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Dementia prevention: the time to act is now

A multilayered action plan is needed for a substantial, timely and sustained investment in dementia prevention

In 2012, the Australian Government declared dementia as the ninth National Health Priority Area. Eight years later, dementia is the greatest cause of disability in Australians aged over 65 years, the second leading cause of mortality, and the highest in women.¹ Today, more than 459 000 Australians live with dementia, and this number is expected to exceed one million by 2056.² The societal, economic and health care burden of dementia is unprecedented, with significant impacts on individuals, caregivers and families. In addition to therapeutic advances, improved and timely diagnosis and coordinated person-centred care, dementia prevention and risk-factor management are our best chance to make a difference.³ How do we tackle dementia prevention cost-effectively in the post-pandemic era?

Between 40% and 48% of dementia risk is considered modifiable.^{4,5} In Australia, the population-attributable risk of dementia risk factors, in descending order, are physical inactivity (17.9%), mid-life obesity (17.0%), low educational attainment in early life (14.7%), mid-life hypertension (13.7%), depression (8.0%), smoking (4.3%), and diabetes mellitus (2.4%).⁵ In addition, the 2020 *Lancet* Commission report on dementia prevention, intervention and care⁴ includes hearing loss, traumatic brain injury, alcohol use, social isolation, and air pollution as risk factors. Emerging research suggests that a suboptimal diet,⁶ cognitive inactivity⁷ and sleep-wake disturbance⁸ also influence the modifiable dementia risk.

We urge substantial, timely, and sustained investment in dementia prevention via a multilayered action plan with eight recommendations (Box).

1. Create public health and clinical practice guidelines for dementia prevention across the lifespan for the Australian setting. In 2019, the World Health Organization released dementia risk-reduction guidelines, stating that “the existence of potentially modifiable risk factors means that prevention of dementia is possible through a public health approach”.⁹ These guidelines focus on “interventions that delay or slow cognitive decline or dementia”, with the strongest recommendations being applied to addressing physical inactivity, tobacco cessation, hypertension and diabetes mellitus.⁹ Yet, in Australia, we do not have dementia prevention guidelines, with the clinical practice guidelines for dementia from the National Health and Medical Research Council (NHMRC) and the Australian Cognitive Decline Partnership Centre (CDPC) focusing on diagnosis and management.¹⁰ Since then, Australia has made significant progress by including dementia prevention guidelines for general practitioners in the CDPC’s *Care*

*guide for general practice.*¹¹ We recommend extending guidelines beyond primary care, including secondary prevention in memory clinics, prioritising educational attainment in early life, and developing occupational and environmental policy to reduce hearing loss, traumatic brain injury, and air pollution.

2. Equip and resource primary care providers to be the clinical spearheads for dementia prevention throughout life. Primary care is the usual entry point and key coordinator of care within the health care system and is well positioned to spearhead dementia prevention throughout life. The Medicare Benefits Schedule should increase focus on dementia prevention, enabling primary care, specialists, and allied health professionals more time, resources and team care. This could be achieved through new Medicare Benefits Schedule item numbers and modification of existing items, such as the 45–49-year-old health check for individuals at risk of chronic conditions. Private health insurers could complement this by expanding the scope of preventive health services to target dementia risk factors and rewarding individuals who participate with lower insurance premiums or greater rebates for health services.

3. Support multidisciplinary memory clinics and specialists to implement secondary prevention programs for those at high risk. Memory clinics and specialists should focus on secondary prevention for people at higher risk, such as those with mild cognitive impairment.¹² The Australian Dementia Network (ADNeT) aims to unite and build the network of memory clinics, establish practice guidelines, harmonise assessments, and implement dementia prevention tools and strategies. ADNeT will also facilitate access to clinical trials, improve diagnostic accuracy to aid secondary prevention approaches and introduce a Clinical Quality Registry.

4. Fund research for evidence-based interventions for modifiable risk factors for dementia across the life cycle to reduce the evidence-to-practice gap. While there has been increasing funding for dementia prevention research and the establishment of the International Research Network on Dementia Prevention as part of the Australian Government's commitment to the World Dementia Council,¹³ urgent funding is still required to address critical evidence-to-practice gaps. The current evidence base includes observational studies and intervention trials that have generally focused on cognitive outcomes, rather than dementia incidence, given the long time frames needed. We need to strengthen the evidence base on managing risk factors across different phases of the lifespan, such as the most effective doses and forms of interventions in large-scale trials. Rigorously evaluated multidomain prevention trials that simultaneously target multiple risk factors may present the best value for money if shown to be effective and sustainable, particularly as they address risk factors that have an established evidence base for preventing other conditions. A number of these trials are already underway in Australia.

