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Research Article

**PREVALENCE OF HYPERTENSION IN MEDICAL AND
DENTAL COLLEGE STUDENTS****Dr Sana Ghaffar¹, Dr Irfan Saleem², Dr Azka Butt³**¹ Sir Ganga Ram Hospital Lahore, ² Nishtar Institute of Dentistry Multan, ³ DHQ Hospital Parachinar**Article Received:** March 2020**Accepted:** April 2020**Published:** May 2020**Abstract:**

High blood pressure is classified as primary [essential] hypertension or secondary hypertension. About 90–95% of cases are primary, defined as high blood pressure due to nonspecific lifestyle and genetic factors. A total of 200 medical and dental students was included in the study. The mean age of the students was 21.12 ± 2.01 years, mean age of the females was 20.89 ± 1.11 years and mean age of males was 22.12 ± 1.83 years. There were 89 [44%] females and 111 [56%] males in the study. As per the operational definition of hypertension, 170 students had blood pressure in normal ranges and thirty had blood pressure greater than 120/80mmHg. The students which had higher blood pressure, had family history of hypertension as well.

Keywords: Medical Students, Dental Students, Hypertension**Corresponding author:**

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INTRODUCTION:

Hypertension [HTN or HT], also known as high blood pressure [HBP], is a long-term medical condition in which the blood pressure in the arteries is persistently elevated. High blood pressure typically does not cause symptoms. Long-term high blood pressure, however, is a major risk factor for coronary artery disease, stroke, heart failure, atrial fibrillation, peripheral arterial disease, vision loss, chronic kidney disease, and dementia.

High blood pressure is classified as primary [essential] hypertension or secondary hypertension. About 90–95% of cases are primary, defined as high blood pressure due to nonspecific lifestyle and genetic factors. Lifestyle factors that increase the risk include excess salt in the diet, excess body weight, smoking, and alcohol use. The remaining 5–10% of cases are categorized as secondary high blood pressure, defined as high blood pressure due to an identifiable cause, such as chronic kidney disease, narrowing of the kidney arteries, an endocrine disorder, or the use of birth control pills [1,2].

Blood pressure is expressed by two measurements, the systolic and diastolic pressures, which are the maximum and minimum pressures, respectively. For most adults, normal blood pressure at rest is within the range of 100–130 millimeters mercury [mmHg] systolic and 60–80 mmHg diastolic. For most adults, high blood pressure is present if the resting blood pressure is persistently at or above 130/80 or 140/90 mmHg. Different numbers apply to children. Ambulatory blood pressure monitoring over a 24-hour period appears more accurate than office-based blood pressure measurement.

Lifestyle changes and medications can lower blood pressure and decrease the risk of health complications.

