



CODEN [USA]: IAJPBB

ISSN: 2349-7750

**INDO AMERICAN JOURNAL OF
PHARMACEUTICAL SCIENCES**<http://doi.org/10.5281/zenodo.3258245>Available online at: <http://www.iajps.com>

Research Article

**PREVALENCE OF DIABETES MELLITUS IN PATIENTS
PRESENTING IN OUTDOOR DEPARTMENT**

¹AMANULLAH, ²SANA JABEEN, ³MUHAMMAD AAMIR, ⁴HAMMAD RASHEED
¹Rural health center bheikhomor Mandi Bahauddin, ²Basic Health Unit Chakki District Attock,
³Allama Iqbal Medical College Lahore, ⁴Tehsil Head Quarter Taunsa Sharif.

Article Received: April 2019**Accepted:** May 2019**Published:** June 2019**Abstract:**

Diabetes mellitus is a global health issue and increasing day by day. By 2025, according to the World Health Organization, its incidence would be around seventy-five percent of the whole population.

Objective: To see the prevalence of diabetes in outdoor patients.

Material and Methods: A total of 118 patients of either gender and of age ≥ 18 years were included in this study. Random blood sugar levels of patients were checked.

Results: Total of 63 females and 55 males were included in this study. The mean age of the patients was 36.09 ± 14.22 years. 94 patients (79.7%) were labeled as diabetic and 24 patients (20.3%) were labeled as non-diabetic.

Conclusion: There is seen, high prevalence of diabetes in patients presenting in the outdoor department.

Key Words: *Diabetes mellitus, random blood sugar, outdoor*

Corresponding author:**Amanullah,**

Rural health center bheikhomor Mandi Bahauddin.

QR code



Please cite this article in press Amanullah et al., *Prevalence Of Diabetes Mellitus In Patients Presenting In Outdoor Department., Indo Am. J. P. Sci, 2019; 06[06].*

INTRODUCTION:

Diabetes mellitus is also generally known as diabetes i.e. increased levels of blood sugar for a longer period of time. Patients with diabetes may be asymptomatic or 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 rural health center bheikhomor Mandi Bahauddin. Total of 116 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 of diabetes. Pregnant females 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 63 females and 55 males were included in this study. The mean age of the patients was 36.09 ± 14.22 years. Mean age of the male patients was 38.35 ± 16.053 years and mean age of the female patients was 36.09 ± 14.22 years. Out of 118 patients, 99 patients (83.9%) of the patients presented with symptoms specific to diabetes and 19 patients (16.1%) were not having any symptoms of diabetes. 94 patients (79.7%) were having blood sugar levels of ≥ 126 mg/dl and labeled as diabetes, 24 patients (20.3%) were having

blood sugar levels of ≤ 126 mg/dl. The mean blood sugar level of the patients was 146.72 ± 21.21 mg/dl. Mean blood sugar in female patients was 141.37 ± 16.95 mg/dl and mean blood sugar in male patients was 152.85 ± 23.94 mg/dl. 27 patients (22.88%) were having a positive family history for diabetes mellitus. Distribution of diabetic and non-diabetic patients according to gender is given in the table.

Gender	Non- diabetic	Diabetic	Total
Male	8	47	55
Female	16	47	63
Total	24	94	118

Distribution of diabetic and non-diabetic cases according to gender

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 24 patients as non-diabetic. This finding tells us that some of the patients who were asymptomatic but were diabetic and some of the patients who presented with symptoms of diabetes but were non-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:

1. Dr. AMANULLAH: Data Collection, writing limitations and conclusion section
2. SANA JABEEN: Writing the introduction and Methodology section
3. MUHAMMAD AAMIR: Writing the results and discussion section
4. HAMMAD RASHEED: Statistical Analysis and editing of the paper

REFERENCES:

1. Alberti KG, Zimmet PF. Definition, diagnosis and classification of diabetes mellitus and its complications. Part 1: diagnosis and classification of diabetes mellitus. Provisional report of a WHO consultation. *Diabetic medicine*. 1998 Jul;15(7):539-53.
2. Golden SH, Lazo M, Carnethon M, Bertoni AG, Schreiner PJ, Roux AV, Lee HB, Lyketsos C. Examining a bidirectional association between depressive symptoms and diabetes. *Jama*. 2008 Jun 18;299(23):2751-9.
3. Nathan DM. Long-term complications of diabetes mellitus. *New England Journal of Medicine*. 1993 Jun 10;328(23):1676-85.
4. Fowler MJ. Microvascular and macrovascular complications of diabetes. *Clinical diabetes*. 2008 Apr 1;26(2):77-82.
5. Shera AS, Jawad F, Maqsood A. Prevalence of diabetes in Pakistan. *Diabetes research and clinical practice*. 2007 May 1;76(2):219-22.
6. American Diabetes Association. Diagnosis and classification of diabetes mellitus. *Diabetes care*. 2013 Jan 1;36(Supplement 1):S67-74.
7. Ratner RE, Prevention Program Research Group D. An update on the diabetes prevention program. *Endocrine Practice*. 2006 Jan 1;12(Supplement 1):20-4.
8. Ratner RE, Christophi CA, Metzger BE, Dabelea D, Bennett PH, Pi-Sunyer X, Fowler S, Kahn SE, Diabetes Prevention Program Research Group. Prevention of diabetes in women with a history of gestational diabetes: effects of metformin and lifestyle interventions. *The Journal of Clinical Endocrinology & Metabolism*. 2008 Dec 1;93(12):4774-9.