

World Wide Fingers will advance dementia prevention

Your Editorial highlighted the need of trials on dementia prevention, and welcomed the launch of World Wide Fingers WW-FINGERS,¹ but did not provide details on this initiative. WW-FINGERS springs from the successful experience of the Finnish geriatric intervention study to prevent cognitive impairment and disability (FINGER),² a landmark trial that showed that a multidomain lifestyle intervention, based on simultaneous management of several vascular and lifestyle-related risk factors for dementia and Alzheimer's disease (AD), can benefit cognition in people aged 60–77 years with high risk of dementia.

The multidomain lifestyle model used in the FINGER trial² is going to be tested in different populations and settings across the world, with studies starting recruitment in 2018. The US study to protect brain health through lifestyle intervention to reduce risk (US POINTER) is a 2-year trial testing the multidomain intervention in 2500 adults aged 60–79 years who are at high risk for cognitive decline. The multimodal intervention to delay dementia and disability in rural China (MIND-CHINA) study will recruit 2500 elderly people at risk of developing AD in a 2-year trial in the Shandong province, China. The Singapore intervention study to prevent cognitive impairment and disability (SINGER) is a 6-month feasibility study adapting and testing the FINGER multidomain model to 150 participants with mild cognitive impairment in Singapore. UK-FINGER is being planned and other countries, including Canada, Germany, Japan, and Spain, are joining WW-FINGERS and planning trials for dementia prevention.

The key feature common to all these trials is the multidomain approach, provided through a combination of

individualised counselling and group-based activities. Additionally, the core of the trial method is harmonised and similar clinical outcomes are made use of in these trials, to ensure comparability of findings. At the same time, local adaptations are implemented to account for geographical, ethnic, and cultural differences, and thus facilitate adherence to the interventions.

The Lancet Commission on Dementia prevention, intervention, and care³ concluded that up to 30% of AD cases worldwide can be attributed to seven modifiable risk factors (diabetes, mid-life hypertension and obesity, physical inactivity, smoking, low education, and depression), supporting the validity of the FINGER approach. Given the prevalence of obesity and diabetes, the benefits of lifestyle multidomain interventions can be expected to be substantial in terms of dementia prevention.

A key question remains as to whether the FINGER results obtained in Finland can be replicated in other settings. It is encouraging that a multidomain intervention previously developed in Finland for the prevention of diabetes mellitus⁴ has been successfully replicated in other countries (eg, China, the Netherlands, UK, and USA). The WW-FINGERS network has a similar ambition for dementia prevention.

The WW-FINGERS network catalyses resources and expertise to generate robust evidence and identify cost-effective preventative interventions that are accessible, feasible, and sustainable for different geographical, economic, and cultural settings. This collaboration creates a unique opportunity for rapid knowledge dissemination and implementation. All the hands and fingers are needed to produce strong scientific evidence and guidelines for reducing dementia risk.

We declare no competing interests.

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- 1 Lancet Neurology. Pointing the way to primary prevention of dementia. *Lancet Neurol* 2017; **16**: 677.
- 2 Ngandu T, Lehtisalo J, Solomon A, et al. A 2 year multidomain intervention of diet, exercise, cognitive training, and vascular risk monitoring versus control to prevent cognitive decline in at-risk elderly people (FINGER): a randomised controlled trial. *Lancet* 2015; **385**: 2255–63.
- 3 Livingston G, Sommerlad A, Orgetta V, et al. Dementia prevention, intervention, and care. *Lancet* 2017; published online July 20. [http://dx.doi.org/10.1016/S0140-6736\(17\)31363-6](http://dx.doi.org/10.1016/S0140-6736(17)31363-6).
- 4 Tuomilehto J, Lindström J, Eriksson JG, et al. Prevention of type 2 diabetes mellitus by changes in lifestyle among subjects with impaired glucose tolerance. *N Engl J Med* 2001; **344**: 1343–50.

Advice for those trying to find a cure for the shaking palsy

I would like to thank Ava Easton for her review of *Mentored by a Madman: The William Burroughs Experiment* in *The Lancet Neurology*.¹ I believe that all neurologists, irrespective of whether they have an academic appointment, should devote a little of their working week to research. Private practice and burgeoning bureaucracy are impediments to this aspiration, but are never a valid excuse for inaction. When I speak of research, I am not talking about dedicated molecular biological investigation in a so-called wet laboratory, or crunching big numbers in front of computer screens to identify risk factors. What I mean is a curiosity to try to answer with more precision the questions every doctor is asked in their everyday practice and to openly acknowledge that patients can inspire experiments.

I used levodopa for the first time in 1970 at St Stephen's Hospital on the Fulham Road in Chelsea, UK. Within 2 weeks my patient could walk again.



See Online for appendix

For World Wide Fingers see <http://wwfingers.com>