



TARGETING LIFESTYLE AND MEDICAL RISK FACTORS FOR DEMENTIA RISK REDUCTION

A RESEARCH BRIEF BY THE UNSW AGEING FUTURES INSTITUTE

Lifestyle and medical risk factors are known to contribute to the risk of developing dementia. New research has developed tools to measure this risk and inform tailored programs to improve and maintain brain health.

BACKGROUND AND CURRENT ISSUE

Global population ageing, increased longevity and a growing burden of chronic disease is projected to contribute to a rising prevalence of dementia and Alzheimer's disease. Currently there are limited pharmacological treatments for Alzheimer's disease or other types of late life dementia and these are not widely available and have significant side effects. However, it is estimated that over 40% of dementia cases globally may be attributable to modifiable factors that increase risk of developing neurodegeneration (1). A coordinated and large-scale approach is needed to target dementia risk in the community through public health programs, primary and secondary prevention. This requires evidence-based tools for risk measurement, and scalable preventive programs.

SUMMARY OF CURRENT RESEARCH

A large evidence base has accumulated on the medical, lifestyle and environmental factors that increase risk of neurodegeneration. Review and synthesis of this evidence by our team has identified key factors for which the evidence is strongest for increasing dementia risk (2). This data was then used to develop an algorithm for measuring a person's relative exposure to risk and protective factors, and thereby quantify their risk of developing Alzheimer's disease and dementia (3). The predictive accuracy of the CogDrisk tool was then evaluated on several independent international datasets.

As a brief online 10-20 minute survey, the tool provides a low-cost method of validly measuring an individual's risk profile for informing risk reduction guidelines and advice.

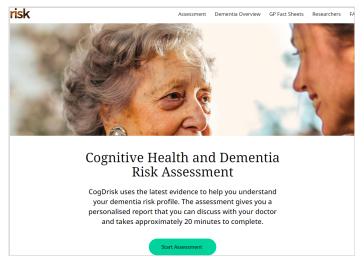
RECOMMENDATIONS AND IMPLICATIONS

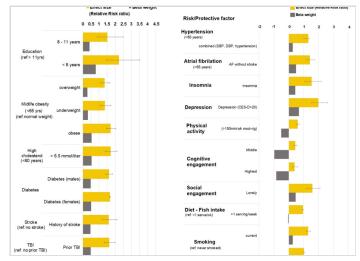
Risk assessment and monitoring will be a key component in global efforts to reduce the prevalence of dementia (4). The types and prevalence of risk factors are also likely to vary across different populations (2). The algorithmic approach used to develop the CogDrisk allows it to be adapted to risk factor data specific to any population.

Validated measures such as the CogDrisk can a) assist population health policy makers and data scientists model projections of future dementia prevalence, b) enable primary care physicians manage disease risk in patients, support researchers conducting dementia risk reduction trials and interventions, and c) help health

REFERENCES

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ABOUT THE AUTHOR

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Access CogDrisk at https://cogdrisk.neura.edu.au/