

DEMENTIA 1: RECOGNISING SYMPTOMS AND RISK FACTORS

AUTHORS **Bethany Shackleton, MSc, BA**, is guideline implementation adviser, National Collaborating Centre for Mental Health; **Karen Harrison, MA, RMN, RNMH, RGN**, is senior nurse, mental health services for older people, Leicestershire Partnership NHS Trust; **Clare Taylor, DPhil, MPhil, BA**, is editor, National Collaborating Centre for Mental Health.

ABSTRACT Shackleton, B. et al (2008) *Dementia 1: Symptoms and risk factors. Nursing Times*; 104: 6, 28–29.

This two-part unit discusses the NICE and Social Care Institute for Excellence (SCIE) dementia guideline (2006). Part 1 outlines the clinical issue of dementia and can be used as a learning tool to aid recognition of signs of dementia and its risk factors.

People with dementia and their families often receive care from a combination of health and social services. Professionals from these two sectors may have different perspectives (the medical model and the social care model) and responses to dementia care; it is therefore important to join up the two perspectives. This was a primary aim in the development of comprehensive guidance on dementia care provision (NICE and SCIE, 2006).

Approximately 700,000 people in England and Wales have dementia (Alzheimer's Society, 2008); 5% of people over 65 and 20% over 80 have the condition. Dementia services cost more than those for cancer, stroke and heart disease combined. While caring for people with dementia is already a significant part of nurses' role, this is set to increase as a result of an ageing population.

TYPES OF DEMENTIA

The medical model characterises dementia by global cognitive impairment, which is associated with deterioration in functioning and, in many people, behavioural and psychiatric disturbances.

Although most prevalent in people over 65, the condition can develop in younger

LEARNING OBJECTIVES

1. Define dementia and describe the signs and symptoms of the four main types.
2. Identify patients who are at greatest risk of developing dementia.

people. There may be differences in aetiology and other characteristics between these two groups, and it is important to recognise this because patients may benefit from different approaches (Harvey et al, 2003).

There are four main types of dementia:

- | Alzheimer's disease (AD) accounts for 60% of all cases and is characterised by 'plaques' and 'tangles' in brain structures that lead to the death of brain cells. It is progressive, affecting more parts of the brain over time;
- | Vascular dementia (VaD) accounts for 15–20% of all cases and is caused by a problem in the supply of blood in the brain;
- | Dementia with Lewy bodies (DLB) accounts for 15–20% of all cases and is caused by small protein deposits in nerve cells that block chemical messages in the brain;
- | Frontotemporal dementia (FTD) accounts for 5% of all cases and is a progressive degeneration of the frontal lobes of the brain.

Many people, especially older people, will present with a 'mixed dementia', which is a combination of two or more of the above types.

There are other less prevalent types such as Creutzfeldt-Jakob disease (CJD), alcohol related-dementia and Parkinson's disease dementia (PDD). In some other forms the symptoms can be reversible – this can occur in psychiatric disorders (dementia associated with depression) and endocrine abnormalities (B12 deficiency), but the majority of cases are non-reversible and need complicated and measured care plans.

Clinical dementia is different from the normal cognitive decline associated with

ageing. Its symptoms are more severe and, as the deficits are more global, there is more functional disability.

A significant problem is defining the difference between normal ageing (which may involve some cognitive decline) and a pre-clinical state of dementia. Mild cognitive impairment (MCI), which is a syndrome still under clarification, refers to a decline in one specific area of brain functioning that is more pronounced than would be expected for the age and circumstances of the individual concerned (Petersen et al, 1999). For example, a person experiencing memory difficulties that are greater than would be expected for someone of their age, but with no other problems, may be classified as 'amnesic'. However, they should be paid close attention in case their symptoms develop into dementia.

SYMPTOMS

Dementia is characterised by physical and social functional disabilities. Generally, it is associated with progressive disturbances in memory, comprehension, language, thinking, orientation, calculation, learning capability and judgement. These are commonly accompanied by deterioration in emotional control, social behaviour and motivation.

Symptoms of AD

- | Initially, there is a loss of memory (especially concerning new information);
- | Later, problems may develop with:
 - Language;
 - Praxis (ability to perform habitual actions);
 - Executive functions (higher-level abilities that influence more basic functions, for example, initiating, monitoring and planning);
 - Challenging behaviour such as depression, apathy, agitation, disinhibition, delusions and hallucinations, wandering, aggression, incontinence and altered eating habits.

