Low income, less education tied to high blood pressure in young adults
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(Medical Xpress) -- Alarming new data regarding high rates of high blood pressure in young adults suggests those with less education and lower income are at greatest risk, according to researchers at Duke University Medical Center.

New data from a study of more than 14,000 men and women between 24 and 32 years old explores why nearly one in five of these people has high blood pressure.

The results were published in the July issue of the journal Hypertension.

"The rates of obesity and high blood pressure in this young adult population are striking and our findings provide a clearer picture of who appears to be at highest risk," said Beverly Brummett, PhD, the study's lead author and associate research professor at Duke.

"Those with low education and income tended to be more overweight and exercised less, and in turn had higher blood pressure."

The recent studies are from the 2008 National Longitudinal Study of Adolescent Health, known as Add Health, funded by the National Institutes of Health.

Findings published in the May issue of the journal Epidemiology found 19 percent of young adults had elevated blood pressure, which significantly increases the likelihood of developing heart disease and stroke. Only 11 percent of the study participants had ever been told by their doctor they had the condition.

In the latest study, researchers found that lower household income was most strongly associated with elevated blood pressure. A lower education level was also related to higher blood pressure, but not as strongly as household income and by way of behavioral risk factors, such as smoking and less exercise.

Researchers contrasted their findings with a smaller study among a similar young adult population in France conducted during the same timeframe. In the French study, education was more strongly associated than income with high blood pressure.

"The U.S. data were collected amid the recent economic recession, which resulted in job loss and diminished household incomes among many study participants," said Redford Williams, MD, director of Duke's Behavioral Medicine Research Center and study co-author.

"It's interesting to consider that in the U.S., where we do not have a national health care system as they do in France, we find that household income is most strongly associated with blood pressure. The differences in the health care systems may play a role."

"It wasn't all good news for people with higher education and incomes," Brummett said. "Young adults with higher income and education tended to have higher alcohol intake, which is strongly related to elevated blood pressure."

Brummett and Williams emphasized that blood pressure monitoring should be done routinely much earlier in life.

"Waiting until middle age, as many people do, may be too late," Brummett said.

Researchers said that interventions that promote weight loss and reduce resting heart rate have the potential to reduce the impact of less education and low income on blood pressure, especially among young adults. And the benefits would extend into middle and older adulthood.

"People in this age group should stop smoking,
drink no more than two servings of alcohol per day, exercise regularly, and get in the habit of monitoring their **blood pressure**," Williams said.

**More information:** [http://hyper.ahajournals.org/](http://hyper.ahajournals.org/)

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