



# The role of pharmacists in the early detection of dementia

BY DEIRDRE CRIDDLE

*'Even then, more than a year earlier, there were neurons in her head, not far from her ears that were being strangled to death, too quietly for her to hear them.'*

– from *Still Alice* by Lisa Genova, 2009.

Currently, more than 332,000 Australians are living with dementia.<sup>1</sup> Without a medical breakthrough, it is estimated that there will be three million new cases of dementia in Australia between 2012 and 2050.<sup>1</sup> Awareness and early diagnosis are crucial to meeting the substantial challenge that dementia poses to Australia's health care system. Pharmacists can play a vital role in recognising the early symptoms of dementia and encouraging their customers to seek an early diagnosis.

## What is dementia?

Dementia is not one specific disease. Rather, it is a syndrome that includes a wide range of symptoms related to impaired brain function. Dementia can affect memory, behaviour and cognitive skills. The hallmark of dementia is the inability to carry out everyday activities as a consequence of diminished cognitive ability.<sup>2</sup>

Dementia is the single greatest cause of disability in Australians aged 65 years or older. It is also the third leading cause

of death.<sup>3</sup> Dementia can happen to anybody, but it is more common with age. Dementia affects almost one in 10 people over 65, increasing to three in 10 people over the age of 85 years.<sup>1</sup> Dementia was once referred to as 'senility' or 'senile dementia', reflecting the formerly widespread but incorrect belief that serious mental decline is a normal part of ageing.

There are many causes of dementia. The most common is Alzheimer's disease. This condition accounts for at least half of all cases and is associated with distinctive changes in the brain tissue in the form of 'tangles and plaques'.<sup>4</sup>

Vascular dementia is the second most common cause of dementia (approximately 20% of cases) and is associated with problems of blood circulation in the brain. Mixed dementia is also common and occurs when elements of both Alzheimer's disease and vascular dementia occur simultaneously.<sup>4</sup> Dementia with Lewy bodies' accounts for 15% of all cases and is marked by fluctuating alertness and attention, hallucinations, falls and Parkinsonism. While fronto-temporal dementia is rarer, comprising only 5% of dementia cases, it represents the second most common cause of dementia in patients less than 65 years

*Deirdre Criddle* is a Complex Care Coordinator at Sir Charles Gairdner Hospital and a visiting lecturer for the Master of Pharmacy at The University of Western Australia. She is also an accredited Pharmacist, working in aged care and as a consultant pharmacist for Dementia Behaviour Management Advisory Service, Alzheimer's WA.

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## LEARNING OBJECTIVES

After reading this article, pharmacists should be able to:

- Identify the early signs of dementia
- Understand the resources available for helping customers who are concerned about memory loss or dementia
- Recognise the benefits of early detection for customers with dementia.

Competency standards (2010) addressed: 1.3, 6.1, 6.2.

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after Alzheimer's disease. Behavioural changes, such as disinhibition, social isolation or apathy are the earliest signs of the condition.

## Early signs of dementia

The early signs of dementia can be subtle and differ between people. On average, families notice symptoms of dementia three years before a firm diagnosis is made.<sup>1</sup> Alzheimer's disease is characterised by an insidious onset of symptoms with initial forgetfulness that progresses to profound memory impairment. Problems with 'executive function' such as planning, organising, strategising, recalling details and managing 'time and place' may be seen early in the course of the disease. Memory loss, particularly remembering recent events, is often the first sign that people notice.

### Warning signs of dementia<sup>5</sup>

- memory loss that affects day-to-day function
- difficulty performing familiar tasks
- confusion about time and place
- problems with language
- problems with abstract thinking
- poor or decreased judgment
- misplacing things
- changes in personality or behaviour
- a loss of initiative.

## Benefits of detecting dementia early

*'The first step in addressing the health care needs of individuals with dementia is to provide an accurate and timely diagnosis. Unfortunately a timely diagnosis is not the experience of many people with dementia, their families and carers, and improving the capacity of the current primary care system to do better is a high priority for consumers.'* Glenn Rees, AM, CEO Alzheimer's Australia<sup>4</sup>

Dementia is often not recognised early in primary care, with a delay from the onset of symptoms to presentation to the general practitioner (GP). This is often due to stigma, lack of recognition or reluctance to seek help by the

patient,<sup>6</sup> and lack of knowledge about dementia or reluctance to undertake assessments on the part of the GP.<sup>7</sup>

A recent poll in the UK found older people may be more scared of dementia than cancer<sup>8</sup> and this may contribute to the delay in seeking assistance. Symptoms similar to dementia can be caused by several different diseases and conditions, some of which are treatable and reversible, including infections, depression, medication side-effects or nutritional deficiencies.<sup>4</sup> The sooner the cause of these symptoms is identified, the sooner treatment of potentially reversible causes can begin. A medical review of any symptoms and identification of the cause of symptoms may also bring relief to the patient and carer in the form of an explanation for 'what's going wrong?'<sup>4</sup>