Symptoms of VaD

- | Attention and executive/planning problems;
- | Gait disturbances;



THIS ARTICLE HAS BEEN DOUBLE-BLIND PEER-REVIEWED

- | Apraxia (the inability to carry out desired movements);
- | Challenging behaviour (most commonly depression and apathy).

Symptoms of DLB

- | Recurrent visual hallucinations;
- | Fluctuating cognitive disturbance;
- | Motor features of Parkinsonism;
- | Falls;
- | Disturbances of consciousness;
- | Autonomic dysfunction (disturbances of the body's unconscious functions, such as heart rate, blood pressure and so on);
- | Rapid eye movements (REM) sleep behaviour disorder.

Symptoms of FTD

- | Language disturbance;
- | Behavioural difficulties (apathy, disinhibition).

COURSE AND PROGNOSIS

In the four main types of dementia, cognitive deterioration leads to physical disability and death. Cognition and the ability to function in daily tasks decline progressively in AD, leading to an inability to perform activities such as eating and using the toilet independently. Disturbances in behaviour can increase as the condition worsens. DLB

and FTD are also associated with progressive deterioration, although people with DLB can experience fluctuations in their levels of confusion. The course of VaD is less predictable, with some people experiencing relative stability for a time. However, a subsequent vascular event can cause a sudden decline in cognitive function.

Physical consequences

People with dementia are more prone to other illnesses, especially as the condition worsens. This is due to attendant problems with diet, lack of personal care, decline in mobility and difficulties in taking medication. Those with VaD and DLB may also have other conditions such as stroke or Parkinson's disease.

RISK FACTORS

Genetic factors

Some chromosomal abnormalities have been identified that account for FTD but some hereditary traits for dementia have not yet been accounted for. For example, people with a family history of late-onset AD and VaD are at an increased risk of the condition, but no chromosomal abnormality has been identified. People with Down's syndrome also have a higher risk of AD than the general population (Rabe et al, 1990).

Environmental factors

Some environmental influences can increase a person's chance of developing dementia. These will have a greater effect on people who already have a genetic predisposition to developing the condition. The following are either independent or cumulative moderating environmental risk factors:

- | Age;
- | Smoking;
- | High blood pressure;
- | Diabetes;
- | Hyperlipidaemia;
- | Past history of psychiatric problems (especially depression and schizophrenia).

High educational attainment or high pre-morbid IQ are protective factors against the development of dementia.

Social implications of dementia

Before the 1990s, dementia was viewed as a physical disease that incapacitated people and left them without hope. Care services are trying to change this culture and ensure that people with dementia are enabled to remain independent for as long as possible.

KEY REFERENCES

Alzheimer's Society (2008) *Statistics*. www.alzheimers.org.uk

Gilliard, J. et al (2005) Dementia care in England and the social model of disability: lessons and issues. *Dementia*; 4: 571-586.

Harvey, R.J. et al (2003) The prevalence and causes of dementia in people under the age of 65 years. *Journal of Neurology, Neurosurgery and Psychiatry*; 74: 1206-1209.

NICE, SCIE (2006) *Dementia: Supporting People with Dementia and Their Carers in Health and Social Care*. London: NICE. www.nice.org.uk

The full reference list for this part of the unit is available in Portfolio Pages at nursingtimes.net

However, many people now being diagnosed with dementia will have grown up seeing patients excluded from society and may expect the same to happen to them. This may cause them to hide their symptoms, making diagnosis even more difficult.

Seven key points from the social model of dementia have significant implications for patients, carers and society's perception:

- | Dementia is not the fault of the individual;
- | The focus is on the skills and capacities the person retains rather than loses;
- | People with dementia can be fully understood (history, likes and dislikes);
- | The influence of an enabling or supportive environment is recognised;
- | The key value of appropriate communication is endorsed;
- | Opportunities should be taken for rehabilitation or re-enablement;
- | The responsibility to reach out to people with dementia lies with people who do not (yet) have dementia (Gilliard et al, 2005).

Care should accommodate the social, physical, spiritual and emotional aspects of dementia and focus on nurturing activities and pastimes people with dementia and their family/friends can enjoy. Appropriate interventions can have a significant impact on quality of life for patients and carers. n

| *Part 2 of this unit, which explores nurses' role in early diagnosis and assessment, will be published in next week's issue.*

PORTFOLIO PAGES ONLINE



Portfolio Pages can be filed in your professional portfolio as evidence of your learning and professional development. They contain learning activities that correspond to the learning objectives in this unit, presented in a convenient format for you to print out or work through on screen.

| For the Portfolio Pages corresponding to this unit, log on to nursingtimes.net, click NT Clinical and Archive then click Guided Learning