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Research Article

**PREVALENCE OF HYPERTENSION AMONG PATIENTS
PRESENTING IN OUTDOOR DEPARTMENT**¹Muhammad Aamir, ²Maria Inayat, ³Sana Jabeen, ⁴Amanullah¹Allama Iqbal Medical College Lahore, ²WMO Jaura Jalalpur District Gujrat, ³Basic Health Unit Chakki District Attock, ⁴Rural health center bheikhomor Mandi Bahauddin**Article Received:** April 2019**Accepted:** May 2019**Published:** June 2019**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 128 patients of either gender. Patient of age 18 years and above were included. Data was collected and analyzed using SPSS V. 20.

Results: Mean age of the patients was 37.88±14.65 years and mean systolic and diastolic blood pressure were 140.99±19.19 mmHg and 88.13±5.741 mmHg respectively. 106 (82.82%) patients were having pre-hypertension, class I and class II hypertension and 22 (17.18%) patients were having normal systolic blood pressure.

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

Key Words: 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 ≥ 160 mmHg and ≥ 100 mmHg respectively¹.

The main symptoms of hypertension with which the patient presents include headache, frustration, dizziness, and irritability². 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 cases³.

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 patients⁴. 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 medication⁵.

Purpose of this study was to see the prevalence of hypertension among the 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 rural health center bheikhomor Mandi Bahauddin. Total of 128 patients was included in this study. Patients presenting with headache and frustration were and patients of age ≥ 18 years were included in this study. After consent age, gender, blood pressure, and family were taken. Data were analyzed in SPSS V. 20.

RESULTS:

Mean age of the patients was 37.88 ± 14.65 years with a minimum age of 18 years and maximum age of 76 years. The mean age of the male patients was

40.98 ± 15.77 years and female patients were 34.67 ± 12.74 years. There were 63 female patients (49.2%) and 65 male patients (50.8%). Mean systolic blood pressure was 140.99 ± 19.19 mmHg with a minimum value of 110 mmHg and a maximum value of 176 mmHg. Mean diastolic blood pressure was 88.13 ± 5.741 mmHg with a minimum value of 80 mmHg and a maximum value of 99 mmHg. 106 (82.82%) patients were having pre-hypertension, class I and class II hypertension and 22 (17.18%) patients were having normal systolic blood pressure. Thirty-one (24.2%) patients had a positive family history and ninety-seven (75.8%) patients did not have a positive family history. Distribution of systolic and diastolic blood pressure among males and females is presented in table-I.

Gender	Variable	Systolic	Diastolic
Female	Mean	136.43	87.16
	N	63	63
	Std. Deviation	17.600	5.347
	Minimum	110	80
	Maximum	174	99
Male	Mean	145.42	89.06
	N	65	65
	Std. Deviation	19.755	5.992
	Minimum	111	80
	Maximum	176	99

Distribution of systolic and diastolic blood pressures according to gender.

	Systolic blood pressure			Diastolic blood pressure		
	Fem ale	M ale	%a ge	Fem ale	M ale	%a ge
Prehypertension	19	21	31.3	45	37	64.1
Class I	23	17	31.3	18	28	35.9
Class II	6	20	20.3	0	0	0
Normal	15	7	17.2	0	0	0

Frequency of patients according to different classes of systolic and diastolic blood pressure

DISCUSSION:

In this study, the mean age of the patients was 37.88 ± 14.65 years and male to female ratio was 1.03:1.

Mean systolic and diastolic pressures were 140.99 ± 19.19 mmHg and 88.13 ± 5.741 mmHg respectively. In our study 106 (82.82%) patients were having pre-hypertension, class I and class II hypertension and 22 (17.18%) 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 24.2% 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 fruits⁶.

LIMITATIONS:

A smaller number of patients is the limitation of this study. Further, 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.

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