What is dementia?

This help sheet describes dementia, who gets it and some of its most common forms. It describes some early signs of dementia and emphasises the importance of a timely medical diagnosis.

Dementia describes a collection of symptoms that are caused by disorders affecting the brain. It is not one specific disease.

Dementia affects thinking, behaviour and the ability to perform everyday tasks. Brain function is affected enough to interfere with the person's normal social or working life. The hallmark of dementia is the inability to carry out everyday activities as a consequence of diminished cognitive ability.

Doctors diagnose dementia if two or more cognitive functions are significantly impaired. The cognitive functions affected can include memory, language skills, understanding information, spatial skills, judgement and attention. People with dementia may have difficulty solving problems and controlling their emotions. They may also experience personality changes. The exact symptoms experienced by a person with dementia depend on the areas of the brain that are damaged by the disease causing the dementia.

With many types of dementia, some of the nerve cells in the brain stop functioning, lose connections with other cells, and die. Dementia is usually progressive. This means that the disease gradually spreads through the brain and the person's symptoms get worse over time.

Who gets dementia?

Dementia can happen to anybody, but the risk increases with age. Most people with dementia are older, but it is important to remember that most older people do not get dementia. It is not a normal part of ageing, but is caused by brain disease. Less commonly, people under the age of 65 years develop dementia and this is called 'younger onset dementia'.

There are a few very rare forms of inherited dementia, where a specific gene mutation is known to cause the disease. In most cases of dementia however, these genes are not involved, but people with a family history of dementia do have an increased risk. For more information see the help sheet **About Dementia 10: Genetics of dementia**.

Certain health and lifestyle factors also appear to play a role in a person's risk of dementia. People with untreated vascular risk factors including high blood pressure have an increased risk, as do those who are less physically and mentally active. Detailed information about dementia risk factors is available at **dementia.org.au/risk-reduction**.

What causes dementia?

There are many different diseases that cause dementia. In most cases, why people develop these diseases is unknown. Some of the most common forms of dementia are:

Alzheimer's disease

Alzheimer's disease is the most common form of dementia, accounting for around two-thirds of cases. It causes a gradual decline in cognitive abilities, often beginning with memory loss.

Alzheimer's disease is characterised by two abnormalities in the brain – amyloid plaques and neurofibrillary tangles. The plaques are abnormal clumps of a protein called beta amyloid. The tangles are bundles of twisted filaments made up of a protein called tau. Plaques and tangles stop communication between nerve cells and cause them to die. For more information see the help sheet on **About Dementia 13: Alzheimer's disease**.

Vascular dementia

Vascular dementia is cognitive impairment caused by damage to the blood vessels in the brain. It can be caused by a single stroke, or by several strokes occurring over time.

Vascular dementia is diagnosed when there is evidence of blood vessel disease in the brain and impaired cognitive function that interferes with daily living. The symptoms of vascular dementia can begin suddenly after a stroke, or may begin gradually as blood vessel disease worsens. The symptoms vary depending on the location and size of brain damage. It may affect just one or a few specific cognitive functions. Vascular dementia may appear similar to Alzheimer's disease, and a mixture of Alzheimer's disease and vascular dementia is fairly common. For more information see the help sheet on **About Dementia 16: Vascular dementia**.

Lewy body disease

Lewy body disease is characterised by the presence of Lewy bodies in the brain. Lewy bodies are abnormal clumps of the protein alpha-synuclein that develop inside nerve cells. These abnormalities occur in specific areas of the brain, causing changes in movement, thinking and behaviour. People with Lewy body disease may experience large fluctuations in attention and thinking. They can go from almost normal performance to severe confusion within short periods. Visual hallucinations are also a common symptom.

Three overlapping disorders can be included with Lewy body disease:

- Dementia with Lewy bodies
- Parkinson's disease
- Parkinson's disease dementia

When movement symptoms appear first, Parkinson's disease is often diagnosed. As Parkinson's disease progresses most people develop dementia. When cognitive symptoms appear first, this is diagnosed as dementia with Lewy bodies.

Lewy body disease sometimes co-occurs with Alzheimer's disease and/or vascular dementia. For more information, see the help sheets on **Lewy body disease**.

Frontotemporal dementia

Frontotemporal dementia involves progressive damage to the frontal and/or temporal lobes of the brain. Symptoms often begin when people are in their 50s or 60s and sometimes earlier. There are two main presentations of frontotemporal dementia – frontal (involving behavioural symptoms and personality changes) and temporal (involving language impairments). However, the two often overlap.

Because the frontal lobes of the brain control judgement and social behaviour, people with frontotemporal dementia often have problems maintaining socially appropriate behaviour. They may be rude, neglect normal responsibilities, be compulsive or repetitive, be aggressive, show a lack of inhibition or act impulsively.

There are two main forms of the temporal or language variant of frontotemporal dementia. Semantic dementia involves a gradual loss of the meaning of words, problems finding words and remembering people's names, and difficulties understanding language. Progressive non-fluent aphasia is less common and affects the ability to speak fluently.

Frontotemporal dementia is sometimes called frontotemporal lobar degeneration (FTLD) or Pick's disease. For more information, see the help sheet on **About Dementia 17: Frontotemporal dementia**, or visit the Frontier research group website **neura.edu.au**

Is it dementia?

There are a number of conditions that produce symptoms similar to dementia. These can often be treated. They include some vitamin and hormone deficiencies, depression, medication effects, infections and brain tumours.

It is essential that a medical diagnosis is obtained at an early stage when symptoms first appear to ensure that a person who has a treatable condition is diagnosed and treated correctly. If the symptoms are caused by dementia, an early diagnosis will mean early access to support, information and medication should it be available.

What are the early signs of dementia?

The early signs of dementia can be very subtle, vague and may not be immediately obvious. Some common symptoms may include:

- Progressive and frequent memory loss
- Confusion
- Personality change
- Apathy and withdrawal
- Loss of ability to perform everyday tasks

What can be done to help?

At present there is no cure for most forms of dementia. However, some medications have been found to reduce some symptoms. Support is vital for people with dementia and the help of families, friends and carers can make a positive difference to managing the condition.

Further Information

Dementia Australia offers support, information, education and counselling. Contact the National Dementia Helpline on **1800 100 500**, or visit our website at **dementia.org.au**

Interpreter

For language assistance phone the Translating and Interpreting Service on **131 450**