



Topics to engage, educate and inspire

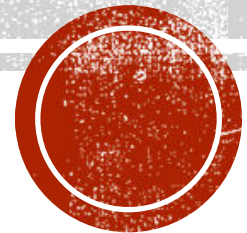


Dunedin School of Medicine
Te Kura Whaiora o Ōtepoti

THE DUNEDIN DEMENTIA RISK AWARENESS PROJECT

A/Prof Y Barak, Dr C Rapsey, and Prof K Scott.

Otago University Medical School



BACKGROUND

- The total number of people with dementia will increase because of the aging of the population, and so will associated care costs, making dementia a global public health priority.
- A recent review suggested that 12 major modifiable risk factors:
 - less Education
 - Hypertension,
 - hearing Impairment
 - Smoking
 - Obesity
 - Depression
 - Physical inactivity
 - Diabetes
 - low Social Contact
 - excessive Alcohol consumption
 - Traumatic brain injury
 - air Pollution.
- account for about 40% of all cases of Alzheimer's disease (AD) dementia.

BRAINHEALTH LITERACY

- Beliefs about AD and scientific knowledge of AD influence the perceived threat of AD in older adults.
- Education programs and interventions that foster exposure to AD factual knowledge, particularly for those with limited education, can help reduce this negative view of AD.
- Moreover, data from the European Health Literacy Survey demonstrated an increased odds of exercising almost daily associated with understanding disease prevention and health promotion information.
- Public health policy should thus consider measures to improve health literacy in order to achieve positive behavioural change.

AIM

- A report issued by the CDC and the Alzheimer's Association in 2014 recommended with high priority to “determine how diverse audiences think about cognitive health and its association with lifestyle factors.”
- We planned to use the LIBRA developed by Schiepers and colleagues to survey a representative sample of older adults (50 to 75 years old) living independently in the community in Otago, New Zealand.
- The results of this survey will be the basis for designing a dementia primary prevention effort for the benefit of New Zealand adults.
- Our ability to “personalize” future programmes according to the target population's brain health awareness will be a unique advantage compared to other available programmes.

FOCUS GROUPS

- Part of the process of refining our survey was to target groups of older adults in order to ascertain that the modified LIBRA scale is easily comprehended by the target population.
- Surveying groups of older adults has traditionally been employed to study attitudes, beliefs, barriers and facilitators for health promotion as well as to develop health education programmes.
- In the present study we report results of participants from brain health awareness groups.

PARTICIPANTS

- A series of 5 public lectures was supported by the Dunedin Public Library. These were advertised in both the library itself, the library's Facebook pages and in the weekend edition of the Otago Daily Time (the most read newspaper in Otago, New Zealand).
- The talks were describes as: "...talks about brain health...knowledge of Alzheimer's disease and prevention." The talks were held fortnightly in the evening and were free.
- Prior to each talk the questionnaire was distributed.

OPEN ENDED QUESTIONS

- What do you believe are the 3 most important risk factors for dementia?’
- -
- -
- -
- ‘What do you believe are the 3 most important protective factors for dementia?’
- -
- -
- -

PROMPTED QUESTIONS

‘Which of the following do you believe has a significant effect on whether or not the average person develops dementia?’

- Low/Moderate Alcohol Consumption
- Coronary Heart Disease
- Oral Hygiene
- Physical Inactivity
- Renal Dysfunction
- Diabetes
- High Cholesterol
- Curcumin
- Smoking

‘Which of the following do you believe has a significant effect on whether or not the average person develops dementia?’

