

# Tests to predict heart problems may be more useful predictor of memory loss than dementia tests

1 April 2013

Risk prediction tools that estimate future risk of heart disease and stroke may be more useful predictors of future decline in cognitive abilities, or memory and thinking, than a dementia risk score, according to a new study published in the April 2, 2013, print issue of *Neurology*, the medical journal of the American Academy of Neurology.

"This is the first study that compares these risk scores with a dementia risk score to study decline in cognitive abilities 10 years later," said Sara Kaffashian, PhD, with the French National Institute of Health and Medical Research (INSERM) in Paris, France.

The study involved 7,830 men and women with an average age of 55. Risk of heart disease and stroke (cardiovascular disease) and risk of dementia were calculated for each participant at the beginning of the study.

The [heart disease risk](#) score included the following risk factors: age, blood pressure, treatment for high blood pressure, [high density lipoprotein](#) (HDL) cholesterol, total cholesterol, smoking, and diabetes. The stroke risk score included age, blood pressure, treatment for high blood pressure, diabetes, smoking, history of heart disease, and presence of cardiac arrhythmia (irregular heart beat).

The dementia risk score included age, education, blood pressure, [body mass index](#) (BMI), total cholesterol, exercise, and whether a person had the APOE  $\epsilon$ 4 gene, a gene associated with dementia.

Memory and thinking abilities were measured three times over 10 years.

The study found that all three risk scores predicted

10-year decline in multiple cognitive tests. However, heart disease risk scores showed stronger links with [cognitive decline](#) than a dementia risk score. Both heart and stroke risk were associated with decline in all cognitive tests except memory; dementia risk was not linked with decline in memory and [verbal fluency](#).

"Although the dementia and cardiovascular risk scores all predict cognitive decline starting in late middle age, cardiovascular risk scores may have an advantage over the dementia [risk score](#) for use in prevention and for targeting changeable risk factors since they are already used by many physicians. The findings also emphasize the importance of risk factors for cardiovascular disease such as high cholesterol and high blood pressure in not only increasing risk of heart disease and stroke but also having a negative impact on cognitive abilities," said Kaffashian.

Provided by American Academy of Neurology

APA citation: Tests to predict heart problems may be more useful predictor of memory loss than dementia tests (2013, April 1) retrieved 22 October 2020 from <https://medicalxpress.com/news/2013-04-heart-problems-predictor-memory-loss.html>

*This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.*