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Research Article

**PREVALENCE OF DIABETES MELLITUS IN OUTDOOR
PATIENTS**¹Hafiz Wasif Ahmad, ²Areeha Zulfiqar, ³Muhammad Raheel¹Bahawal Victoria hospital Bahawalpur²Pakistan Institute of Medical Sciences Islamabad³Bahawal Victoria Hospital Bahawalpur**Abstract:**

Diabetes mellitus (DM) is a worldwide health issue and is increasing day by day. Objective: To see the prevalence of diabetes mellitus in the outdoor patients. Material and Methods: A total of 100 patients of either gender and of age ≥ 18 years were included in this study. Random blood sugar levels were checked using Glucometer. Results: Total of 55 females and 45 males were included in this study. The mean age of the patients was 35.98 ± 15.32 years. Eighty five patients (85%) were labeled as diabetic and fifteen patients (15%) were labeled as non-diabetic. Conclusion: There is seen, high prevalence of diabetes in patients presenting in the outdoor department. Keywords: Diabetes mellitus, random blood sugar, outdoor

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INTRODUCTION:

Diabetes mellitus (DM) is also generally known as diabetes i.e. increased levels of blood sugar for a longer period of time. Patients with diabetes are usually asymptomatic or they may present with increased frequency of urination, increased levels of thirst and hunger. Diabetes is categorized into four major groups. These groups include type-I diabetes, type-II diabetes, gestational diabetes and diabetes of other specific types^{1,2}.

Most of the patients are diagnosed for the first time on the basis of routine investigations. If early diagnosis and treatment of diabetes are not planned, it may lead to certain complications i.e. acute complications including hyperosmolar hyperglycemic state, diabetic ketoacidosis or death in some cases and chronic or long term complications include stroke, chronic kidney disease, damage to eyes, foot ulcers and cardiovascular diseases^{3,4}.

According to the World Health Organization, in developing countries prevalence of diabetes will be raised up to 170% accounting for the seventy-five percent of the world by the year 2025⁵. So there is a need to diagnose this kind of disease at earliest and manage accordingly⁶. Purpose of this study is to see the prevalence of diabetes mellitus in the patients presenting in the outdoor department. This study will help us in treatment and managing this chronic disease and enable us to prevent its complications.

MATERIAL AND METHODS:

This cross-sectional study was conducted in the outdoor department of Bahawal Victoria Hospital Bahawalpur. Total of 100 patients of either gender and of age ≥ 18 years were included. Patients who presented with increased urination, increased thirst or hunger were included. Patients who presented with any other disease were also included i.e. those patients were not having any symptoms specific to the diabetes mellitus. Pregnant females and those not providing the informed consent were excluded. After taking consent, age, gender, blood sugar levels, and family history was taken. Data were analyzed in SPSS V. 20.

RESULTS:

Total of 55 females and 45 males were included in this study. The mean age of the patients was 35.98 ± 15.32 years. Mean age of the male patients was 39.45 ± 15.91 years and mean age of the female patients was 35.88 ± 14.22 years. Out of 100 patients, 81 patients (81%) of the patients presented with symptoms specific to diabetes and 19 patients (19%) were not having any symptoms of diabetes. Eight five patients

(85%) were having blood sugar levels of ≥ 126 mg/dl and labeled as diabetes, fifteen patients (15%) were having blood sugar levels of ≤ 126 mg/dl. The mean blood sugar level of the patients was 145.97 ± 22.02 mg/dl. Mean blood sugar in female patients was 142.89 ± 16.95 mg/dl and mean blood sugar in male patients was 152.85 ± 23.94 mg/dl. Twenty five patients (25%) were having a positive family history for diabetes mellitus.

DISCUSSION:

The results of our study show a high prevalence of diabetes mellitus in patients. Reasons for this high prevalence is that we included a patient who presented with symptoms that are specific to diabetes. Another interesting result was seen i.e. we included 19 patients who were asymptomatic and not having signs of diabetes and our results revealed fifteen patients as non-diabetic. This finding tells us that some of the patients who were asymptomatic but were also diabetic. The other reason for this finding might be that some of the patients who were symptomless had taken any sweets before drawing the blood.

According to some studies, few factors for this high prevalence of diabetes in Pakistani environment might be increasing urbanization and industrialization as well as dietary and lifestyle habits. There are greater risks for certain complications i.e. microvascular and macrovascular resulting in a disturbed healthy life^{3,4}. According to some studies, education about physical activity i.e. exercise and dietary habit is a must for the patients who are at risk of diabetes^{7,8}.

LIMITATIONS:

Smaller sample size and checking the blood sugar level randomly are a few limitations to this study. A study in a larger number of patients and checking the fasting blood sugar levels should be conducted.

CONCLUSION:

There is seen a high prevalence of diabetes in the patient presenting with symptoms of increased frequency of urination, increased thirst, and hunger. There should be workup for the treatment and management of this high prevalence of diabetes and its related causes.

CONTRIBUTION OF AUTHORS:

Hafiz Wasif Ahmad: Data Collection and Analysis
Areeha Zulfiqar: Writing the paper.
Muhammad Raheel: Editing and Proof reading

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