



HYPERTENSION: THE SILENT KILLER

Medical Science

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ABSTRACT

Today world face one of the biggest problem is hypertension in adults. Hypertension, also known as high blood pressure, increases the risk for heart disease and stroke, two leading causes of death for people in the United States [1]. In the United States, about 77.9 million (1 out of every 3) adults have high blood pressure. A global brief on hypertension by WHO reported that, the prevalence of hypertension in adults aged 25 and above was about 40% around the world in 2008, rising from 600 million in 1980 to 1 billion in 2008 during the past 28 years [2]. Similarly, this prevalence among the adults aged 18 and above in China has risen from 18.8% in 2002 to 25.2% in 2015, presently, there are more than 200 million hypertensive patients in China [3]. Epidemiological studies show a steadily increasing trend in hypertension prevalence over the last 40 years, more in urban than in the rural areas. This is converse to findings reported from developed countries where there is a significant decrease in its prevalence.

KEYWORDS

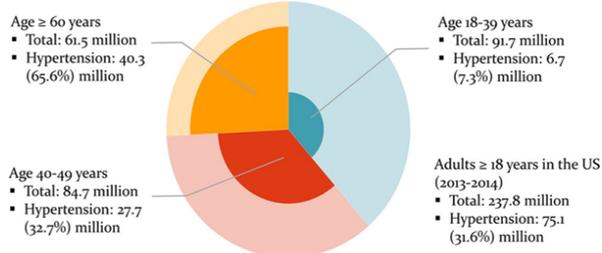
Hypertension, epidemiological, high blood pressure.

INTRODUCTION:

Hypertension is a major public health problem due to its high prevalence all around the globe.

High blood pressure is a common condition in which the long-term force of the blood against your artery walls is high enough that it may eventually cause health problems, such as heart disease.

- Blood pressure is determined both by the amount of blood your heart pumps and the amount of resistance to blood flow in your arteries. The more blood your heart pumps and the narrower your arteries, the higher your blood pressure. In India, lifestyle diseases were considered in the urban setting; so the medical fraternity has concentrated more on the urban people. With epidemiological transition, a dramatic reduction in physical exercise has been observed in the rural areas with an increase in the stresses of life. According to World Health Report 2002, cardiovascular diseases will be the largest cause of death and disability by 2020 in India; the contributing factors are increasing hypertension, dyslipidemia, diabetes, overweight or obesity, physical inactivity, and using tobacco. High blood pressure per se is a quiet disorder to be typically asymptomatic till the end organ damages show the symptoms and signs-WHO has named it the "Silent Killer." Nearly half of adults in the United States (108 million, or 45%) have hypertension defined as a systolic blood pressure ≥ 130 mm Hg or a diastolic blood pressure ≥ 80 mm Hg or are taking medication for hypertension.



HYPERTENSION CLASSIFICATION:

An intermediate blood pressure level is described as a blood measurement of 120-139/80-89 mmHg.

Stage one (mild) hypertension: systolic between 130-139 mm Hg or diastolic between 80-89 mm Hg.

Stage two (moderate) hypertension: systolic at least 140 mm Hg or diastolic at least 90 mm Hg.

Severe hypertension: a systolic pressure of ≥ 180 mmHg, or a diastolic pressure of ≥ 110 mmHg.¹

Isolated systolic hypertension: Isolated systolic hypertension is defined as systolic blood pressure (BP) 140 mm Hg and diastolic BP.

Isolated diastolic hypertension: as a clinic diastolic blood pressure of 90 mmHg or higher and a clinic systolic pressure of less than 140 mmHg.

RISK FACTOR IN HYPERTENSION:

Common hereditary and physical risk factors for high blood pressure include:

There are two types of risk factors: Modifiable risk factors and Non-modifiable risk.