Early diagnosis allows people with dementia to plan ahead while they still have the capacity to make important decisions about their future care.<sup>9</sup> The patient and their family can then receive timely, practical information, advice and support. In addition, early diagnosis may alleviate anxiety by explaining symptoms of concern. Only through receiving a diagnosis of Alzheimer's disease at a relatively early stage of the disease will patients be eligible to receive subsidised (PBS) access to available drug therapies that for some people may temporarily improve cognition and enhance their quality of life.<sup>4,10</sup> A diagnosis of dementia (Alzheimer's disease or other causes) can also facilitate referral to support services and access to a range of non-drug interventions that can help to promote independence and enhance quality of life.

## Pharmacists are a valuable member of the healthcare team

Pharmacists play a vital role in the management of dementia. There are many ways pharmacists can support not only customers living with a diagnosis

but also those who may be at risk from developing dementia.

## Known modifiable risk and protective factors for dementia

Age is the single biggest risk factor for any form of dementia. However, there are a number of modifiable lifestyle-related factors that are known to increase or reduce dementia risk.

### Risk factors<sup>11,12</sup>

- smoking
- type 2 diabetes
- high cholesterol levels
- obesity
- hypertension
- excessive alcohol consumption.

### Protective factors<sup>11,12</sup>

- physical activity
- lifetime intellectual engagement
- leisure/social activity
- higher education
- cholesterol lowering drugs for those with high cholesterol
- anti-hypertensive (blood pressure lowering) drugs for those with high blood pressure.

For more information, see Alzheimer's Australia's *Your Brain Matters* program: [www.yourbrainmatters.org.au](http://www.yourbrainmatters.org.au)

## The pharmacist's role in public understanding and awareness

Public awareness is important in encouraging early diagnosis of dementia and removing stigma. Each year in September, Dementia Awareness Month offers community pharmacists the opportunity to raise public awareness, reduce stigma and dispel the myths surrounding dementia in a non-threatening way. This can be done by offering Alzheimer's Australia's free help sheets to people who are concerned or by actively encouraging customers to consider a memory screening test with their GP.

Some pharmacies have embraced 'dementia-friendly' environments using the Alzheimer's Australia's Dementia Friendly Communities Toolkit.<sup>13</sup> These pharmacies have trained staff to better understand dementia and effectively communicate with people living with dementia. Some pharmacies have gone further and have established 'memories choirs' which encourage people living with dementia to share their past experiences through music and weekly 'dementia cafés' to provide a supportive meeting place for people with dementia and their carers. Through these initiatives, trained staff can take a leadership role by integrating people living with dementia into their local communities.<sup>14</sup>

pharmacists have with their customers cannot be underestimated. With the early signs of dementia being so subtle and variable, pharmacists are often the first healthcare professional who can identify changes in their customer's usual demeanour, behaviour or cognition. People with early-stage dementia may hold negative connotations regarding becoming old and forgetful and try to present themselves in the best possible way in order to be seen as coping.<sup>4</sup> An excerpt from research in progress provides insights into how GPs perceive the process of disclosure regarding dementia diagnosis and why a collaborative approach with pharmacists could prove helpful:

and potential problems with cognition. This can serve as a helpful introduction to difficult conversations about memory loss, problems with cognition and the importance of educating customers and their families about the benefits of early detection and diagnosis.

Pharmacists can also highlight the value of medication review with their customers – advising the importance of a comprehensive medicines check where problems of memory loss, forgetfulness or cognitive impairment become a concern. A Home Medicines Review can provide an ideal opportunity for a collaborative approach to medication management, involving the patient's usual GP, pharmacist and carer. The pharmacist can explore the potential contribution of medication to problems with cognition or confusion in the comfort and privacy of the patient's home, as well as having the opportunity to gain an insight into how well they are managing at home.

If customers are reluctant to have a Home Medicines Review, a Medscheck may provide an opportunity for an in-pharmacy check where the pharmacist can explore medication management concerns and issues of cognition further.

**“HAVING A TRUSTED LONG-TERM RELATIONSHIP WITH CUSTOMERS MAY ALLOW PHARMACISTS TO APPROACH A DIFFICULT TOPIC WITH SENSITIVITY AND TACT.”**

As one of the most accessible and regularly visited healthcare professionals in primary care, pharmacists can play a vital role in recognising the early symptoms of dementia. As dementia more commonly occurs in older age groups, diseases such as hypertension, diabetes, depression and arthritis often co-exist and can complicate diagnosis.<sup>15</sup> Patients with these diseases are high users of health services, and older people with three or more chronic conditions will see a doctor on average every month and a pharmacist every eight days.<sup>16</sup> Therefore, pharmacists are ideally placed to engage customers who present with the early signs of dementia and encourage referral to the patient's GP for follow up.

