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Research Article

**HYPERTENSION AMONG PATIENTS PRESENTING IN
OUTDOOR DEPARTMENT**

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Article Received: October 2019 **Accepted:** November 2019 **Published:** December 2019**Abstract:**

According to the studies, hypertension is increasing worldwide due to increased urbanization and industrialization. Hypertension if uncontrolled can lead to certain complications.

Objective: *To determine the prevalence of hypertension among the patients presenting in the outdoor department.*

Material and Methods: *This cross-sectional study included 129 patients of either gender. Patients of age 18 years and above were included. Data was collected and analyzed using SPSS V. 23.0*

Results: *Mean age of the patients was 36.23±13.98 years. There were 61 female patients (47.28%) and 68 male patients (52.71%). Mean systolic blood pressure was 141.12±20.01 mmHg and the mean diastolic blood pressure was 88.21±5.37 mmHg. One hundred and four (80.62%) patients were having pre-hypertension, class I and class II hypertension and 25 (19.37%) patients were having normal systolic blood pressure. Twenty nine (22.48%) patients had a positive family history and hundred (77.51%) patients did not have a positive family history.*

Conclusion: *This study concludes a higher prevalence of hypertension in patients presenting in the outdoor department.*

Keywords: *Hypertension, outdoor department, Pakistan.*

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INTRODUCTION:

According to the literature, hypertension is an increasing global issue that needs special attention. It is defined as increased blood pressure i.e. more than 140/90 mmHg in young patients. It is called as prehypertension if the systolic pressure is 120-139 mmHg and diastolic pressure is 80-89 mmHg, stage I hypertension when systolic pressure is 140-159 mmHg and diastolic pressure is 90-99 mmHg and stage II hypertension when systolic and diastolic pressures are ≥ 160 mmHg and ≥ 100 mmHg respectively [1].

The hypertensive patient presents with dizziness, headache, frustration, and irritability [2]. Patients may be asymptomatic in pre-hypertension or in young patients with newly developed hypertension. If hypertension is not diagnosed and managed timely it may cause further complications i.e. stroke, myocardial infarction, aneurysms, kidney diseases, and blindness in some cases [3].

According to the studies, in Poland the prevalence of hypertension is very high i.e. 72.5% in female patients and 68.9% in male patients [4]. In Pakistan, 33% of the patients who are 45 years old or more are suffering from hypertension. A study also revealed that fifty percent of the patients presented in the hospitals have never taken any anti-hypertensive medication [5].

The purpose of this study is to determine the prevalence of hypertension among the patients presenting in the outdoor department. This study will further help the clinicians in searching different treatment modalities suitable for an individual patient.

MATERIAL AND METHODS:

This cross-sectional study was conducted in the outdoor department of Jinnah Hospital Lahore. Total of 129 patients was included in this study. Patients of either gender, presenting with headache and frustration and patients of age ≥ 18 years were included in this study. After taking informed consent age, gender, blood pressure, and family history was noted. Data were analyzed in SPSS V. 23.0.

RESULTS:

Mean age of the patients was 36.23 ± 13.98 years with a minimum age of 18 years and maximum age of 72 years. The mean age of the male patients was 41.89 ± 14.82 years and female patients were 35.28 ± 11.92 years. There were 61 female patients (47.28%) and 68 male patients (52.71%). Mean systolic blood pressure was 141.12 ± 20.01 mmHg with a minimum value of 111 mmHg and a maximum value

of 175 mmHg. Mean diastolic blood pressure was 88.21 ± 5.37 mmHg with a minimum value of 80 mmHg and a maximum value of 99 mmHg. One hundred and four (80.62%) patients were having pre-hypertension, class I and class II hypertension and 25 (19.37%) patients were having normal systolic blood pressure. Twenty nine (22.48%) patients had a positive family history and hundred (77.51%) patients did not have a positive family history.

DISCUSSION:

In this study, the mean age of the patients was 36.23 ± 13.98 years and male to female ratio was 1.11:1. Mean systolic and diastolic pressures were 141.12 ± 20.01 mmHg and 88.21 ± 5.37 mmHg respectively. In our study 104 (80.62%) patients were having pre-hypertension, class I and class II hypertension and 25 (19.37%) patients were having normal systolic blood pressures. More females were suffering from pre-hypertension and class I hypertension. Our study also shows positive family history in 22.48% of the patients. These results are according to different studies conducted in Pakistan. Some of the reasons for the high prevalence of hypertension in the Pakistani population might be their lifestyle, lack of education, financial constraints and dietary habits⁵. According to British Hypertension society guidelines, some of the lifestyle changes advised were to maintain body weight i.e. BMI of 20 to 25 kg/m², reduction of sodium in the diet to less than 100mmol/day, increased exercise and physical activity and increased consumption of vegetables and fruits [6].

There are certain limitations to this study, firstly a smaller number of patients and secondly we included patients presenting with certain symptoms. Further we didn't discuss certain risk factors.

CONCLUSION:

According to this study, there is a high prevalence of hypertension in Pakistani population. This might be due to increasing urbanization and industrialization leading to sedentary lifestyle and improper dietary habits. Further studies should be conducted in order to study the other risk factors and treatment modalities to control hypertension.

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