

New tool can predict individual's dementia risk

November 18 2022



A risk score tool can accurately predict an individual's 13-year dementia

risk, according to a study published online Nov. 17 in *JAMA Network Open*.

Lina Ren, from Shenzhen Mental Health Centre in China, and colleagues developed a point risk score prediction model for [dementia](#) using data from a diagnostic study of 444,695 U.K. individuals.

The researchers found that dementia occurrence during the 13 years of follow-up (mean age at baseline, 56.2 years) was 0.7 percent for men and 0.5 percent for women. In the training set, the *C* statistic of the final multivariate Cox proportional hazards regression model was 0.86 for men and 0.85 for women versus 0.85 for men and 0.87 for women in the testing [data](#) set.

Some modifiable risk and protective factors were similar between men and women, but they also presented independent risk factors that accounted for 31.7 percent of men developing dementia and 53.35 percent of women developing dementia, according to the weighted population-attributable fraction. The total point score of the risk score model ranged from –18 to 30 in men versus –17 to 30 in [women](#). For both genders, the risk score model yielded nearly 100 percent prediction accuracy of 13-year dementia risk.

"The findings of this diagnostic study suggest that a risk score tool can be used for individual prediction of dementia risk that may help individuals to identify their potential risk profile and provide [guidance](#) on precise and timely actions to take to prevent or delay dementia," the authors write.

More information: Lina Ren et al, Development of a Clinical Risk Score Prediction Tool for 5-, 9-, and 13-Year Risk of Dementia, *JAMA Network Open* (2022). [DOI: 10.1001/jamanetworkopen.2022.42596](https://doi.org/10.1001/jamanetworkopen.2022.42596)

Copyright © 2022 [HealthDay](#). All rights reserved.

Citation: New tool can predict individual's dementia risk (2022, November 18) retrieved 8 May 2024 from <https://medicalxpress.com/news/2022-11-tool-individual-dementia.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.