

# MODULE 1 INTRODUCTION TO DEMENTIA



**01** Definition

**03** Stages of  
dementia

**02** The main types  
of dementia

**04** Treatments of  
dementia

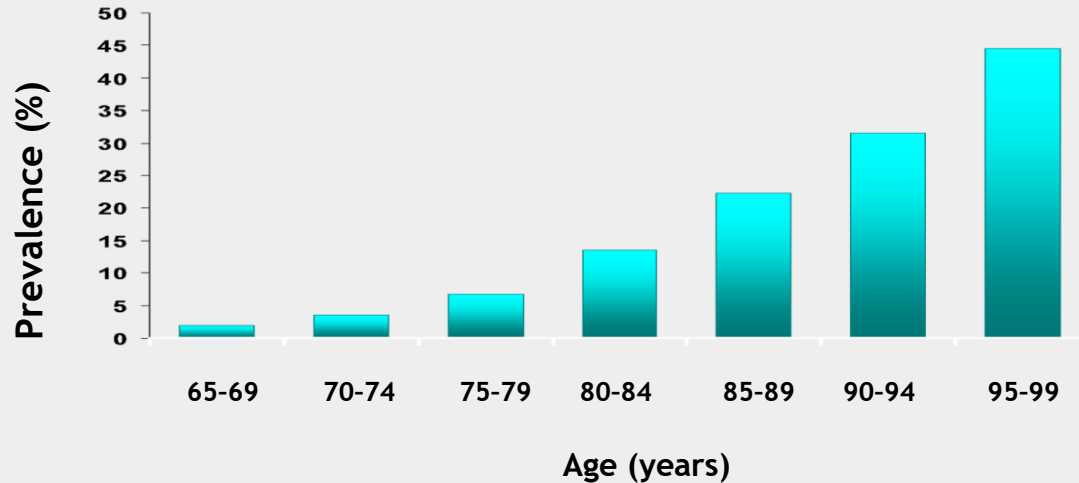
# Alzheimer, what is this?

<https://www.youtube.com/watch?v=la7hO0bZSA4>



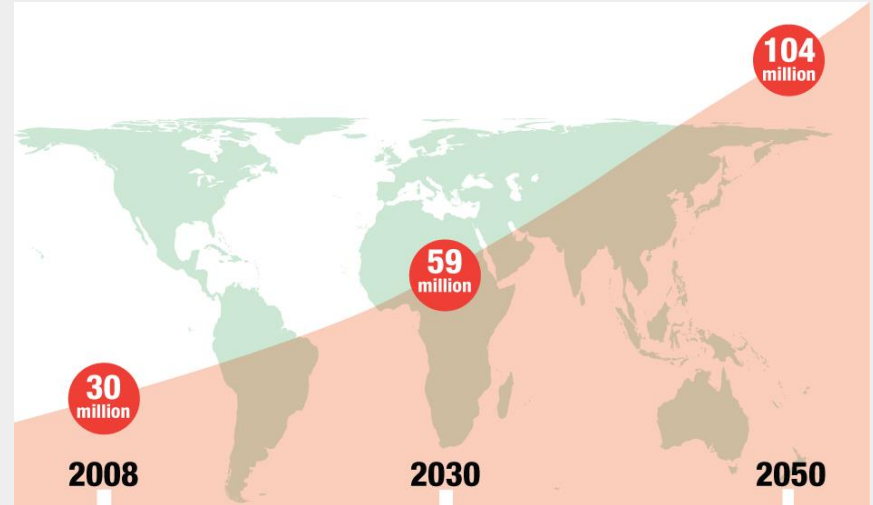
# Dementia in 2022

- Dementia affects 8% of people over 65, a rate that increases significantly with age
- If all people lived to the age of 95, then one in two would suffer from some form of dementia



# Dementia in 2022

- On a global scale, it is estimated that 35,000,000 people suffer from dementia, while 7,300,000 in Europe
- In 2050, it is estimated that this number will rise to 104,000,000 worldwide, while the percentage of elderly people in Europe will constitute 35% of the general population