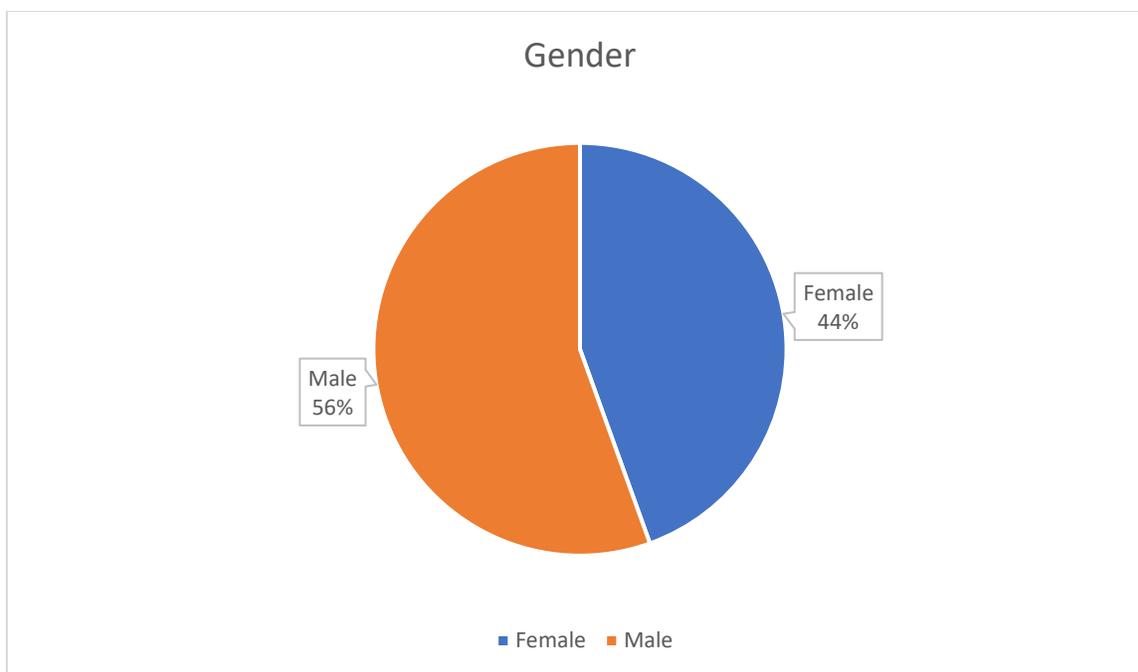
Lifestyle changes include weight loss, physical exercise, decreased salt intake, reducing alcohol intake, and a healthy diet. If lifestyle changes are not sufficient then blood pressure medications are used. Up to three medications can control blood pressure in 90% of people. The treatment of moderately high arterial blood pressure [defined as >160/100 mmHg] with medications is associated with an improved life expectancy. The effect of treatment of blood pressure between 130/80 mmHg and 160/100 mmHg is less clear, with some reviews finding benefit and others finding unclear benefit. High blood pressure affects between 16 and 37% of the population globally. In 2010 hypertension was believed to have been a factor in 18% of all deaths [9.4 million globally] [3,4].

MATERIAL AND METHODS:

This study was conducted in different medical and dental colleges of Pakistan. The data was collected from students of different classes on a predefined proforma. Different Likert type questions were asked. All the responses were collected and analyzed in SPSS Ver. 25.0. The qualitative variables were presented as frequency and percentages. The quantitative variables were presented as mean and standard deviation. Relevant statistical analysis was performed.

RESULTS:

A total of 200 medical and dental students was included in the study. The mean age of the students was 21.12 ± 2.01 years, mean age of the females was 20.89 ± 1.11 years and mean age of males was 22.12 ± 1.83 years. There were 89 [44%] females and 111 [56%] males in the study. As per the operational definition of hypertension, 170 students had blood pressure in normal ranges and thirty had blood pressure greater than 120/80mmHg. The students which had higher blood pressure, had family history of hypertension as well.



DISCUSSION:

The World Health Organization has identified hypertension, or high blood pressure, as the leading cause of cardiovascular mortality. The World Hypertension League [WHL], an umbrella organization of 85 national hypertension societies and leagues, recognized that more than 50% of the hypertensive population worldwide are unaware of their condition. To address this problem, the WHL initiated a global awareness campaign on hypertension in 2005 and dedicated May 17 of each year as World Hypertension Day [WHD]. Over the past three years, more national societies have been engaging in WHD and have been innovative in their activities to get the message to the public. In 2007, there was record participation from 47 member countries of the WHL. During the week of WHD, all these countries – in partnership with their local governments, professional societies, nongovernmental organizations and private industries – promoted hypertension awareness among the public through several media and public rallies. Using mass media such as Internet and television, the message reached more than 250 million people. As the momentum picks up year after year, the WHL is confident that almost all the estimated 1.5 billion people affected by elevated blood pressure can be reached [5,6].

High blood pressure is the most common chronic medical problem prompting visits to primary health care providers in USA. The American Heart Association estimated the direct and indirect costs of

high blood pressure in 2010 as \$76.6 billion. In the US 80% of people with hypertension are aware of their condition, 71% take some antihypertensive medication, but only 48% of people aware that they have hypertension adequately control it. Adequate management of hypertension can be hampered by inadequacies in the diagnosis, treatment, or control of high blood pressure. Health care providers face many obstacles to achieving blood pressure control, including resistance to taking multiple medications to reach blood pressure goals. People also face the challenges of adhering to medicine schedules and making lifestyle changes. Nonetheless, the achievement of blood pressure goals is possible, and most importantly, lowering blood pressure significantly reduces the risk of death due to heart disease and stroke, the development of other debilitating conditions, and the cost associated with advanced medical care [7-9].

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