was calculated as per the height and weight ratio of the Patient. Waist was also measured to calculate IDRS.

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The Patients who were coming for the first time to get check for their BGL on themselves or as per advice from their physician were screened first. The patients found with increased BGL, as detected through Digital Acu check glucometer, the risk score was counted to counsel the Patient accordingly. IDRS 00 <30 means the Patient is at no risk, between 30 to 59 Patient is at intermediate risk and IDRS>60 reveals that the patient is on high risk of Diabetes.

Patients who were Known Diabetics, were tested for BGL to know the current status and counseled for life style modifications, do's and don'ts about diet, and medicine compliance as per need.

The patients were provided with psycho- education about the disease[5].The schedule included prevalence and outcome of the disease. Motivation therapy was also done for de-addiction from smoking, drinking or tobacco chewing[6]. Where, the depression content was found, Cognitive behavior therapy was also applied with due consent from the patients[7].

OBSERVATION AND RESULT

Total No of persons screened and counseled were 4532. Number of people screened only were 1661, Total No of persons counseled only were 2996, Total no of people detected diabetic and pre-diabetic and referred to diabetic clinic were 1568. 230 Patients were at risk (i.e. they were having IDRS<30), Patients on Intermediate risk were 669, and Patients with high chances to become diabetic were 1463. Hypertensive patients were 606.

BMI and Diabetes: Out of 4532 people 72% of patients were found with raised BMI (>23.i.e.3263) Among them 51.38% of Patients with raised BMI were detected diabetic (3263 Patients).
Hypertension-13.37% were HTN
Persons with IDRS>60-32.28% (463)
Persons with IDRS 30-60-14.46% (669)
Persons with IDRS<30-5.07% (230)

Counseled& Screened
Persons Counseled only-66.10% (2996)
Persons screened only-36.65% (1661)

Smokes/Alcoholic/Tobacco
Out of 1568 detected Diabetic Patients 38% (596) were smokers while 28% of 1568 patients were involved in tobacco chewing, 50% of 1568 were found Alcoholic.

Age-
15% of the Diabetics were below the age of 35 years (499)
27% of the Diabetics were between the age to 35-49 years (905)
58% of the Diabetics (1948) were of the age more than 50 years.

Physical Exercise-
36% of the Diabetics were not doing any physical activity and hence leading a sedentary life.
26% of the Diabetic were moderately exercising (872 persons) Rest were doing their exercise as per counselor's advice.

Gender-
Among the Patients coming to the OPD, 56% were females.

DISCUSSION

Large No of Patients who were suffering from the disease were overweight or obese[8]. The researcher has observed that 72% of the people who were screened and counseled were having raised BMI. Out of which 51.38% (i.e. more than half) were having Diabetes. It clearly shows that overweight / obesity may play a major role as a causative factor for the disease.

Approximately 16% of the Diabetics were hypertensive; it shows that raised BGL, effects vascular elasticity and makes them stiff to generate more pressure on arterial walls, causing Hypertension.

Percentage of smokers and alcoholics were as high ranging from 38% to 50%. This clarifies that smoking and alcohol or use of tobacco badly affects metabolism and hence become major cause behind occurrence of the disease[9].

No Physical exercise (36%) or less physical exercise (26%) was also found to be a culprit for insulin resistance.

Age is another factor. It was found that approximately 58% of the Diabetics (1948) were of more than 50 years of age, while only 15% were below 35 years. It can be concluded that Diabetes if not a juvenile one (Type-1) generally wakes up at middle age.

The Diabetes sees no difference in male or female, but in this study 56% of the Diabetics were females. The reason perhaps, is that most of them were illiterate and housewives. They do not take care for self. Don't go out for walk. Physical exercises are restricted and household stresses make them feel overburdened.

CONCLUSION

It can be concluded from the above discussion, that Diabetes is a major problem prevailing in this area. Patients are not aware of the problem and do not know that how their sedentary life style may harm them. They do not know about the type of diet, they should eat or should not indulge in bad habits of smoking, tobacco chewing or alcoholism. Counseling is required to make them understand the disease and its subsequent consequences. The general information about the characteristic features and prodromal symptoms about Diabetes should be displayed on boards in public places so that people could be aware about the same. This study may further be extended to find out effect of counseling upon the knowledge and perceived quality of half with this disease.

Annexure-I the actual report for the year 2012
Annexure-II Reference
Annexure-I the actual report for in year 2012
Diabetes Care Campaign
Govt. Of NCT of Delhi
GTB Hospital, Shahdara, Delhi,
Monthly Report (2012) for Diabetes Screening and Counseling Centers
Hospital Name-A & U Tibbia College & Hospital, Karol Bagh, New Delhi

Month-Year 2012	Total No of Persons screened & Counseled	Total No of persons Screened	Total No of Persons Counseled only	Total No of Persons detected diabetic & referred to diabetic clinic	IDRS ** <30	IDRS 30-60	IDRS> 60	Hypertensive
January	394	101	299	193	05	13	88	42
February	557	137	420	204	04	42	97	59
March	566	178	388	253	05	68	117	125
April	659	226	433	210	08	96	216	91
May	737	173	565	243	04	58	151	49
June	368	123	378	53	08	67	51	53
July	256	213	94	131	37	94	137	33
August	144	131	46	57	74	70	129	12
September	57	111	11	54	78	59	113	03
October	279	94	174	51	01	33	96	40
November	247	164	94	57	04	43	115	32
December	268	183	94	62	02	26	153	67
Total	**4532**	**1661**	**2996**	**1568**	**230**	**669**	**1463**	**606**

**IDRS-Indian Diabetes Risk Score

Annexure-II Reference

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