- Obesity
- Hypertension
- Mediterranean Diet
- Depression
- Prescription Drugs
- High Cognitive Activity
- Low Unsaturated Fat Intake
- Hearing Impairment
- Loneliness

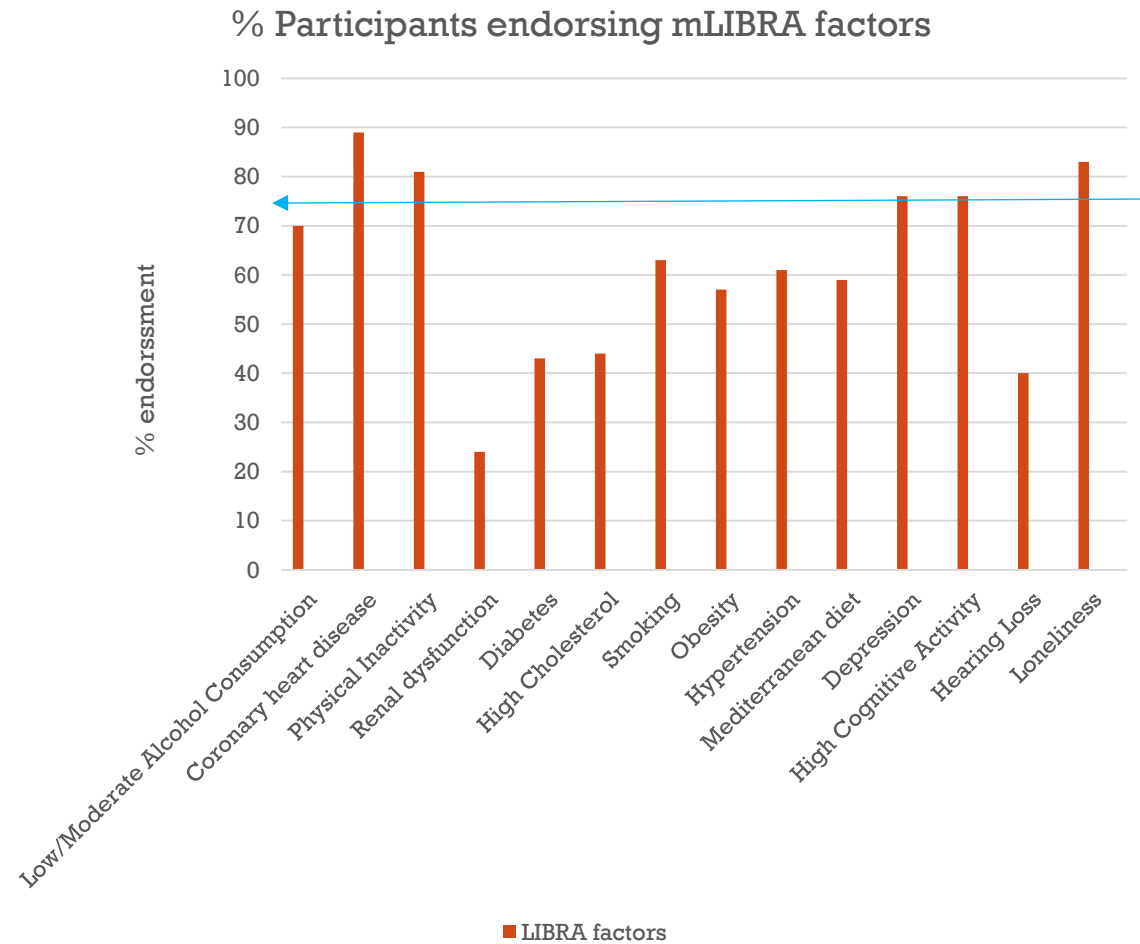
PARTICIPANTS

- Four hundred and one people attended the series of public lectures.
 - Of these 304 were aged 50 years or older.
 - We focused on the responses of the older adults and of these 216 consented to complete the survey questionnaire (71% response rate).
- Two hundred and sixteen older adults (≥ 50 years)
 - mean age 65.5 ± 11.4 years (range: 50-93)
 - 172 women and 44 men.
 - The great majority - 95.4% - were NZ Europeans.
 - Education levels in this group was as follows:
 - school only, (primary and secondary school), 37.9%
 - post-secondary education, (BA, BSc or tertiary learning), 53.7%
 - post-graduate, (MA, MSc and PhD), 8.4%.

