Dementia
An interprofessional presentation
Dementia - an interprofessional presentation

At the end of this presentation students will be able to:
• Give a definition of dementia
• Discuss types of dementia
• Identify areas of the brain affected by dementia
• Describe signs and symptoms of dementia
• Explain risk factors and prevention
• Develop an interprofessional plan of care for a dementia sufferer

THIS CLINICAL TRAINING INITIATIVE IS SUPPORTED BY FUNDING FROM THE AUSTRALIAN GOVERNMENT UNDER THE INCREASED CLINICAL TRAINING CAPACITY (ICTC) PROGRAM
What is Dementia?
What is Dementia?

• Dementia is a physical illness that causes problems with memory, thinking, speaking and doing.

• Physical changes in the structure of the brain cause dementia. These changes can be seen on brain scans which can help in diagnosing dementia.

• “Try to remember that a client with dementia is not mentally ill and is not going mad”.

www.alzheimers.org.uk

This clinical training initiative is supported by funding from the Australian Government under the Increased Clinical Training Capacity (ICTC) Program
What is Dementia?

• Dementia is a term used to describe the symptoms of a large group of conditions that result in a progressive decline in cognition caused by brain cell death.

• Dementia is a broad term used to describe a loss of memory, intellect, rationality, social skills and what would be considered normal emotional reactions.

• Some individuals may develop behavioural and psychological symptoms including psychotic symptoms.

• [http://www.youtube.com/watch?v=9iXPHhfk_7E](http://www.youtube.com/watch?v=9iXPHhfk_7E)

Alzheimer’s Australia (2009)
Impact of Dementia

The Australian Institute of Health and Welfare classifies dementia as the greatest single contributor to the burden of disability at older ages.

(AIHW 2009)
Types of Dementia

- 62% Alzheimer's disease
- 17% Vascular dementia
- 10% mixed: Alzheimer's disease and vascular dementia
- 4% Lewy bodies
- 3% Other
- 2% Fronto-temporal
- 2% Parkinson's disease dementia

Alzheimer’s Disease

• Physical disease which attacks the brain resulting in impaired memory, thinking and behaviour
• Brain cells die, shrinking the substance of the brain
• Abnormal material builds up creating tangles and plaques, disrupting messages in the brain, which leads to death of brain cells and prevents recall of information
• The first function affected is memory of recent events
• As the disease progresses, long term memory is also lost
• Many of the brain's other functions are also affected and consequently, many other aspects of behaviour are disturbed
The Alzheimer’s Brain

healthy brain

advanced alzheimer's
Vascular Dementia

• Cause: damage to blood vessels in the brain, leading to death of brain cells

• Conditions which may cause damage – high blood pressure, strokes, heart problems, diabetes and high cholesterol

www.alzheimers.org.au
Multi-infarct Dementia

- Most common form of vascular dementia
- Cause - small strokes: mini-strokes or Transient Ischaemic Attacks (TIA)
- Patients are likely to have better insight in the early stages than people with Alzheimer's disease
- Symptoms - include severe depression, mood swings and epilepsy
Lewy Bodies Dementia

- Cause: development of small protein bodies in the brain, causing the death of brain cells
- Shares characteristics with Alzheimer’s and Parkinson’s diseases
- Second commonest cause of dementia after Alzheimer's disease
- Symptoms: may include tremors and stiffness, difficulty with concentration and attention, extreme confusion and difficulties judging distances, often resulting in falls
Fronto Temporal Lobar Degeneration

Group of dementias:
- Pick’s disease
- Progressive non-fluent aphasia
- Semantic dementia
- Fronto temporal dementia

All caused by damage to frontal lobe or temporal parts of the brain
These areas are responsible for behaviour, emotional responses and language skills
Areas of the brain affected by Dementia

Symptoms of Dementia

All classifications of dementia are neurodegenerative diseases, the progressive loss of structure or function of neurons. This means that the symptoms get worse over time.

The speed of change varies between people and between diseases. In most dementias, symptoms progress slowly over several years.