# Dementia in 2022

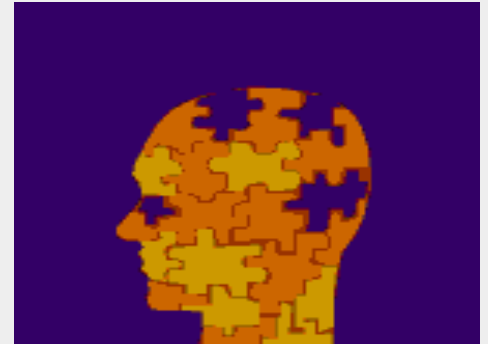
- In Europe, the direct cost of dementia-related health care is at least €77,000,000 per year, while if we include the indirect costs, the amount reaches €170,000,000

# What is dementia?

Refers to a **series of symptoms** that destroy brain cells and cause a gradual and slow deterioration of the person's mental abilities, affecting:

- the memory
- the reason
- the behaviour

and lead to a complete disorganization of his life and personality



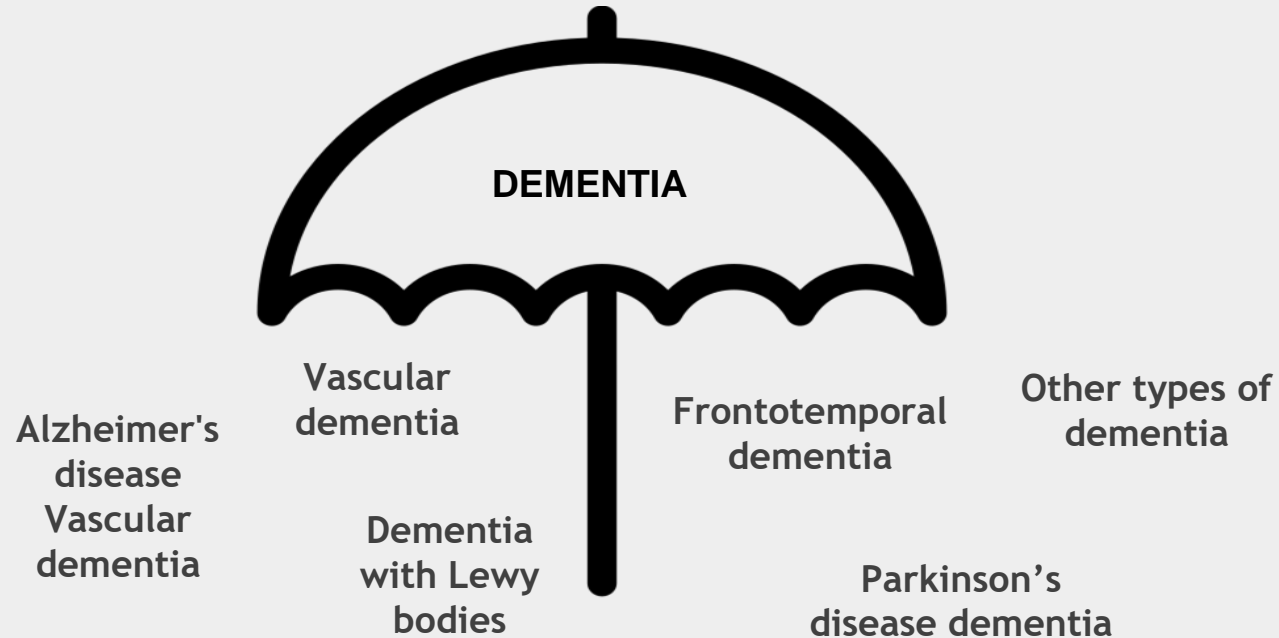
# What is dementia?

Disorder characterized by **impairment of memory** and at least one other mental function:

- **Aphasia** (writing, reading, understanding, naming objects)
- **Apraxia** (movements on command or imitation)
- **Agnosia** (recognition of familiar objects or persons)
- **Impairment of executive functions** (judgment, planning, organization, abstract thinking, problem solving, decision making)
- **Significant impairment of previous functioning** in social and professional life
- **Serious effects on the person's life**



# The main types of dementia



# Reversible forms of dementia

Result of some physical disease, such as:

- Metabolic disorders
- Endocrine diseases
- Traumatic brain injury

or as a result of the toxic effect of some drugs.

