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Research Article

### PREVALENCE OF HYPERTENSION AMONG OUTDOOR PATIENTS

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**Abstract:**

*Hypertension is an increasingly global issue and causes multiple complications if not controlled early. **Objective:** To see the prevalence of hypertension among the patients presenting in the outdoor department.*

***Material and Methods:** This cross-sectional study included 134 patients of either gender. Patient of age 18 years and above were included. Data was collected and analyzed using SPSS V. 23.*

***Results:** Mean age of the patients was 38.98±13.35 years. There were 69 female patients (51.49%) and 65 male patients (48.51%). Mean systolic blood pressure was 140.01±20.15 mmHg with a minimum value of 110 mmHg and a maximum value of 175 mmHg. Mean diastolic blood pressure was 88.21±5.45 mmHg with a minimum value of 80 mmHg and a maximum value of 99 mmHg. Nineteen (14.18%) patients were having normal systolic blood pressure, 23 (17.16%) patients were suffering from pre-hypertension, 50 (37.31%) were class I hypertensive and 42 (31.34%) were class II hypertensive.*

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

**Keywords:** Hypertension, outdoor department, Pakistan.

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## INTRODUCTION:

Hypertension is a growing global problem and is defined as increased blood pressure i.e. more than 140/90 mmHg in a young patient. It is classified as prehypertension when 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  $\geq 160$  mmHg and  $\geq 100$  mmHg respectively [1].

The main symptoms of hypertension with which the patient presents include headache, frustration, dizziness, and irritability [2]. It may be asymptomatic in case of pre-hypertension or in young patients with newly developed hypertension. If not diagnosed and treated timely it may cause further complications i.e. stroke, myocardial infarction, aneurysms, kidney diseases, and blindness in some cases [3].

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

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

## MATERIAL AND METHODS:

This cross-sectional study was conducted in the outdoor department of DHQ Teaching Hospital Dera Ghazi Khan. Total of 134 patients were included in this study. Patients of either gender, and of age  $\geq 18$  years and presenting with headache were included in this study. After taking the informed consent age, gender and family history was noted in a predefined proforma. Blood pressure was measured. Data were analyzed in SPSS V. 23.

## RESULTS:

Mean age of the patients was  $38.98 \pm 13.35$  years with a minimum age of 19 years and maximum age of 73 years. The mean age of the male patients was  $41.78 \pm 14.78$  years and female patients were  $35.62 \pm 12.76$  years. There were 69 female patients (51.49%) and 65 male patients (48.51%). Mean systolic blood pressure was  $140.01 \pm 20.15$  mmHg with a minimum value of 110 mmHg and a maximum value

of 175 mmHg. Mean diastolic blood pressure was  $88.21 \pm 5.45$  mmHg with a minimum value of 80 mmHg and a maximum value of 99 mmHg. Nineteen (14.18%) patients were having normal systolic blood pressure, 23 (17.16%) patients were suffering from pre-hypertension, 50 (37.31%) were class I hypertensive and 42 (31.34%) were class II hypertensive. Twenty patients (14.93%) patients had a positive family history.

## DISCUSSION:

In this study, the mean age of the patients was  $38.98 \pm 13.35$  years and female to male ratio was 1.06:1. In our study, an interesting fact was that more females were suffering from pre-hypertension and class I hypertension. Our study also shows positive family history in 14.93% 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 habits [5]. 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/m<sup>2</sup>, 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 some limitations to our study i.e. smaller number of patients and that we didn't discuss risk factors leading to hypertension.

## CONCLUSION:

This study concludes that in Pakistan, there is a high frequency of hypertension. So, there is a need to modify lifestyle and dietary habits. Further studies should be conducted in order to study the other risk factors and treatment modalities to control hypertension.

## ROLE OF AUTHORS:

Quratulain Asma: Collection and Analysis of Data  
Maheen Asim: Writing the paper  
Waqas Ahmed: Proofreading

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