
Blood Pressure Reduction and All-Cause Dementia



Dementia is the fifth leading cause of death globally. In the absence of curative treatments, primary prevention through risk factor reduction has become a public health priority. While lowering blood pressure (BP) is a promising strategy, definitive evidence supporting its role in preventing dementia among hypertensive individuals has been limited.

To address this, researchers launched the China Rural Hypertension Control Project Phase 3 (CRHCP-3), one of the largest randomised effectiveness trials to date. The 48-month results, published in *Nature Medicine*, indicate that intensive BP control significantly reduces the risk of both all-cause dementia and cognitive impairment without dementia (CIND).

The study enrolled 33,995 adults across 326 rural villages in China, assigning 17,407 participants to an intervention group and 16,588 to usual care. Those in the intervention arm received a multifaceted, non-physician-led strategy aimed at achieving BP targets of <130/80 mm Hg. Over four years, the intervention group saw a 22.0 mm Hg drop in systolic BP and 9.3 mm Hg in diastolic BP compared to the control group.

These BP reductions were associated with a 15% lower risk of all-cause dementia and a 16% lower risk of CIND.

Dementia is a global public health crisis due to its high prevalence, mortality, and the substantial emotional and financial burden it places on individuals and society. Few randomised controlled trials have explored the effect of BP medications on dementia, and even fewer have included it as a primary endpoint, SPRINT-MIND being the notable exception.

The CRHCP-3 results underscore the importance of widespread adoption of intensive BP control in hypertensive patients, not only to reduce cardiovascular risk but also to help curb the growing burden of dementia worldwide.

Looking ahead, researchers plan to leverage big data and artificial intelligence to support early prediction of dementia and to refine personalised prevention and treatment strategies.

Source: [Nature Medicine](#)

Image Credit: iStock

Published on : Wed, 4 Jun 2025