strokefoundation

Standing Committee on Health and Ageing

Inquiry into Dementia:
Early Diagnosis and Intervention

Contact

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EXECUTIVE SUMMARY

- The three leading causes of death in Australia are heart disease, stroke and dementia and together these diseases accounted for almost a third of deaths in Australia in 2010[1].

- Much of the dementia burden shares common risk factors with other preventable chronic disease including heart disease, stroke, type 2 diabetes and chronic kidney disease.

- When it comes to prevention and improving quality of life and delaying onset of disease, addressing common risk factors across these major vascular disease groups can be highly cost-effective, with large population health benefits across the vascular disease groups. This approach is critical as the population ages and more people are at risk of developing devastating and costly vascular diseases.

- **A national vascular disease check (prevention, screening and management program)** should be introduced as a highly cost effective intervention that can detect people at high risk of developing vascular disease and ensure early intervention for management of modifiable risk of vascular and related diseases in primary care.

- The check should consist of awareness raising and identification of at-risk individuals, high quality assessment of individual risk and appropriate management and follow-up in keeping with guideline recommendations.

The National Stroke Foundation would also like to draw the Committee's attention to the significant gains made for healthy ageing, extending quality of life independence, through preventative initiatives for stroke, heart disease and dementia including:

- ***Getting and keeping older Australians Active***
  Support walking and 'Heartmoves' programs in local government areas with rapidly ageing populations.

- ***Active Travel***
  Develop and fund a national active travel strategy embracing walking, cycling and public transport as well as implementation of urban design principles that support active living through the *Healthy Spaces and Places* initiative.

- ***Supercharge food reformulation***
  Expand the life-saving work of the Australian Government's health and food dialogue to reduce salt, fat and sugar content of the food supply.

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[1] Australian Bureau of Statistics, 3303.0 - Causes of Death Australia 2010. 20 March 2012.

INTRODUCTION

The National Stroke Foundation (NSF) welcomes the opportunity to provide the following submission to the Standing Committee on Health and Ageing.

Dementia is the third leading cause of death after heart disease and stroke. While there are over 100 recognised causes of dementia, Alzheimer's disease accounts for about 60% and vascular dementia 20%[2]. In addition, researchers are increasingly noting the overlap between differing types of dementia, referred to as mixed dementia. The more common mixed dementias involve Alzheimer's disease and vascular dementia[3]. The risk factors for one form of dementia may also be risk factors for other dementias and prevention interventions may address more than one type of dementia.

The NSF would like to draw the committee's attention to the common known risk and preventative factors of some forms of dementia and other common chronic diseases such as stroke, heart disease, diabetes and chronic kidney disease. In light of these commonalities we argue that dementia screening and risk reduction should be incorporated as a part of a comprehensive vascular disease risk assessment and management program in primary care.

VASCULAR DISEASE

Cardiovascular disease, including stroke, has a strong relationship with type 2 diabetes and chronic kidney disease as these conditions share many risk factors and often co-exist.

Table 1. Common factors for vascular and related diseases

	Coronary heart disease	Stroke	Diabetes	Chronic kidney disease	Vascular dementia[4]
Tobacco smoking	✔	✔	✔	✔	✔
High blood pressure	✔	✔	✔	✔	✔
High blood cholesterol	✔	✔	✔		✔
Physical inactivity	✔	✔	✔	✔	
Poor diet	✔	✔	✔	✔	
Overweight & obesity	✔	✔	✔	✔	✔
Alcohol misuse	✔	✔	✔		

Additional risk factors for vascular dementia include[5]:

- Old age   - Stroke
- Male gender   - Elevated homocysteine
- Family history of vascular disease   - Cardiac disease & major cardiac surgery
- Diabetes, type 2   - Atrial fibrillation

The fact that these major chronic diseases share many risk factors, and some are themselves risk factors for dementia, demonstrates that effective prevention programs targeting modifiable risk factors are a key strategy to reduce not only the burden of dementia, but also of cardiovascular disease, diabetes and chronic kidney disease.

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[2] M Woodward, Alzheimer's Australia Paper 13 *Dementia Risk Reduction: The Evidence,* September 2007.
[3] Ibid.
[4] M Woodward, Op cit.
[5] Ibid.

Currently in Australia there is no comprehensive program to ensure people who are at risk, or who have increasing risk are systematically assessed and routinely managed. Access to current programs that may ensure this (such as the 45-49 year old check) is very low.