Everybody is affected uniquely.
Symptoms of Dementia

• Decreasing ability to remember, think and make decisions
• Communication and language affected
• Behaviour change. Some become sad or demoralised
• Anxieties or phobias
• Problems with time perception
• Restlessness at night
• Anger or agitation in later stages of dementia
• Unsteady and fall more often
• Require more help with daily activities

www.alzheimers.org.uk
## Risk Factors and Prevention

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<thead>
<tr>
<th>Risk Factors for Dementia</th>
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<tr>
<td><strong>Age</strong></td>
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<td>The risk of Alzheimer's disease, vascular dementia, and several other dementias goes up significantly with advancing age.</td>
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<th><strong>Genetics (Family History)</strong></th>
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<td>As described on the slide &quot;What causes dementia?&quot; researchers have discovered a number of genes that increase the risk of developing Alzheimer’s disease.</td>
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<th><strong>Smoking and Alcohol use</strong></th>
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<td>Studies found smoking significantly increases the risk of mental decline and dementia; and people who smoke have a higher risk of vascular disease, which may be the underlying dementia risk. Large amounts of alcohol appears to increase dementia risk.</td>
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<th><strong>Atherosclerosis</strong></th>
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<td>Interferes with the delivery of blood to the brain and can lead to stroke.</td>
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<th><strong>Cholesterol</strong></th>
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<td>High levels of low-density lipoprotein (LDL), the so-called bad form of cholesterol, appear to significantly increase a person's risk of developing vascular dementia.</td>
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<th><strong>Plasma Homocysteine</strong></th>
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<td>Research has shown that a higher-than-average blood level of homocysteine - a type of amino acid - is a strong risk factor for the development of Alzheimer’s disease and vascular dementia.</td>
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<th><strong>Diabetes</strong></th>
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<td>Diabetes is a risk factor for both Alzheimer's disease and vascular dementia.</td>
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<th><strong>Mild Cognitive Impairment</strong></th>
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<td>While not all people with this condition develop dementia, they do have a significantly increased risk of dementia compared to the rest of the population.</td>
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<th><strong>Down Syndrome</strong></th>
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<td>Studies found that most with Down syndrome develop characteristic Alzheimer’s disease plaques and neurofibrillary tangles by the time they reach middle age. Many also of these individuals also develop dementia symptoms.</td>
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Risk Factors and Prevention

Dementia has same risk factors as cardiovascular disease. The following may help lower risk:

• exercising regularly
• not smoking
• achieving and maintaining a healthy weight
• controlling high blood pressure
• reducing cholesterol level
• controlling blood glucose if you have diabetes
• eating a healthy, balanced diet with lots of fruit and vegetables and low amounts of saturated fat.

Some studies suggest: active life, with interests and hobbies may be beneficial.

Other research: more time in education associated with lower risk.
Is Diet the Answer?

Research:

Mediterranean diet
  • may be related to lower Alzheimer’s disease risk

Modest to moderate alcohol intake, particularly wine
  • some research has shown there may be a lower risk of Alzheimer’s disease

Supplements of vitamins E, B6, B12 and folate
  • randomised clinical trials have shown no cognitive benefit
  • randomised trials for other nutrients or diets and Alzheimer’s disease are not available

Oily fish or taking B vitamins
  • studies so far have had mixed results

Summarised: Existing evidence does not support the recommendation of specific supplements, foods, or diets for the prevention of Alzheimer’s disease

Luchsinger et al. 2007
Medications

- Most of the drugs for Alzheimer's disease fall into a category called cholinesterase inhibitors.