These forms can be cured or stabilized.



# Mild Cognitive Impairment (MCI)

- Refers to a condition characterized by impairment of mental functions to a degree greater than expected for age but not to the degree required for a diagnosis of dementia to be made.
- It can **affect speech, or orientation in space.**
- More common is mild cognitive impairment of the amnesic type.
- It can be a sign of dementia, but it can also be due to depression, anxiety, medication side effects or alcohol abuse.

# Vascular dementia

- Damages to the vascular system, causes dysfunction to the supply of blood to the brain
- **Strokes, heart problems, high blood pressure, diabetes and high cholesterol, age, genetic factors** are the risk factors for vascular dementia
- Problems in memory, learning new info and communication
- Vascular dementia has a more stable progress when compared to Alzheimer's disease

# Frontotemporal dementia

- Is characterized by **extreme changes in the personality**
- **Either apathy or disinhibition**
- The damage in the brain is located firstly to the frontal and then to the temporal lobes
- It is gradually progressive
- The ages range varies from **45 to 64 years** old of patients with frontotemporal dementia
- In this type of dementia, *behavior, speech and personality* are more affected than memory

# Dementia with Lewy Body

- Is a progressive type of dementia
- **Early** (delusions, sleep disorders, difficulties in movement) **Middle** (confusion, speech difficulty, motor dysfunctions, paranoia) and **Later** (speech difficulties, muscle rigidity, susceptibility to infections) **Stages**.
- Is **characterized** by visual hallucinations, paranoid delusions and parkinsonism
- The mood and the behavior has rapid shifts

# Dementia with Lewy Body

- Parkinson disease is characterized by **shakiness, tremor, lack of facial expression, stooped posture.**
- 3 out of 4 patients with Parkinson's disease will **experience a decline in their mental functions**, i.e. dementia.
- In PDD, the person is getting slow in processing the information, they have **difficulty in remembering, making judgments or paying attention.**

# Alzheimer disease

- Alzheimer's disease is the most common form of dementia, accounting for **60-70% of cases**.
- It usually occurs in people **over the age of 65**, while it is rare in younger ages





# Alzheimer disease

Alzheimer's disease is named after **Alois Alzheimer**, a German neurologist, who in 1907 first described the symptoms and pathological findings of the disease in the brain of patient Augusta D.



Alois Alzheimer  
1864–1915

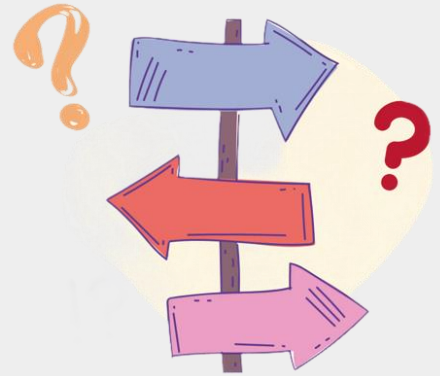


# Symptoms of Alzheimer disease

- They differ both from patient to patient and during the stages of disease progression.
- The progression of the disease may not follow exactly the following course and patients may not experience all the symptoms described

# Early stages in dementia

- Symptoms often go **unnoticed** and are interpreted as normal signs of age:
  - memory difficulties
  - difficulty naming people and objects
  - difficulty making decisions
  - lack of initiative
  - lack of interest in his previous occupations
  - symptoms of depression and irritability



# Middle stages in dementia

- **Difficulties become more apparent** in the middle stage and the person is unable to function independently
  - severe memory impairment
  - difficulty in expression, use of wrong words
  - deterioration of orientation in space/time
  - inability to perform simple daily tasks
  - Weakness/indifference to personal hygiene
  - "inappropriate" or "unusual" behaviors
  - hallucinations or delirium



