

These healthcare professionals may be secret weapon against hypertension, study finds

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Lead author Katherine Mills, associate professor and vice chair of epidemiology at Tulane University School of Public Health and Tropical Medicine, said the findings may indicate that hypertension is best treated by healthcare professionals who have the most time to give.

When it comes to helping patients with high blood pressure get their hypertension under control, a new Tulane University study finds that pharmacists and community health workers have the best success rates.

The study, published in [***Circulation: Cardiovascular Quality and Outcomes***](#), analyzed data from 100 hypertension trials around the world and compared blood pressure reductions by the type of healthcare professionals who led the interventions.

While interventions led by nurses, physicians and multiple healthcare professionals still significantly reduced blood pressure for patients, pharmacists achieved the greatest improvements, followed by community health workers.

Interventions in both clinical and community settings can effectively treat hypertension – the leading preventable cause of early death in the world – particularly in communities where financial and geographical barriers allow the disease to remain prevalent. The study findings suggest that the disease is best treated by healthcare professionals with the most time to give.

“Blood pressure can require more time to manage than is often available in primary care visits,” said lead author [**Katherine Mills**](#), associate professor and vice chair of [**epidemiology**](#) at [**Tulane University School of Public Health and Tropical Medicine**](#). “Having someone lead an effort who doesn’t have the same time constraints may be the most effective approach.”

On average, pharmacist-led interventions reduced systolic blood pressure by 7.3 mmHg and community health workers saw a 7.1 mmHg drop. Interventions led by nurses and physicians saw between a 2-3 mmHg reduction in systolic blood pressure. Pharmacist- and community health worker-led interventions also saw the greatest declines in diastolic blood pressure. According to current guidelines, hypertension is diagnosed at 130/80 mm Hg and higher for adults.

Mills said she was unsurprised by the results and that “the good news is that all healthcare professionals were effective at delivering interventions.” But when it comes to addressing varying individual medical needs of hypertensive patients, pharmacists may be uniquely suited for the role.

“One of the big challenges is getting the right combinations and doses of antihypertensive medications, and that can be difficult for some patients requiring repeated visits,” Mills said. “Pharmacists are perfect for that.”

“This study underscores the importance of a team-based care approach to helping keep blood pressure under control,” said Lawrence J. Fine, M.D., a senior advisor in the clinical applications and prevention branch in the Division of Cardiovascular Sciences at the National Heart, Lung, and Blood Institute (NHLBI), part of the National Institutes of Health (NIH). “In addition to traditional healthcare providers like physicians, other team members such as pharmacists and community healthcare workers can be effective in helping individuals achieve their treatment goals, particularly when blood pressure control has declined nationwide in recent years,” Fine said.

Community health workers are also likely very effective at interventions due to cultural ties to the community that can help gain trust and boost buy-in. Further, use of community health workers is usually more cost-effective compared to interventions led by other health care professionals.

“Hypertension doesn’t often have symptoms, so it is commonly not the first concern of patients during brief primary care visits if they have multiple health issues. The goal is to determine who should lead these interventions and what the best strategy is to address this important health issue,” Mills said.

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