RISK AND PROTECTIVE FACTORS:

- ‘What do you believe are the 3 factors that will **increase** the chances of a person experiencing memory problems in older age?’
 - - **Loneliness** was most commonly emphasized (24%) followed by genetics and smoking.
- ‘What do you believe are the 3 factors that will **reduce** the chances of a person experiencing memory problems in older age?’
 - - **Exercise** was most commonly emphasized (48%) followed by dietary changes and cognitive training.

PROMPTED QUESTIONS



DISCUSSION

- The growing attention to cognitive health promotion among older adults emphasizes the importance of scrutinizing public understanding of risk and protective factors for dementia.
- An increased understanding of public views about dementia is a priority.
- Health beliefs have long been recognized as an important factor in risk self-management.
- Perceived threat of disease - personal susceptibility – is associated with willingness to seek out preventive options whereas beliefs about causes influence self-management

BRAIN HEALTH LITERACY

- Mental health literacy has received increasing attention as a useful strategy to promote early identification of mental disorders, reduce stigma and enhance behaviours promoting prevention.
- Low health literacy exacerbates struggles of older adults and contributes to a variety of adverse health behaviours and outcomes.
- Addressing how health literacy impinges on the lives of older adults is a neglected area of study and practice.
- Moreover, health literacy amongst the elderly has not been much researched with focus on brain health.
- Limited health literacy can be a barrier to older adults' access to information and quality of care.
- Attempts to improve the comprehensibility of health-related information for older adults have shown lack of consistent evidence for effectiveness and thus stress the importance of further research

THE FUTURE

- Randomized
- Representative
- Sample size

- We have recruited **1,005** participants, aged 50-75 years in Otago and all have completed our survey.

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Clusters of Dementia Literacy: Implications from a Survey of Older Adults

Y. Barak, C. Rapsey, K.M. Scott

Otago University Medical School, Department of Psychological Medicine, Dunedin, New Zealand.

NZ OLDER ADULTS

- In 2018 the National Poll on Healthy Aging report presented findings from a nationally representative USA household survey undertaken two to three times a year with a sample of approximately 2,000 members age 50–80.
- Worries about dementia and interest in promoting brain health are both high.
- About half of respondents thought they were likely to develop dementia in their lifetime.
- However, just 5% said they had ever discussed ways to prevent dementia with their doctor.
- The poll findings suggest that many older adults could benefit from discussing prevention strategies with health care providers.