Modifiable risk factors include:

Physical inactivity and cardiovascular disease

Tobacco and cardiovascular disease

Diet and cardiovascular disease

Bad Fats

Blood lipids (fats) as a risk factor for cardiovascular disease

Obesity and cardiovascular disease

Non-modifiable risk:

Diabetes as a risk factor for cardiovascular disease

Family history and cardiovascular disease

Other common non-modifiable risk factor include:

Age: Older age people have high risk of cardiovascular disease; risk of stroke than adults.

Gender: Male have a greater risk of heart disease than premenopausal women. But after menopause the risk is same in both.

Ethnicity: Your ethnic origin plays a role. People with African or Asian ancestry are at higher risks of developing cardiovascular disease than other racial groups.

Socioeconomic status: Being a poor have increase the chance of heart disease because of a chronically stressful life, social isolation, anxiety and depression.

SYMPTOMS:

Hypertension is generally a silent condition. Many people won't experience any symptoms. It may take years or even decades for the condition to reach levels severe enough that symptoms become obvious. Even then, these symptoms may be attributed to other issues. Symptoms of severe hypertension can include:

- visual changes
- dizziness
- headaches
- shortness of breath
- nosebleeds
- flushing
- chest pain
- Blood in the urine.

If you have feel these symptoms then immediately contact to your physicians.

TREATMENTS:

Changing your lifestyle can go a long way toward controlling high blood pressure. Your doctor may recommend you make lifestyle

changes including:

- Getting regular physical activity
- Maintaining a healthy weight or losing weight if you're overweight or obese
- Limiting the amount of alcohol you drink

Reducing the amount of sodium in your diet to less than 1,500 milligrams a day if you have high blood pressure; healthy adults should try to limit their sodium intake to no more than 2,300 milligrams a day (about 1 teaspoon of salt).

- Stop smoking.
- Stress reduction.

Follow these following step to maintain your hypertension.**Medications:****Diuretics****ACE inhibitors****Beta-blockers****Angiotensin II receptor blockers (ARBs)****Calcium channel blockers****Alpha-2 agonists****Above medication we use to control high blood pressure****Diagnosing AND TESTS:**

The best way to diagnose high blood pressure (HBP or hypertension) is to have your blood pressure measured.

How a blood pressure test works

- A blood pressure reading is taken with a pressure cuff (sphygmomanometer).
- During the test, the cuff is placed around the upper arm before being manually or electronically inflated.
- Once inflated, the cuff compresses the brachial artery, momentarily stopping blood flow.
- Next, air in the cuff is slowly released while the person performing the measurement listens with a stethoscope or monitors an electronic readout.



If your blood pressure remains high, your doctor will likely conduct more tests to rule out underlying conditions. These tests can include:

- urine test
- cholesterol screening and other blood tests
- test of your heart's electrical activity with an electrocardiogram (EKG, sometimes referred to as an ECG)
- Ultrasound of your heart or kidneys.

CONCLUSION:

Today world face problem of hypertension and these problem not only restricted to older people but it fastly spread to adults. Hypertension is a very important disorder in aged people and is associated with higher risk of cardiovascular morbidity and mortality In USA Nearly half of **adults** (108 million, or 45%) have **hypertension**. There is many reason of this but lifestyle of the people is main reason of this. Hypertension is the **silent killer** it cause many problem and sometimes leads to death. Today there is fashion of smoking in adults and due to this lot of adults have hypertension, heart disease etc. **Prevention is better than cure so we change our lifestyle, do not take stress because it is play important role in hypertension.** In most instances the goal of treatment is a blood pressure less than 140/90 mmHg, although less than 150/80 mmHg is suggested for hypertensive patients beyond the eighth decade in the absence of an ongoing major illness and approximately 130/80 mmHg for hypertensive patients

with diabetes mellitus, chronic kidney disease or previous history of cardiovascular disease. Future studies will likely focus on determining the treatment strategy that will provide optimal protection against developing cardiovascular disease. Finally, better physician management has improved outcomes overall, but challenges continue to exist for patients at high cardiovascular risk.

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