# Late stages in dementia

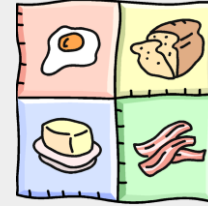
**Absolute dependence of the person on others**, as the symptoms of the disorder are very serious and obvious. The person:

- does not recognize familiar faces
- cannot understand what is happening
- Is unable to serve himself
- loses his orientation within the house
- has difficulty in walking
- is unable to control anal clamps
- may be bedridden or need a wheelchair to get around



# Risk factors for Alzheimer's disease

- Age
- Gender
- Genetic factors
- Vascular factors (cholesterol, diabetes, etc.)
- Medicines
- The mental reserve
- Depression and intense anxiety
- The nutrition



# The treatment of Alzheimer's disease

- Pharmaceutical treatments
- Non-pharmacological interventions
- Counseling / Carer Support







# The treatment of Alzheimer's disease

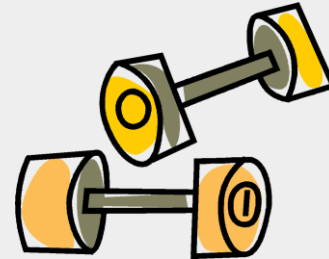
- To date, no **treatment has been found** that prevents or completely stops the progression of the disease
- However, delaying development saves significant benefits
- The combination of both the pharmacological and non-pharmacological interventions is the best way of “treating” dementia

# The treatment of Alzheimer's disease

- **Non-pharmacological interventions:**
  - They **enhance the effectiveness** of medication
  - They are applied on *a **personalized basis***, depending on the needs, capabilities of the individual
  - They have **no side effects**
  - They cost less than pharmaceutical intervention

# The treatment of Alzheimer's disease

- **Non-pharmacological interventions:**
  - Mental empowerment
  - Speech therapy
  - Occupational therapy
  - Therapy of inducing pleasant memories
  - Physiotherapy/Gymnastics
  - Healing through art



# The treatment of Alzheimer's disease

- **Services for caregivers:**
  - Psychoeducational seminars
  - Stress management groups
  - Counseling support
  - Psychotherapy
  - Combination of interventions



# The target of those interventions are caregivers

- To be **informed** and gain a sense of **control over the situation**
- To **recognize** and **modify** the factors that increase their burden
- To manage their negative emotions, such as stress, anger, sadness, guilt. caused by constant care
- **Connect with other carers** and build a network of carers for continued support
- **To improve their quality of life (QoL)**

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# The treatment of Alzheimer's disease

*The best way to treat the disease is a combination of medication and non-medication interventions for both the individual and the caregiver!*

Everyone involved in caring for people with dementia needs **support**, **information** and **education** about coping with the disease, ways of providing care and the resources available.





# Scenario 1

- Mary is 70 years old, married with Jonathan for 35 years. They have 2 daughters and 3 grandsons. Mary was a teacher in the kindergarten, loved cooking and her Labrador dogs.
  - ✓ Now, Mary doesn't want to cook and neglects her dogs.
  - ✓ She repeats the same questions and has troubles in remembering new information
  - ✓ She cannot organize her meetings with her friends and is feeling lonely and depressed
  - ✓ When she cannot find the proper word to describe something she is getting irritated

# Scenario 1

- In which stage is she?
- What type of dementia she maybe has?
- What do you believe that her prognosis is?
- What are her needs in the everyday life?
- How do you believe that Mary is feeling now?
- What are your thoughts on that?

# Scenario 2

- Mike is 75 years old, a father of 3 daughters and 4 grandchildren. He is married to July for 40 years and was plumber. He lost 25 kilos the last 3 years. More to this, he stopped reading his newspaper and doesn't pay attention to the political current events.
- He will never discuss something, unless someone addresses him. Making fun or telling jokes is not in his concerns. Most of the time, he remains silent and idle.

# Scenario 2

- In which stage is he?
- What type of dementia he maybe has?
- What do you believe that his prognosis is?
- How do you believe that Mike is feeling now?
- What are your thoughts on that?

**Do you have any  
questions?**