SAMPLE

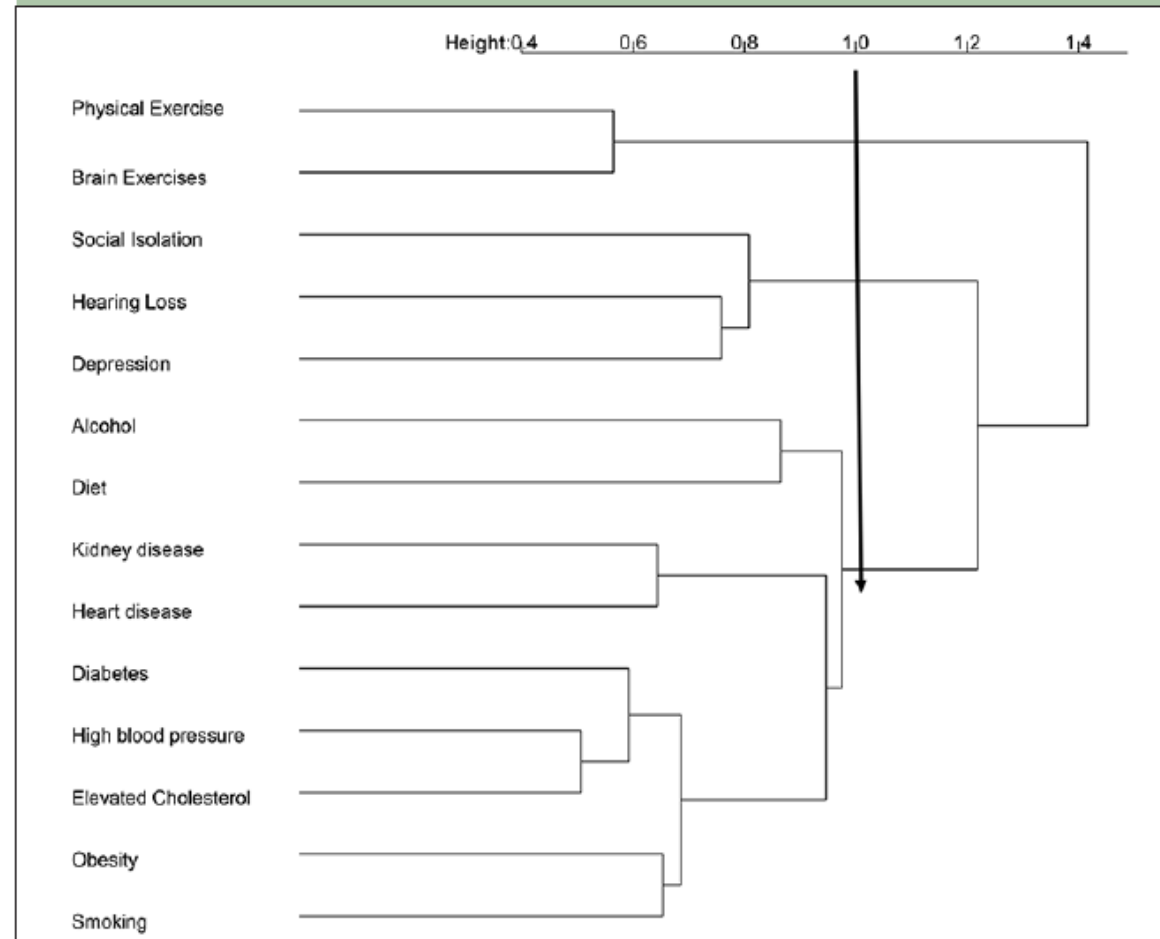
- One thousand and three hundred households were contacted and asked to take part.
 - The response rate was 77.3%, yielding a sample of 1,005.
- Of the 1,005 respondents included in our present analysis there were:
 - slightly more women (n=518, 51.5%)
 - most were European (n=921, 91.6%)
 - well educated (n=100, 46%, with a tertiary qualification; including n=17, 8%, with a post-graduate qualification)
 - over half of the sample were from a large urban centre (n=540, 53.7%) and the rest from rural communities.

MODIFIED LIBRA

- Only for 6/14 factors were adequate health literacy levels demonstrated
 - that is greater than 75% of participants correctly endorsed these factors as significantly affecting development of dementia.
- These factors were:
 - moderate alcohol consumption (89.6%)
 - social isolation (89.1%)
 - depression (86.4%)
 - cognitive activity (82.2%)
 - physical inactivity (77.9%)
 - nutrition (77.2%).
- The lowest literacy levels were for the following risk factors:
 - heart disease (40.6%)
 - high serum cholesterol levels (46.4%).

CLUSTERS OF KNOWLEDGE

Figure 1. Cluster Dendrogram



CONCLUSIONS

- Clusters of knowledge have been globally studied and analyzed with focus on health characteristics, health literacy needs and development of effective interventions.
- Clusters of awareness around risk and protective factors, medical, activities, and psychosocial, hold promise for personalized health information.
 - These clusters may also be useful as composite endpoints for trials examining the effects of educational interventions on facets of awareness.
- The present survey identifies clusters of brain health literacy that could be an interesting and potentially valuable starting point for interventions aiming to increase awareness and knowledge about brain health.

THANK YOU FOR YOUR ATTENTION...

“The more you **read**
the more **things** you know.
The more that you **learn**
the more **places** you’ll go.”
-Dr. Seuss