

A clinico-demographic profile of the patients with hypertension at tertiary health care center

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Abstract

Background: Hypertension being a major non communicable disease has become an important public health challenge in both developing and developed countries, rapid industrialization and change in lifestyle has led to an increasing prevalence of hypertension. **Aims and Objectives:** To study Clinico-Demographic profile of the patients with Hypertension at tertiary health care center. **Methodology:** The Present study was undertaken by the department of Pharmacology in collaboration with the department of Medicine on newly diagnosed patients of Hypertension attending Medicine outpatient department of HKE society's Basaveshwara Teaching and General hospital, attached to M.R. Medical College, Kalaburagi a for a period of 12 months from January 2017- December 2017. After approval by the Institutional Ethics Committee (IEC), 100 adult patients aged 18-60 yrs of either sex of newly diagnosed mild and moderate hypertensive patients were included. **Result:** In our study we have seen that the average age of the patients was (Mean± SD) 43.73 ± 8.69, The majority of the patients were Male i.e. 67% and 33% were females, The average (Mean ±SD) BMI of the patients was 26.90 ± 2.57. The most common complaints were Headache in 26%, followed by Palpitation in 26%, Anxiety in 20%, Profuse Perspiration in 12%, Visual Disturbance in 26%, Tremors in 11%, Nausea/Vomiting in 26%, Muscular Weakness in 13%, Polyuria in 15%, Others in 12%. The majority of the patients were having Moderate type of Hypertension i.e.58% and Mild in 42% **Conclusion:** It can be concluded from our study that In our study we have seen that the average age of the patients was (Mean± SD) 43.73 ± 8.69, The majority of the patients were Male, The most common complaints were Headache by Palpitation, Anxiety, Profuse, Perspiration, Visual Disturbance, Tremors, Nausea/Vomiting etc

Key Word: Hypertension, Signs of Hypertension, Blood pressure.

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INTRODUCTION

Hypertension being a major non communicable disease has become an important public health challenge in both developing and developed countries. It is one of the most common disease afflicting humans throughout the world and because of the associated morbidity and mortality and the cost to society, it is an important public health

challenge as well¹. Hypertension doubles the risk of cardiovascular disease including coronary heart disease, congestive heart failure, ischemic and hemorrhagic stroke, renal failure and peripheral arterial disease². According to the WHO 2008 estimates, the prevalence of raised blood pressure in Indians was 32.5% (33.2% in men and 31.7% in women)³. High blood pressure can be controlled through existing antihypertensive drug therapy by following some guidelines. The Joint National Committee (JNC-7) is considered the “gold standard” consensus guidelines for the management of hypertension⁴. The definition of hypertension as released by the seventh report of the Joint National Committee on prevention, detection, evaluation, and treatment of high blood pressure (JNC 7) is systolic blood pressure (SBP) ≥140 mmHg or diastolic blood pressure (DBP) ≥90 mm Hg, which simplifies hypertension classification by including only stage I (SBP 140–159 mm Hg or DBP 90–99) or stage II (SBP 160 mm Hg or higher or DBP 100

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mm Hg or higher). Perhaps the most important change is the new classification of “pre-hypertension” (SBP 120–139 mm Hg or DBP 80–89mm Hg), which combines the normal and high normal categories of the previous JNC VI report, in the recognition of the fact that even these levels of BP confer an increased risk of the development of hypertension and future cardiovascular events^{5, 6}. Many risk factors may contribute to its development, including age, gender, weight, physical activity, smoking, family history, serum cholesterol, diabetes mellitus, renal dysfunction, peripheral resistance vessel tone, endothelial dysfunction, autonomic tone, insulin resistance and neurohumoral factors etc ^{7,8}.

Methodology

The Present study was undertaken by the department of Pharmacology in collaboration with department of Medicine on patients attending Medicine outpatient department of HKE society's Basaveshwara Teaching and General hospital, attached to M.R.Medical College, Kalaburagi a for a period of 12 months from January 2017- December 2017. After approval by the Institutional Ethics Committee (IEC), 100 adult patients aged 18-60 yrs of either sex of newly diagnosed mild and moderate hypertensive patients were included. while Patients aged <18 years and >60 years, History of severe hepatic, renal disease and severe cardiac disease, Pregnant and lactating mothers, Major Depressive Disorder with psychotic symptoms were excluded from the study. The statistics presented in the percentages and tabular form.

