

**Editorial****Hypertension: Today's Most Burning Issue****Mohsin Masud Jan**

Editor

High blood pressure, also known as hypertension, is common around the world and the leading cause of heart disease, but many people are unaware that they have it, a new study shows.

The international team of researchers noted that this is true for wealthy, developed nations as well as low-income countries. And despite the availability of drugs to control high blood pressure, many people who do know they have the condition are not being properly treated. "Blood pressure-lowering drugs are generally inexpensive and commonly available treatments," senior study author Dr. Salim Yusuf, a professor of medicine at McMaster University's Michael G. DeGroote School of Medicine in Hamilton, Ontario, Canada, said in a university news release. "However, only a third of patients commenced on treatment are on enough treatment to control their blood pressure. This is worst in low-income countries, but significant in high- and middle-income countries, too."

The researchers led by the Population Health Research Institute of McMaster University and Hamilton Health Sciences examined data on 154,000 adults aged between 35 and 70. The participants, who did not have a history of heart disease or stroke, were from 17 different countries of varying economic strength.

All participants had their blood pressure and medication use monitored. The researchers also collected information on their age, gender, level of education and other risk factors, including whether participants knew they had high blood pressure. "Study indicates over half of people with hypertension are unaware of their condition and, amongst those identified, very few are taking enough treatment to control their blood pressure," Study author Dr. Clara Chow, Associate professor of medicine at Sydney University and the George Institute for Global Health in Australia. The study published in the Journal of the American Medical Association, found only 46.5 percent of those with high blood pressure were aware of their condition. Just 32.5 percent of patients who were aware of the fact that they had high blood pressure were effectively keeping their condition under control. Improvements are needed around the world in the diagnosis and treatment of high blood pressure, the researchers concluded.

Differences in blood pressure readings taken from the left and right arms may be a sign of heart and blood vessel disease and death risk, according to a new review of recent research.

Researchers found that a difference of 15 points or more in the readings between the left and right arms raised the risk of peripheral vascular disease, a

narrowing or blockage of the arteries, by two and a half times.

Researchers say the results suggest that doctors should routinely compare blood pressure readings from both arms to prevent unnecessary deaths.

Although the practice of taking blood pressure from both arms as a part of heart disease screening has been adopted in Europe, and some guidelines in the U.S. recommend it, American Heart Association spokesman Richard Stein, says it's not routinely done in the U.S.

British researchers examined 20 studies covering differences in systolic blood pressure and the results, published in the Lancet journal of England, showed that a difference of 15 points are more. The risk of cerebrovascular disease was 60% higher and the risk of dying from heart and circulatory diseases rose by 70%. The risk of peripheral vascular disease was also higher when there was a difference in BP readings of 10 points or more.

Researchers analyzed the health records of nearly 250,000 children, aged 6 to 17, in California, and found those who were overweight were twice as likely as normal weight children to have high blood pressure (hypertension). The risk was four times higher in moderately obese children and teens, and 10 times higher in those who were extremely obese, according to the study, which was published October 2010 in the Journal of Clinical Hypertension.

The researchers also found that 10 percent of extremely obese children and teens have high blood pressure and nearly half of them have occasional blood pressure readings in the high range. "This study's findings suggest that pediatricians need to be particularly vigilant about screening overweight and obese children for hypertension because high blood pressure can be asymptomatic for many years," study lead author Corinna Koebnick, a researcher at Kaiser Permanente Southern California's Department of Research and Evaluation.

Another researcher agreed. "High blood pressure in children is a serious health condition that can lead to heart and kidney disease," study co-author Dr. David Cuan, of the department of pediatrics at Kaiser Permanente Riverside Medical Center, in Riverside, Calif., said in the news release. "While it is generally recommended that pediatricians measure blood pressure in children 3 years and older at every health care visit, this study shows the importance of screening overweight and obese young people in particular as they have an increased likelihood of hypertension," Cuan said. The study findings also suggest that current classification methods for overweight and obesity in

children may be an effective tool for identifying children at high risk for high blood pressure. The researchers found that being classified as overweight was an indicator for pre-hypertension, and being classified as obese was an indicator for hypertension.

Obesity and high blood pressure lead to faster mental decline in the over-50s, researchers warn. A study shows that being fat and having other risk factors for heart disease and diabetes accelerates the loss of memory and other cognitive skills.

Over the course of a decade, obese participants' brains aged 3.8 years more than those of a healthy weight.

The fattest participants had a 22.5 per cent faster drop-off in test scores compared with those who were a healthy size and had fewer risk factors. Experts warn that obesity in middle-age could be a major risk factor for developing dementia in later life, as well as conditions such as diabetes.

The claim has been strengthened after the study by scientists at the French medical research institution INSERM examining the mental skills, body mass index and general health of 6,401 adults with an average age of 50.

Researchers took note of so-called 'metabolic abnormalities' such as high blood pressure, low levels of 'good' cholesterol, high blood sugar and whether participants took diabetes medication. A third of the participants had two or more of these risk factors, while 9 per cent were obese (defined as having a BMI above 30) and 38 per cent were overweight (with a BMI of between 25 and 29.9).

The participants then took tests on memory and other cognitive skills three times over ten years. Those who were overweight or obese and had at least two metabolic abnormalities showed the fastest decline.

Over the course of the study, those who were both obese and 'metabolically abnormal' experienced a 22.5 per cent faster decline on their scores than those who were a normal weight with no abnormalities.

Researchers say the early changes seen with higher blood pressure may set the stage for problems with thinking, memory, and dementia down the road. "This

is an important finding," says Paul Rosenberg, associate professor of psychiatry and behavioral sciences at Johns Hopkins University in Baltimore.

The study used magnetic resonance imaging (MRI) to take a snapshot of the brains of 579 healthy adults who were participating in the third generation of the long-running Framingham Heart Study. People in the study ranged in age from 19 to 63, but on average they were around 39. Doctors measured each person's blood pressure twice and took the average of the numbers.

Those who had elevated blood pressures showed more signs of early changes on detailed brain scans than those with normal blood pressure. Normal is a systolic pressure under 120 and a diastolic pressure under 80. People who had pre-hypertension, meaning that their systolic pressure was between 120 and 139 or their diastolic blood pressure was between 80 and 89, had brains that looked about 3.3 years older than normal. Those with high blood pressure, meaning they had a systolic number over 140 or a diastolic number over 90, had brains that looked about 7.2 years older. About 50 million Americans have elevated blood pressure. It's estimated that less than 50% of people who know they have hypertension are treated for it. Only about a third of those people ever get it under control.

This study doesn't prove that high blood pressure alone caused the brain changes. Other studies have shown that diets high in saturated fat and sugar, the same eating patterns that are thought to contribute to obesity and high blood pressure, play a role in changes in the brain that are thought to lead to Alzheimer's disease.

At the end, Researchers said that you must control high blood pressure from the moment it emerges. Individuals can protectively lower their risk for cardiovascular disease and stroke by getting active, maintaining healthy blood pressure, cholesterol level, weight and diet as well as avoiding smoking.

General communities and health departments can help by providing healthy living spaces, including tobacco free and safe walking areas and ensuring access to healthy foods.