- Doctors may also prescribe other drugs, such as anticonvulsants, sedatives and antidepressants, to treat seizures, depression, agitation, sleep disorders and other specific problems that can be associated with dementia.
Case Study Activity

In groups, examine the following case study and prepare answers for the following questions:

1. How might the client and the carer be feeling?
2. What would a health professional consider when developing a care plan for this individual?
3. Consider how each discipline within the interprofessional health care team can help the individual to achieve their goals.
Case Study 1

Tom is a 79 year old athletic, active widower. Tom was a social worker and cook at his community senior centre where he met Diana, a 79 year old divorcee with two daughters, who was a professional ice dancer before retiring. Tom stated "We have been friends for 14 years and together as a couple for 8". When they first met, they worked out at the gym, swam, and took art classes together. Neither one was looking for a new relationship.
Case Study 1

In 1994, Tom noticed a change in Diana's paintings and in her memory. In 1995, Tom and Diana came to the psychiatric clinic for a memory loss assessment. Diana was diagnosed with Alzheimer's disease.

As the disease progressed, Diana was unable to continue painting, her memory continued to deteriorate, and her mobility decreased causing her to suffer a few falls. She started refusing food and experiencing difficulty with fluids and subsequently became generally weaker. She started to require 24 hour care.

To provide this care, Tom gave up the activities they used to do together and, as time went on, he gave up all outside activities. Tom contacts an outpatient interprofessional health care centre to see if they can offer any support.
Case Study 2

Shelia is a healthy and active 48 year old woman who is the social support for the rural village where she lives with her husband and youngest son. Shelia has two other daughters who both live two hours from home and whom she visits frequently. Shelia loves cooking and entertaining with her friends and swims regularly.

Shelia works as a secretary for a busy building firm in the village and often puts in long hours to ensure smooth running of the office. Shelia is renowned for putting 100% effort into all that she does and is always helping others in times of crisis. Shelia has no past medical history, other than hospital admissions for the births of her children.
Case Study 2

Over the past 12 months, the family had been getting concerned that Shelia was having difficulty ‘finding her words’ and family members needed to finish her sentences more frequently. Shelia is also finding it hard to grasp new ideas and is finding the workload at the office increasingly difficult. Shelia has gone off certain foods and the family are concerned that she is losing weight. The family GP knows her well and decided to refer her to a Neurologist for further tests and assessments.

Following various scans and examinations at the Neurology department, Shelia has been diagnosed with Pick’s disease. Shelia and her family are desperate to find out more about the disease and what help is available for the future.
1. How might the client and carer be feeling?

Client:

- **Shock** - leading to disbelief or denial is a very common reaction. Sometimes denial can be a good thing and can help the client cope with the reality of their disease at their own pace.
- **Fear** - often the biggest fear is of a loss of control – over the future, and over one’s own life. Not knowing what is going to happen can be very frightening indeed.
  - Common fears include:
    - Becoming a burden to one’s family.
    - They may be frightened of passing the condition on to children.
    - Fears of physical indignities, such as becoming incontinent and dribbling.
• **Guilt** is a very common reaction. The patient may think that they have done something wrong, or not tried hard enough to prevent the disease. They may even feel they’re to blame. This is however an organic disease, whatever the type of dementia; it is not their fault.

• **Sense of loss** - the patient may feel sad that perhaps they will not be able to do some of the things they have planned.

• **Relief** - this may seem strange to some, but the patient may feel relieved that they finally have a diagnosis. Now that they have a concrete diagnosis, they can do something about it.

• **Acceptance** - the patient may never accept their illness and will also need to consider driving, health, legal decisions, work, money and benefits. Planning for the future can make things easier to manage later on so they need to take advantage of all the advice, services and support available.
1. How might the client and carer be feeling?

Carer/Family member:

- Angry and sad - the person they care for will never be the same again;
- Stress, depression or anxiety – a lot of changes are happening, which are out of their control, and the pressures on the carer will only increase with time;
- Struggling to combine work with care;
- Worried about finances;
- Lacking time for the other interests in their life;
- Fatigue due to long hours spent caring, lack of breaks, lack of sleep;
- Difficulty maintaining relationships with family and friends;
- Inability to plan for the future;
- Worried about contingency for emergencies, such as if the carer becomes ill;
- Difficulties coping with challenging health problems such as incontinence; and
- Lack of practical skills such as knowing how to lift the client properly.
2. What would a health professional consider when developing a care plan for this individual?