RESULTS

Table- 1: Age wise distribution of patients

Hypertensive patients	Mean age (years)	Standard Deviation
	43.73	8.69

The average age of the patients was (Mean± SD) 43.73 ± 8.69

Table2: Sex wise distribution of patients among two groups

Gender	No.	Percentage (%)
Male	67	67
Female	33	33

The majority of the patients were Male i.e. 67% and 33% were females

Table- 3: Distribution of patients according to Body Mass Index (BMI)

Hypertensive patients	Mean BMI	Standard Deviation
	26.90	2.57

The average (Mean ±SD) BMI of the patients was 26.90 ± 2.57

Table 4: Distribution of the patients as per associated various habits

Habits	No.	Percentage (%)
Smoking	24	32.43%
Alcohol	30	40.54%
Tobacco	20	27.02%

The majority of the patients were associated with Smoking i.e. 32.430% followed by Alcohol 40.54% and Tobacco was 27.02%

Table 5: Distribution of patients according to clinical presentation

Clinical Presentation	No. (100)	Percentage (%)
Headache	26	26
Palpitation	26	26
Anxiety	20	20
Profuse Perspiration	12	12
Visual Disturbance	26	26
Tremors	11	11
Nausea/Vomiting	26	26
Muscular Weakness	13	13
Polyuria	15	15
Others	12	12

The most common complaints were Headache in 26%, followed by Palpitation in 26%, Anxiety in 20%, Profuse Perspiration in 12%, Visual Disturbance in 26%, Tremors in 11%, Nausea/Vomiting in 26%, Muscular Weakness in 13%, Polyuria in 15%, Others in 12%.

Table- 6: Distribution of patients according to Grade of Hypertension

Grades	No.	Percentage (%)
Mild	42	42
Moderate	58	58

The majority of the patients were having Moderate type of Hypertension i.e. 58% and Mild in 42%

DISCUSSION

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.^[10] High blood pressure usually does not cause symptoms.⁹ Long-term high blood pressure, however, is a major risk factor for coronary artery disease, stroke, heart failure, atrial fibrillation, peripheral vascular disease, vision loss, chronic kidney disease, and dementia^{10,11,12,13} High blood pressure is classified as either primary (essential) high blood pressure or secondary high blood pressure.¹⁴ About 90–95% of cases are primary, defined as high blood pressure due to nonspecific lifestyle and genetic factors.^{15,16} Lifestyle factors that increase the risk include excess salt in the diet, excess body weight, smoking, and alcohol use.^{9,13} 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.¹³ Blood pressure is expressed by two measurements, the systolic and diastolic pressures, which are the maximum and minimum pressures, respectively.⁹ For most adults, normal blood pressure at rest is within the range of 100–130 millimeters mercury (mmHg) systolic and 60–80 mmHg diastolic.¹⁵ For most adults, high blood pressure is present if the resting blood pressure is persistently at or above 130/80 or 140/90 mmHg.^{13,15} Different numbers apply to children. Ambulatory blood pressure monitoring over a 24-hour period appears more accurate than office-based blood pressure measurement.¹³ Hypertension is rarely accompanied by symptoms, and its identification is usually through screening, or when seeking healthcare for an unrelated problem. Some with high blood pressure report headaches (particularly at the back of the head and in the morning), as well as lightheadedness, vertigo, tinnitus (buzzing or hissing in the ears), altered vision or fainting episodes. These symptoms,¹⁶ however, might be related to associated anxiety rather than the high blood pressure itself.¹⁷ On physical examination, hypertension may be associated with the presence of changes in the optic fundus seen by ophthalmoscope.¹⁸ The severity of the changes typical of hypertensive retinopathy is graded from I–IV; grades I and II may be difficult to differentiate.¹⁷ The severity of the retinopathy correlates roughly with the duration or the severity of the hypertension.¹⁸ In our study we have seen that the average age of the patients was (Mean \pm SD) 43.73 ± 8.69 , The majority of the patients were Male i.e. 67% and 33% were females, The average (Mean \pm SD) BMI of the patients was 26.90 ± 2.57 , The majority of the patients were associated with Smoking i.e. 32.430% followed by Alcohol 40.54% and Tobacco was 27.02%, The most common complaints were Headache in 26%, followed by Palpitation in 26%, Anxiety in 20%, Profuse Perspiration in 12%, Visual Disturbance in 26%, Tremors in 11%, Nausea/Vomiting in 26%, Muscular Weakness in 13%, Polyuria in 15%, Others in 12%. The majority of the patients were having Moderate type of Hypertension i.e. 58% and Mild in 42%

CONCLUSION

It can be concluded from our study that In our study we have seen that the average age of the patients was (Mean \pm SD) 43.73 ± 8.69 , The majority of the patients were Male, The most common complaints were Headache by Palpitation, Anxiety, Profuse, Perspiration, Visual Disturbance, Tremors, Nausea/Vomiting etc.

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