ABSOLUTE RISK & THE PREVENTION OF VASCULAR & RELATED DISEASES

The NSF is a member of the National Vascular Disease Prevention Alliance (the NVDPA), an alliance between the major not-for-profit organisations including Diabetes Australia, the Heart Foundation and Kidney Australia to tackle the burden of vascular disease in Australia.

The NVDPA has led the development of clinical guidelines for a comprehensive, absolute risk approach to disease prevention that takes into account an individual's overall risk profile, rather than a traditional clinical focus on single risk factors, in predicting the likelihood of later disease events[6].

Based on the AusDiab survey, an estimated 5% of men aged 25 years and over were at high risk of a CVD event in the next 5 years, as were around 1% of women.[7] Over 20% of adult workers have been found to be at high risk of type 2 diabetes using the Ausdrisk tool. Many high risk individuals are unaware of their risk status and are therefore unlikely to undergo comprehensive, absolute risk assessment in an unprompted manner in primary care. Many Australians at high risk of CVD are not adequately treated[8].

There is considerable opportunity to maximise the impact of a comprehensive, absolute risk approach by increasing early detection of vascular and related disease risk and subsequent uptake of full risk assessment and management. Early detection would increase uptake of preventative interventions and reduce the burden of vascular morbidity and mortality.

There are several programs in operation in community and primary care settings to detect vascular and related disease risk, and in some instances to improve management of this risk, but these have limited uptake and are not well integrated or promoted as part of a national preventative health system.

A comprehensive vascular and related disease risk assessment program should consist of:

1. Awareness raising and identification of potentially at risk individuals.

The aim of this first stage of the model is to improve the detection of risk of vascular and related disease in the adult population aged 45 years and older, and increase individual awareness of risk status. Community-based setting would play a major role. Quality controlled and evaluated activities would enable identification of potentially at risk individuals who would then be referred to the primary care setting for full assessment

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[6] National Vascular Disease Prevention Alliance, *Guidelines for the assessment of absolute cardiovascular disease risk*, 2009
[7] Australian Institute of Health and Welfare, Prevention of cardiovascular disease, diabetes and chronic kidney disease: targeting risk factors Cat. No. PHE 118 Canberra 2009
[8] Webster R et al, Gaps in cardiovascular disease risk management in Australian general practice. 2009. MJA, 191(6): 324-339

2. High quality assessment of individual risk

Full assessment of individual risk of vascular and related diseases undertaken by collecting data on major risk factors through simple tests, questions and measurements. Full assessments would be conducted in the primary care setting, either as a result of referral from the community setting or opportunistically. The assessment would include recognised measures to assess risk including:

- a cardiovascular disease risk assessment
- AusDrisk [9]
- Serum creatinine and urinary albumin[10]

3. Management and Follow-up

Provision of quality assured lifestyle and medical interventions to reduce individual risk - for example, smoking cessation services, weight management, exercise and behaviour change.

Those who are identified as at increased risk on any measures should be managed according to clinical guidelines and through lifestyle modification programs and evidence based programs where appropriate.

PREVENTION INITIATIVES

In addition to a comprehensive vascular disease risk reduction program in primary care, the NSF would like to highlight the value of preventative health programs and initiatives to reduce vascular and related disease risk.

Getting & keeping Australians active

Support walking and physical activity programs in local government areas with rapidly ageing populations.

Several observational studies have found that physical activity in mid and late life is associated with a lower risk of cognitive decline and dementia.

In a study of 1,449 people followed up for an average of 21 years, leisure time physical activity at least twice a week at midlife was associated with a 52% reduced risk of all dementia and a 62% reduced risk of Alzheimer's disease[11]. Physical exercise at least 3 times per week in people over age 65 was associated with a 38% reduced risk of dementia after 6 years follow up[12].

In another study, participation in high numbers of different activities including walking but also intellectual, leisure and social activities was associated with a 38% lower risk of developing dementia over an average of 3 years in 1,772 people over age 65, initially free of dementia[13].

