Alzheimer's Australia
Living with dementia

National Preventative Health Taskforce
Alzheimer's Australia Submission

November 2008

Overview

- Dementia is the major chronic neurological disease of the 21st Century.
- Strong evidence exists to support dementia risk reduction.
- There is low community awareness that the risk of dementia may be reduced and of the links between dementia and other chronic conditions.
- The cost of dementia to the health system and carers is estimated at over $6 billion (2002).
- Dementia prevention should be included within a National Preventative Health Strategy.

Dementia and National preventative health policy

There are overriding reasons to include dementia within national preventative health policy and strategic planning:

1. *Prevalence:*

Australia's population is rapidly ageing. By 2045 the projected population over 65 years will represent 25% of the total.[1] Many of these people will develop dementia.

In 2008, there are an estimated 227,300 Australians with dementia. By 2050, this number will rise to 731,000.[2] One in four people over 85 years will develop dementia, making it one of the highest incidences of any disease.

Dementia is projected to show the greatest increase in disease burden by 2023.

2. *Health economics*

The economic costs of an ageing society are a serious and significant issue for Government budgets. Also dementia affects the lives of nearly one million Australians who are involved in caring for a loved one with dementia.[3]

Ageing is expected to account for about half of the increase in health expenditure as a proportion of GDP.[4]

The financial cost of dementia in Australia in 2002 was $6.6 billion and by 2051 dementia's financial impact will total 3.3% of GDP.[5]

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[1] Productivity Commission. *Economics of an Ageing Australia*. Australian Government, Canberra, 2005. p143

[2] Access Economics. *Dementia in the Asia Pacific Region: the epidemic is here*. Alzheimer's Australia, Canberra, 2006.

[3] Pfizer Australia. *Health Report Issue 6: Dementia*. Pfizer Australia, Sydney, 2004.

[4] Productivity Commission, op cit., p143

3. Prevention potential

Dementia cannot yet be cured, but there is now ample evidence to establish that lifestyle and health interventions can reduce the risk or delay onset. There is limited awareness of this among Australians, with 48% not knowing that lifestyle behaviours directly affect their risk of dementia.[6]

If the average onset of dementia was delayed by 5 years, there would be half as many cases and a saving to the Australian economy of $67.5 billion by 2040.[7] Alzheimer's Australia has developed a (Trust funded) evidence-based dementia risk reduction program called Mind your Mind®.[8] It promotes a 'brain healthy' lifestyle, addressing the benefits of mental, physical and social activity, a healthy diet, avoiding head injury, not smoking, not drinking excessively, and maintaining healthy blood pressure, cholesterol and weight. That program now requires Government preventative health funding to be taken to the wider Australian population.

Alzheimer's Australia response to National Preventative Health Taskforce discussion paper *Australia: The Healthiest Country by 2020*

Obesity and dementia

Obesity is a risk factor for dementia. Several long-term studies have demonstrated that obesity in mid-life is associated with a 70-100% increase in the risk of later developing dementia and Alzheimer's disease.[9][10][11]

Research has also demonstrated that the risk of dementia, Alzheimer's disease and cognitive impairment is lower in those who engage in high levels of physical activity compared to those exercising little.[12]

There is some evidence that certain dietary elements, including omega 3 fatty acids, particular vitamins and antioxidants, may be protective against cognitive decline.[13] Higher intakes of saturated fats are associated with an increased risk of dementia, while consumption of unsaturated fats may reduce risk.[14]

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[5] Access Economics. *The Dementia Epidemic: Economic Impact and Positive Solutions for Australia*. Alzheimer's Australia, Canberra, 2003.

[6] Farrow M. *Dementia risk reduction: what do Australians know?* Alzheimer's Australia, Canberra, 2008.

[7] Access Economics. *Delaying the onset of Alzheimer's disease; projections and issues.* Alzheimer's Australia, Canberra, 2004.

[8] Woodward M et al. *Dementia risk reduction: the evidence*. Alzheimer's Australia, Canberra, 2007.

[9] Gustafson D. Adiposity indices and dementia. *Lancet Neurol* 2006; 5:713-720.

[10] Kivipelto M et al. Obesity and vascular risk factors at midlife and the risk of dementia and Alzheimer disease. *Arch Neurol* 2005; 62:1556-1560.

[11] Whitmer RA et al. Obesity in middle age and future risk of dementia: a 27 year longitudinal population based study. *BMJ* doi:10.1136/bmj.38446.466238.E0 (published 16 May 2005).

[12] Rockwood K, Middleton L. Physical activity and the maintenance of cognitive function. *Alzheimer Dement* 2007; 3:S38-S44.

[13] Gomez-Pinilla F. Brain foods: the effects of nutrients on brain function. *Nat Rev Neuroscience* 2008; 9:568-578.

[14] Laitinen MH et al. Fat intake at midlife and risk of dementia and Alzheimer's disease: a population-based study. *Dement Geriatr Cogn Disord* 2006; 22:99–107.

Tobacco and dementia

Smoking is a risk factor for dementia. A recent meta-analysis revealed that smokers had a 79% increased risk of Alzheimer's disease and a 78% increased risk of vascular dementia, compared to those who never smoked.[15] Former smokers had a 41% reduced risk of Alzheimer's disease compared to those still smoking.

Alcohol and dementia

Small amounts of alcohol may in fact reduce the risk of developing dementia. A recent meta-analysis found that light drinkers had a 37% reduced risk of dementia and a 43% reduced risk of Alzheimer's disease compared to non-drinkers.[16]

However, chronic heavy drinking can lead to irreversible brain damage, cognitive impairment and alcohol-related dementia (Korsakoff's syndrome). Regular binge drinking in mid-life has been associated with a three-fold increased risk of late-life dementia.[17]

Conclusions

Alzheimer's Australia supports the National Preventative Health Taskforce recommendations. The opportunity should be taken in educational strategies relating to the identified priority topics to make the point that individuals by adopting recommended lifestyles may be helping their brains as well as their bodies.

It also proposes that the Australian Government fund the Mind your Mind program as an integral part of Australia's preventative health strategy.

Attachments:

Alzheimer's Australia has reviewed the evidence on dementia risk reduction and public awareness of the issues. The papers *Dementia risk reduction: the evidence* and *Dementia risk reduction: what do Australians know?* are attached.

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[15] Anstey K et al. Smoking as a risk factor for dementia and cognitive decline: a meta-analysis of prospective studies. *Am J Epidemiology* DOI: 10.1093/aje/kwm116 (published 14 June 2007).

[16] Peters R et al. Alcohol, dementia and cognitive decline in the elderly: a systematic review. *Age Ageing* 2008; 37:505-512.

[17] Jarvenpaa T et al. Binge drinking in midlife and dementia risk. *Epidemiology* 2005; 16:766-771.