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Research Article

**EFFECT OF HYPERTENSION IN THE RISK ASSESSMENT  
OF HEART DISEASES AMONG YOUNG PEOPLE**Dr Fria Maqsood<sup>1</sup>, Dr Amna Rabbani<sup>2</sup><sup>1</sup>WMO at BHU, Bahishti<sup>2</sup>Reliever medical officer at PHFMC office**Article Received:** February 2020**Accepted:** March 2020**Published:** April 2020**Abstract:**

**Background and objectives:** Hypertension is a significant public health problem, with a worldwide prevalence of 40.8% and a control rate of 32.3%. The main objective of the study is to find the effect of blood pressure and hypertension in the risk assessment of heart diseases among young people. **Methodology of the study:** This cross sectional study was conducted at PHFMC during June 2019 to December 2019. This research will help towards next findings of effect of blood pressure in hypertension and cardiovascular diseases. **Results:** The data shows that there is a significant relationship between hypertension and CVD. There is also some positive relationship between socio-economic status and hypertension with respect to CVD. **Conclusion:** In conclusion, the current hypertension paradigm does not account for the continuous risk associated with elevated BP or the multifactorial nature of CVD, the primary consequence of elevated BP.

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**INTRODUCTION:**

Hypertension is a significant public health problem, with a worldwide prevalence of 40.8% and a control rate of 32.3. Hypertension is a noteworthy hazard factor for various genuine health conditions, including cardiovascular ailment, cerebrovascular malady, and constant kidney illness<sup>1</sup>. Worldwide, 9.4 million passing are credited to difficulties from hypertension, including 45% of all passing because of coronary vein illness and 51% of all passing because of stroke<sup>2</sup>. These relations are steady in the two people, in youthful, moderately aged, and more seasoned subjects, among different racial and ethnic gatherings, and inside and between nations. In spite of the fact that there is a continuum of cardiovascular hazard crosswise over levels of circulatory strain, the characterization of grown-ups as indicated by pulse gives a system to differentiating levels of hazard related with different circulatory strain classes and for characterizing treatment edges and helpful objectives<sup>3</sup>.

As per the grouping approaches created by the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure (JNC VI) and the World Health Organization and the International Society of Hypertension (WHO-ISH)<sup>4</sup>, non-hypertensive subjects with a systolic weight of 130 to 139 mm Hg or a diastolic weight of 85 to 89 mm Hg are sorted as having high-ordinary pulse<sup>5</sup>. Despite the fact that subjects with high-ordinary circulatory strain are probably going to have a hoisted danger of cardiovascular infection (given the continuum of hazard), there is a scarcity of data in regards to the supreme and relative dangers of cardiovascular ailment in these people<sup>6</sup>.

**Objectives of the study**

The main objective of the study is to find the effect of blood pressure and hypertension in the risk assessment of heart diseases among young people.

**METHODOLOGY OF THE STUDY:**

This cross-sectional study was conducted at PHFMC during June 2019 to December 2019. This research will help towards next findings of effect of blood pressure in hypertension and cardiovascular diseases.

The data was collected from 100 patients which was suffering from high blood pressure and any kind of heart issue. We collect the data in two sections, as first of all we collect some demographic information regarding age, sex, socio-economic status and history of blood pressure. Then in second part we collect data regarding high blood pressure and heart issues. For this purpose, we prepare a questionnaire and fill that from patients.

**Statistical analysis**

Student's t-test was performed to evaluate the differences in roughness between group P and S. Two-way ANOVA was performed to study the contributions. A chi-square test was used to examine the difference in the distribution of the fracture modes (SPSS 19.0 for Windows, SPSS Inc., USA).

**RESULTS:**

The data shows that there is a significant relationship between hypertension and CVD. There is also some positive relationship between socio-economic status and hypertension with respect to CVD. Table 01 shows the value of LDL, HDL, Cholesterol and demographic values of patients.

**Table 01: Statistical analysis values of Control group and diseased group**

Variable	Diseases Group	Control Group	t Value	p Value
Age (Year)	56.56±8.46	53.64±8.36	1.716	0.081
BMI (kg/m <sup>2</sup> )	24.31±2.26	23.37±2.09	2.195	0.031
SBP (mmHg)	140.36±15.70	116.53±13.46	8.248	0.000
DBP (mmHg)	87.94±10.69	75.81±9.94	5.967	0.000
PP (mmHg)	52.42±12.87	40.72±8.74	5.426	0.000
FBG (mmol/)	5.12±0.65	5.06±0.49	1.764	0.081
TG (mmol/L)	1.74±0.75	1.69±0.86	1.838	0.071
TC (mmol/L)	4.95±0.76	4.88±0.82	1.712	0.090
HDL-	1.30±0.43	1.31±0.56	1.717	0.089
LDL-C	3.46±0.58	3.38±0.66	1.139	0.266

**DISCUSSION:**

Our approach to understand disease development in early life, identify key pathways of interest in predisposition to hypertension and develop specific

preventive approaches has been to use multi-modality imaging to capture information on cardiovascular structure and function 'from heart to capillary'<sup>7</sup>. With this approach it becomes possible

to model the interrelationship between features of the cardiovascular system and, with longitudinal data, study the progression of disease across vessel and heart. By extending the data collection to other organs such as brain and liver, a holistic view of disease development can be captured<sup>8</sup>.

High blood pressure was the leading risk factor for the overall global burden of disease in 2010. The recent decrease in cardiovascular mortality in high-income countries has been associated with a rise in the numbers of patients living with cardiovascular disease, and the wider use of preventive drugs<sup>9</sup>. Thus, an up-to-date understanding of the associations of blood pressure with different non-fatal and fatal cardiovascular disease outcomes would help to refine strategies for primary prevention and inform the design of future clinical trials<sup>10</sup>.

### CONCLUSION:

In conclusion, the current hypertension paradigm does not account for the continuous risk associated with elevated BP or the multifactorial nature of CVD, the primary consequence of elevated BP.

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