5. Implement findings from dementia risk reduction and implementation research through translation into health promotion programs. Implementation research will be key to translating the increasing evidence base for dementia risk reduction interventions into effective health promotion programs. The science of behaviour change will be

critical given the evidence-to-practice gap. This emphasises the importance of co-design to empower individuals to modify their risk. For health professionals, education and training on dementia risk factors and skills in motivational interviewing and behaviour change principles should be prioritised.

6. Strengthen dementia prevention public health campaigns embracing Australians' diversity, particularly Aboriginal and Torres Strait Islander Australians. Australian-specific dementia prevention guidelines that inform public health campaigns need to appeal to all Australians, embracing geographic, socio-economic, cultural, linguistic, social, ethnic, age, gender, and sexual diversity. This is particularly important for Aboriginal and Torres Strait Islander people, for whom dementia prevalence is three to five times higher than the general population. These measures need to be equitable and not disadvantage vulnerable groups that may already have reduced access to resources.

7. Resource and coordinate a whole-of-community approach including government, public and private health care, community services and education sectors to operationalise guidelines and multifaceted dementia prevention programs throughout life. Dementia prevention is everyone's business. Successful public health and disease prevention campaigns have required a coordinated effort across all levels of the health sector, government, policy makers, non-government organisations, research, education, industry and the community. Yet, many Australians do not believe that dementia risk can be reduced.¹⁴ Dementia prevention is complex due to stigma, literacy, and multifactor risks throughout life. The success of widely known public health campaigns in Australia (eg, Quit for Life and Slip, Slop, Slap) is attributable to their focus on behaviour change using a single behaviour or risk factor, informed by knowledge of barriers and enablers. The Dementia Australia Your Brain Matters campaign was targeted at raising public awareness for dementia, but this was not sustained beyond the funding period (2012–2015). The report from the *Lancet* Commission identifies educational attainment in early life as an impactful risk factor⁴ and this should be prioritised given its broader socio-economic benefits. There are specific mid-life (hearing loss, traumatic brain injury, hypertension, alcohol intake, obesity) and late-life factors (smoking, depression, social isolation, physical inactivity, diabetes, air pollution) which offer opportunities for risk reduction across the lifespan.⁴ From a practical perspective, as many dementia risk factors are shared with other chronic conditions, particularly vascular risk factors, these may present the best opportunity for greatest impact.

8. Mobilise peak health advocacy bodies to promote and coordinate public health messaging on dementia risk factors that cut across chronic conditions. How do we ensure value for money and sustainability of dementia prevention public health campaigns? A unified approach with clear messaging communicated through media, community organisations, and health professionals promoting shared responsibility is crucial. An initial focus on risk factors with the highest population-attributable risk (physical inactivity and midlife obesity) is recommended to improve wellbeing and reduce risk for multiple chronic conditions. They are also ideal for integrated programs

given their overlap with vascular risk factors and successful campaigns (eg, smoking cessation). A key step is the coordination and pooling of resources between peak advocacy bodies such as Dementia Australia, Diabetes Australia, and the Heart Foundation, with clear messaging focusing on single risk factors that have multiple benefits. In clinical practice, this facilitates approaches that are tailored to an individual's experiences and motivation. For example, motivation for increasing physical activity for one individual may arise from receiving a result of impaired glucose tolerance, while for another it may be the experience of having a family member living with heart disease or dementia.

Australia has excellent health infrastructure and an international reputation for dementia prevention due to our depth of clinical, research, and knowledge translation expertise. If we are committed to achieving the ambitious targets of reduced dementia prevalence and incidence, we must shine a spotlight on dementia prevention across all levels of society. To achieve this, the National Health and Medical Research Council National Institute for Dementia Research (NNIDR) Dementia Prevention Special Interest Group proposes this Dementia Prevention Action Plan for Australia.

It is time for a call to action in the fight against dementia: dementia prevention needs to be the next international public health area of focus, with Australia playing a leading role.

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Dementia Prevention Action Plan