# Controlling these 8 risk factors may eliminate early death risk for those with high blood pressure

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The eight health risk factors evaluated in the study include: blood pressure, body mass index, waist circumference, LDL “bad” cholesterol, blood sugar, kidney function, smoking status and physical activity. The study found that addressing each additional risk factor was associated with a 13% lower risk of early death. (Photo by Shutterstock)

A new study led by researchers at Tulane University suggests that people with high blood pressure can significantly reduce — and possibly eliminate — their increased risk of premature death by controlling several key health risk factors at once.

The study, published in *Precision Clinical Medicine*, tracked more than 70,000 people with hypertension and over 224,000 without it, using data from the UK Biobank. Researchers followed participants for nearly 14 years to understand how managing these risk factors affected early mortality — defined as dying before age 80.

The eight health risk factors evaluated in the study include: blood pressure, body mass index, waist circumference, LDL “bad” cholesterol, blood sugar, kidney function, smoking status and physical activity. Notably, researchers found that hypertensive patients who had addressed at least four of these risk factors had no greater risk of an early death than those without high blood pressure.

“Our study shows that controlling blood pressure is not the only way to treat hypertensive patients, because high blood pressure can affect these other factors,” said corresponding author Dr. Lu Qi, HCA Regents Distinguished Chair and professor of epidemiology in the Celia Scott Weatherhead School of Public Health and Tropical Medicine at Tulane University. “By addressing the individual risk factors, we can help prevent early death for those with hypertension.”

Hypertension, defined as a blood pressure of 130 mmHg or higher, is the leading preventable risk factor for premature death worldwide.

The study found that addressing each additional risk factor was associated with a 13% lower risk of early death, 12% lower risk of early death due to cancer and 21% lower risk of death due to cardiovascular disease, the leading cause of premature death globally.

“Optimal risk control” — having seven or more of the risk factors addressed — was linked to 40% less risk of early death, 39% less risk of early death due to cancer and 53% less risk of early death due to cardiovascular disease.

“To our knowledge, this is the first study to explore the association between controlling joint risk factors and premature mortality in patients with hypertension,” Qi said. “Importantly, we found that any hypertension-related excess risk of an early death could be entirely eliminated by addressing these risk factors."

Only 7% of hypertensive participants in the study had seven or more risk factors under control, highlighting a major opportunity for prevention. Researchers say the findings underscore the importance of personalized, multifaceted care — not just prescribing medication for blood pressure, but addressing a broader range of health behaviors and conditions.

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