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Research Article

### STUDY TO DETERMINE THE PUBLIC ALERTNESS ABOUT HYPERTENSION

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**Abstract:**

**Objectives:** To determine the prevalence of hypertension and related lifestyle factors, and to investigate the level of hypertension awareness among adults and to formulate awareness strategies.

**Study Design:** cross-sectional study

**Place and duration:** In the Medicine Unit-II of Benazir Bhutto Hospital Rawalpindi for six months duration from January 2020 to June 2020.

**Patients and Methods:** A total of 100 participants were interviewed. A structured questionnaire was completed on site for sociodemographic information following verbal informed consent. Height, weight, pulse and blood pressure were recorded.

**Results:** A total of 100 participants were interviewed. The overall prevalence of hypertension in the study population was twenty-five percent (25%). The incidence of hypertension increased with age and with increasing body mass index. Only thirty-five percent (35%) could define hypertension, and this awareness was significantly related to the level of education. Lack of physical activity, card games and television vision were observed in sixty percent of participants, while thirty-three percent were overweight. Fifty-nine percent used extra salt, while seventy percent consumed outdoor meals and snacks.

**Conclusion:** There was a high prevalence of hypertension, obesity, physical inactivity, unhealthy eating and bad eating habits in the studied population. An emphasis on health education and the use of electronic and printed media is recommended to raise public awareness of the risk factors and consequences of hypertension such as stroke, heart attack, kidney failure, etc.

**Keywords:** awareness, hypertension, lifestyle, obesity, risk factors,

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**INTRODUCTION:**

Hypertension, also known as hypertension, hypertension or hypertension, is a medical condition in which blood pressure is chronically elevated<sup>1</sup>. Hypertension was previously known as extra-arterial hypertension, but nowadays hypertension usually refers to hypertension without a qualifier. Hypertension is considered to occur when a person's systolic blood pressure is consistently at or above 140 mmHg and / or when their diastolic blood pressure is consistently at or above 90 mmHg. At very high blood pressures, defined as mean arterial pressure 50% or more above average, a person can live no more than several years unless adequately treated [2-3]. Consciousness involves human perception and the cognitive response to hypertension. Awareness does not necessarily mean understanding, only the ability to be aware of feeling or perceiving hypertension [4-5]. The prevalence of hypertension in developing countries is increasing. Hypertension is becoming more and more common, and its main cause is demographic and epidemiological changes, and the changing lifestyle of people. The prevalence of hypertension ranges from 15% to 35% among adult urban residents in Asia compared to the rural population. This incidence is 21-37% in adults and 65% in the elderly. 17% in Sri Lanka and 17.9% in Pakistan [6-7]. Hypertension is an independent risk factor for cardiovascular disease. Therefore, early diagnosis as well as appropriate management and preventive measures are essential if we want to limit the development of morbidity and mortality related to hypertension [8]. Although hypertension continues to affect more and more people, the level of awareness, control and treatment for high blood pressure is low [9]. The study was conducted to determine the prevalence of arterial hypertension and to investigate the associated modifiable lifestyle factors and to assess the level of awareness of hypertension in the study population and to formulate recommendations for the prevention of hypertension.

**MATERIALS AND METHODS:**

A cross-sectional study was conducted in the Medicine Unit-II of Benazir Bhutto Hospital Rawalpindi for six months duration from January 2020 to June 2020. After oral consent was given, a structured questionnaire was completed. Information was obtained about a family history of hypertension, blood pressure, and smoking history. Standard heights and weights were measured in meters and kilograms, respectively, and BMI was calculated. A BMI equal to or greater than 25 was considered overweight, while a BMI equal to or greater than 30 was considered obese, less than 18.5 was considered underweight, and from 18.5 to 24.9 was considered normal. Hypertension was diagnosed when the blood pressure reading exceeded 140/90 mmHg. Hypertension was also thought to occur when a patient had a known case of hypertension. Data was analyzed using SPSS version 18.0. Percentages are given for categorical variables, while means and standard deviations for quantitative variables. The Chi-square significance test was used to assess the relationship, and the Student's t-test for quantitative variables.

**RESULTS:**

A total of one hundred participants took part in the study. The mean age was  $40 \pm 12$  years. Sixty percent (60%) of the population has been matriculated or more. Higher education has been found to be significantly related to awareness of hypertension. Seventy-five percent (75%) of people with hypertension were  $\geq 40$  years of age, seventy percent (70%) had a positive family history, previously known hypertension accounted for ten percent (10%), while newly diagnosed cases were twenty-two percent (22 %), and twenty-five percent (25%) were smokers. Physical inactivity was reported in sixty percent (60%) of the study population.

Variable	value	Frequency	%age
Age	$\geq 40$	75	75
Education	$\geq$ Matric	60	60
Family history	Positive	70	70
Previously known	Yes	10	10
Physical inactivity	Yes	60	60
BMI	$\geq 25$	30	30
Knowledge of Hypertension	$\geq 140/90$	25	25
Smoking	Yes	25	25

The most common form of exercise was walking. Thirty percent (30%) of the participants were overweight or obese. Arterial hypertension was more common in elderly people, and advanced age was statistically significantly associated with the development of hypertension. People with hypertension had a higher BMI compared to normotensive people. 40% could define hypertension. There was a statistically significant relationship between the ability to define arterial hypertension and the level of education and prior diagnosis. There was no significant association between age and the ability to define hypertension. The results are summarized in the table.

### DISCUSSION:

It found that hypertension occurred at a rate of 25%, which was higher than that seen in national studies in Pakistan<sup>10</sup>. It was noticed that 67% of the respondents were not aware of their disease. This is in line with other studies showing a low level of detection of hypertension<sup>11-12</sup>. There is clear evidence that noncommunicable diseases are initiated by unhealthy lifestyles and risk factors such as unhealthy diet, obesity, television, computerization, smoking, and physical inactivity are among the major modifiable lifestyle problems<sup>13</sup>. The prevalence of overweight or obesity and lack of physical activity was high in the study group of 30% and 60%, respectively. These numbers are higher than previously reported. Diet is believed to be a very important risk factor for NCD. Switching from vegetarian foods to animal sources such as meat, fat, and more has significantly increased the risk of obesity, diabetes, coronary artery disease, cancer, and stroke<sup>14</sup>. The changing eating habits of the surveyed population, such as eating meals and snacks, are noteworthy, and the influx of fast food chains such as McDonalds, KFC, Coca Cola becoming the norm and a symbol of social status<sup>15</sup>. The high levels of saturated fat, cholesterol, and refined sugars in these diets are associated with increased rates of obesity, hypertension, and NCD. This study had some limitations. It was conducted on a selected group of people, so there is a possibility of a selective approach.

### CONCLUSION:

This study sheds light on the alarming rise in high blood pressure as a result of an aging population and changing lifestyles. A knowledge gap has also been identified that exists in the correct definition of hypertension. It is known that non-communicable diseases can be prevented by interventions against modifiable risk factors. Therefore, it is necessary to prioritize and design public health interventions to raise public awareness of the warning signs and risk

factors for noncommunicable diseases and provide them with the information they need to adopt and maintain a healthy lifestyle.

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