The value of regular contact and the importance of good relationships

*‘The hardest thing is if the person's got obvious memory loss and they either, or their family, have chosen to significantly ignore it...Then trying to bring it up it makes it harder’ (GP#8).<sup>4</sup>*

**Polypharmacy and dementia**

Having a trusted long-term relationship with customers may allow pharmacists to approach a difficult topic with sensitivity and tact. The focus of most pharmacists' interactions with their customers understandably centres on medication management. Polypharmacy is a reality for many elderly customers being treated for multiple medical conditions, so there are often opportunities as part of usual counselling with dispensing to ask open ended questions regarding side effects

**Medication self-management**

While the use of dose administration aids (e.g. *WebsterPaks*) are seen by most healthcare professionals as an ideal tool to reduce medication misadventure and improve safety,<sup>4</sup> some customers become defensive when these are recommended. While certain customers and their carers will be appreciative of the value of this service, recognising the benefits in safety, time and stress, others will consider such suggestions as an 'insult to their ability to cope'. Pharmacists are well-versed in dealing diplomatically with the issue of medication self-management and often employ an iterative approach, revisiting this service regularly where they have concerns about the ability of their customers to manage medications safely.

## Where can I find support and information?

Alzheimer's Australia offers a range of information, practical advice and support services for dementia. Free help sheets are available to assist customers seeking information about memory problems or other dementia-related concerns. Other resources and support services that are available include:

- Alzheimer's Australia Detect Early website: [www.detectearly.org.au](http://www.detectearly.org.au)
- Alzheimer's Australia *Worried About Your Memory?* Brochure with the Memory Concerns Checklist at: [www.fightdementia.org.au/common/files/NAT/2013\\_WAYM-DL\\_6pp.pdf](http://www.fightdementia.org.au/common/files/NAT/2013_WAYM-DL_6pp.pdf)
- Alzheimer's Australia's *Your Brain Matters* risk reduction program at: [www.yourbrainmatters.org.au](http://www.yourbrainmatters.org.au)
- Alzheimer's Australia. Fact sheet: Memory changes at: [www.fightdementia.org.au/common/files/NAT/20130912\\_NAT\\_HS\\_AboutDementiaHelpSheet\\_12.pdf](http://www.fightdementia.org.au/common/files/NAT/20130912_NAT_HS_AboutDementiaHelpSheet_12.pdf)
- Alzheimer's Australia. Fact sheet: Changed behaviour at: [www.fightdementia.org.au/common/files/NAT/20130912\\_NAT\\_HS\\_ChangedBehavioursHelpSheet\\_1.pdf](http://www.fightdementia.org.au/common/files/NAT/20130912_NAT_HS_ChangedBehavioursHelpSheet_1.pdf)

Alzheimer's Australia is the charity for people with dementia and their families and carers. As the peak body, it provides advocacy, support services, education and information.

The National Dementia Helpline: 1800 100 500 (The National Dementia Helpline is an Australian Government Initiative)

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QUESTIONS

### 1. Dementia:

- a) Affects one in three people over the age of 65 years.
- b) Is not a normal part of aging.
- c) Is characterised by sudden onset profound memory impairment.
- d) Is easily detected by a blood test.
- e) Is an acute confusional state affecting people over the age of 65 years.

### 2. Symptoms similar to dementia can be caused by:

- a) Infections.
- b) Hyperthyroidism.
- c) Nutritional deficiencies or medication side effects.
- d) A and C.
- e) All of the above

### 3. Dementia with Lewy bodies:

- a) Occurs more commonly in patients with hypertension and diabetes.
- b) Is characterised by sudden onset memory loss.
- c) Is the rarest type of dementia.
- d) Is marked by fluctuating alertness and attention, hallucinations and falls.
- e) Is associated with distinctive changes in the brain tissue in the form of 'tangles and plaques'.

### 4. Early detection of dementia:

- a) Causes unnecessary anxiety and denial.
- b) Is unlikely to be helpful due to the irreversible nature of the disease.
- c) Assists patients and families to receive timely practical information and support.
- d) Is managed well in the primary care setting.
- e) Can be facilitated by routine blood tests and X-rays.

### 5. Common early warning signs of dementia include:

- a) Intermittent improvements in coordination.
- b) Orientation in time and place.
- c) Acute confusional state.
- d) Problems with language and memory loss that affects day-to-day function.
- e) Impulsive behaviour.