

Family FINGER: A pilot RCT of a multidomain lifestyle intervention to support mental wellbeing among older spousal caregivers

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Background

Older spousal caregivers are a high-risk group with elevated vulnerability to poor mental and physical health, as well as increased risk of cognitive decline and dementia. Caregiving-related stress, limited physical activity, suboptimal diet, sleep disturbances, and cardiometabolic strain cumulatively accelerate cognitive ageing.

The Finnish Geriatric Intervention Study to Prevent Cognitive Impairment and Disability (FINGER) has demonstrated that a multidomain lifestyle intervention can improve cognitive performance, quality of life, and overall health among older adults at risk of dementia.

The Family FINGER trial extends this evidence by adapting the FINGER model to the specific circumstances of older spousal caregivers. The intervention aims to enhance mental well-being and reduce dementia risk through a feasible, tailored multidomain lifestyle approach designed to fit the everyday realities of caregiving.



Family FINGER RCT

Family FINGER is a single-centre, parallel-group pilot randomised controlled trial conducted in Northern Savo, Finland.

- Up to 100 caregivers aged ≥65 years
- Co-residing with and providing daily care for a spouse with cognitive impairment
- Randomized 1:1 to a 12-month multidomain lifestyle intervention or standard care
- Followed by a 6-month post-intervention follow-up

The intervention retains the core components of the original FINGER model—nutritional counselling, aerobic and resistance training, cognitive training, social engagement, and metabolic risk management—while incorporating structured adaptations to enhance feasibility for caregivers.

Primary outcome: mental wellbeing (WEMWBS)

Secondary outcomes: dementia risk (LIBRA, CAIDE); cognitive performance (MoCA); lifestyle behaviours; physical functioning; cardiovascular and metabolic biomarkers; health-related quality of life

Exploratory outcomes: stress biomarkers; frailty; social inclusion

Qualitative component: interviews will complement quantitative findings

Family FINGER is the first randomized controlled trial to adapt the FINGER multidomain lifestyle intervention for older spousal caregivers. This pilot will generate essential evidence on feasibility, acceptability, and preliminary efficacy in improving mental wellbeing and reducing dementia-related risk factors in this high-risk group.