New Role for High Blood Pressure Meds?

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A Tulane University analysis of previously published clinical studies indicates that for patients with a history of cardiovascular disease but who do not have hypertension, treatment with high blood pressure medication may result in a reduced risk of stroke, congestive heart failure and other causes of death.

Dr. Lydia Bazzano, left, assistant professor of epidemiology, and Angela M. Thompson, a doctoral research fellow in epidemiology, collaborate on hypertension research. (Photo by Guillermo Cabrera-Rojo)

The research team published its results in the March 2 issue of the *Journal of the American Medical Association*.

“Pre-hypertension affects nearly 30 percent of the adult population and carries an elevated risk for cardiovascular disease,” says lead researcher Angela M. Thompson, a doctoral research fellow in epidemiology at the Tulane School of Public Health and Tropical Medicine. Cardiovascular disease is the leading cause of death in the United States and worldwide, accounting for 30 percent of all deaths.

Use of hypertensive medications for patients with a history of heart disease or diabetes but without hypertension has been a subject of debate. “To our knowledge, this meta-analysis is the first to examine the association between antihypertensive medications and cardiovascular disease morbidity and mortality as well as all-cause mortality in individuals without hypertension,” Thompson says.

The researchers found that there was a 23 percent reduction in risk of stroke, 29 percent reduction in risk of congestive heart failure, 15 percent reduction in risk of composite (a combination of disease outcomes) cardiovascular disease events, and a 13 percent reduction in risk for all-cause mortality.

“Our results show that persons with a history of cardiovascular disease but with blood pressures in the normal and pre-hypertensive ranges can obtain significant benefit from antihypertensive treatments,” the authors write.

The research team examined 874 clinical studies, identifying 25 for inclusion in the meta-analysis. The selected trials included data from 64,162 trial participants without hypertension. The meta-analysis evaluated the association between treatment with blood pressure medication and prevention of cardiovascular disease events including death among persons without hypertension.