- Support the client and their family/carers with understanding the diagnosis and disease process
- Encourage the client to maintain a healthy diet and exercise program
- Facilitate participation in therapy sessions to improve the client’s symptoms
- Seek further help from outside agencies and support groups
- Encourage the client and their carer to continue seeing their friends and doing the things they enjoy
3. Consider how each discipline within the interprofessional health care team can help the individual to achieve their goals?

Who can help?

Medical Practitioner
Nurse
Dietitian
Exercise Physiologist/Physiotherapist
Occupational Therapist
Clinical Psychologist
Speech Pathologist
Social worker
How do we help?

Medical Practitioner

The Doctor can:
• Carry out a physical examination
• Arrange further tests with a consultant or hospital specialist
• Talk to the client about symptoms and problems associated with the disease
• Review medications
How do we help?

Nurse

• Nurses provide information and offer support on local health services and advise on how to maintain health.
• Community Psychiatric Nurses (CPNs) provide treatment, care and support for people with mental health problems or dementia.
• During the end stage of the disease they can provide nursing care within the client’s own home or within a nursing home setting.
How do we help?

Dietitian

- If the client or carer is worried about poor appetite, weight loss or weight gain, vitamins or food supplements, a Dietitian can provide information and advice.
How do we help?

**Exercise Physiologist/Physiotherapist**

- An Exercise Physiologist or Physiotherapist can provide the client with exercises or therapies to help them move around more easily.
- The exercises will need to be reassessed as the disease progresses.
- Staying active and mobile with regular exercise will help client’s feel active in maintaining their health and mental wellbeing.
How do we help?

Occupational Therapist

• Occupational Therapists can provide adaptations and equipment that will help the client live for as long as possible in their own home. This might include showering equipment, rails, and devices within the kitchen.

• The Occupational Therapist can also put the carer in contact with support organisations and activity groups.
How do we help?

Clinical Psychologist

• Clinical Psychologists can assess memory, learning abilities and other skills.
• They also offer support to cope with any psychological difficulties, particularly if the client or carer is anxious or showing signs of depression.
• Sometimes they may ask the client to write down their feelings as it can help to have a record of the bad times as well as the good.

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How do we help?

Speech Pathologist

• Speech Pathologists can help clients with communication difficulties to communicate with other people more easily. Specifically they may help people with aphasia (loss of ability to produce or comprehend language) and verbal apraxia (speech disorder in which a person has trouble saying what they want to say consistently and correctly).

• Speech pathologists have many ways of working with people with dementia – an example is the use of photos to promote memory and the use of picture prompt cards to assist in everyday living.
How do we help?

Social worker

• Social services departments can arrange many helpful care services for a client. These services may include equipment and adaptations, meals on wheels, home care, day care and care in a care home.
• Social Worker’s also assess whether a client is eligible for any financial support.
Key IPL Discussion Points

1. How can we ensure that the care is client centred?

• Actively encourage client involvement in clinical decision making
• Respond to the changes in the client’s needs
• Discuss with the client what care options are available
• Encourage self management, health promotion and disease prevention
Key IPL Discussion Points

2. How can we demonstrate effective communication with other members of the interprofessional team?

• Show respect and interest when listening to other team members’ ideas and viewpoints; do not dominate discussions and activities
• Come to an agreed care plan
• Use terminology that is understood by members of the interprofessional care team and provide clarification when required
Key IPL Discussion Points

3. How does an interprofessional team differ from a multidisciplinary team?

- Identify where each health disciplines fits within this interprofessional team, acknowledging skills and knowledge of team members
- Consider where disciplines overlap so that duplication is avoided and where disciplines enhance others in the provision of health care
- Identify misconceptions relating to own and health professions listed in this case study
- Holistic client centred care: client is part of the decision making
- Improved communication, written and verbal, from all disciplines involved with the client’s specific care plan.
“Many people say that keeping a sense of humour makes everything easier to bear”

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Images retrieved from:
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http://www.emedicinehealth.com/slideshow_dementia/article_em.htm

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