Physical inactivity is a major risk factor for chronic disease and is responsible for an estimated 16,000 premature deaths a year[14]. Being active can reduce the risk for

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[9] The Australian Type 2 Diabetes Risk Assessment tool
[10] To detect chronic kidney disease
[11] Rovio S, Kareholt I, Helkala E-L et al. Leisure-time physical activity at midlife and the risk of dementia and Alzheimer's disease. Lancet Neurology 2005;4:705-711.
[12] Larson EB, Wang L, Bowen JD et al. Exercise is associated with reduced risk for incident dementia among persons 65 years of age and older. Ann Intern Med 2006;144:73-81.
[13] Scarmeas N, Levy G, Tang M-X, Manly J, Stern Y. Influence of leisure activity on the incidence of Alzheimer's disease. Neurology 2001;57:2236-42
[14] Medibank Private, Econtech and KPMG (2008) *Cost of Physical Inactivity, 2nd Report*

leading chronic diseases, extend years of active independent life, reduce disability and improve quality of life.

Regular physical activity promotes healthy ageing and better mental and social health, particularly for people who may be socially isolated.

Programs such as the Heart Foundation's Walking and 'Heartmoves' programs are cost effective and effective in attracting older adults, inactive adults, lower socio-economic status groups and the overweight and obese. Increasing walking and activity among these groups helps to improve physical and mental health.

Support Active Transport

One of the most effective ways of getting more people more active is to encourage active travel – walking, cycling and the use of public transport.

Active travel builds physical activity into everyday lives.

Active travel can be stimulated by creating and retrofitting urban areas through *Healthy Spaces and Places* planning and design principles and investing in active travel infrastructure, including footpaths and connected street networks, cycle paths and lanes and public transport facilities and through better integration of these strategies.

Public transport is important to active lifestyles. People who use public transport spend significantly more time walking than those who drive cars to work. One Melbourne study found those who used public transport on average spent 41 minutes per day walking and/or cycling as part of their journey compared with an average of just 8 minutes for those who used their car. This was five times more than those who used their car[15].

While there are welcome signs of progress (eg significant support for local government community infrastructure and passenger rail transport), there is still no comprehensive, on-going approach to supporting the development of active travel across the nation.

The NSF and National Heart Foundation advocate for the development of a <u>funded</u> *Active Travel Strategy* which includes:

- comprehensive targets to boost participation in active travel
- creation of an active travel agency
- ensuring active travel has a strong voice within the Standing Council on Transport and Infrastructure
- provides sustained infrastructure funding that supports active travel (for example, continue the $40m National Bike Path program)
- requires all federally-funded state/territory transport infrastructure projects to incorporate or enhance active travel where feasible
- a fund for active travel programs
- provides financial incentives (tax and price) to make public transport, walking and cycling cheaper and easier choices
- a national approach to benchmarking walking as a significant current and potential contributor to active travel outcomes.

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[15] Bus Association of Victoria (2010) *Briefing paper: Public Transport Use – A Ticket to Health*

Supercharge food reformulation

Expand the life-saving work of the Australian Government's Food and Health Dialogue to reduce salt, fat and sugar content of the food supply.

Eating well and reducing intake of saturated fats is an important strategy to reduce dementia risk[16].

Food reformulation – working with industry to reduce salt, saturated fat and sugar while boosting good nutrients, such as fibre – is one of the most cost-effective public health measures available to government and is being increasingly used worldwide to address risk factors for some of the most common chronic diseases, including types of dementia.

The Food and Health Dialogue, established in 2009, brings together government, industry and NGOs and has already established important salt reduction targets for breads and cereals and is working on setting targets in eight other priority food categories.

The Dialogue has also been charged with seeking to standardise and establish appropriate portion sizes and undertake consumer awareness activities that promote healthy eating patterns and food choices. It is also charged with closely monitoring the progress of industry towards achieving agreed targets.

This is an ambitious agenda with enormous potential to improve the health of the entire population. If this agenda is to be achieved, additional resources are needed to support the work of the Dialogue.

However, funding for the Dialogue terminates in June 2013. To date the Dialogue has received what can only be described as exceptionally modest funding of $300,000 a year between 2010-11 and 2012-13.

Additional funding is required to:
- add more categories to expand public health benefits
- support data collection and modelling to inform future food category selection and determine the impacts of reformulation on population intakes of targeted nutrients
- establish a dedicated reformulation unit, drawing on expertise from CSIRO (a funded position) and with links to industry and appropriate non-government organisations with expertise in this area.
- provide supporting activities including food reformulation workshops with industry, communication and media activities, including web-based resources, and social marketing

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[16] M Woodward, Op cit.