

Al-Mustaqbal University

College of Science

Human Disease for the Health Professions Theoretical Lecture 8 2024-2025



Alzheimer's Disease

Alzheimer's disease (pronounced "alz-HAI-mirs") is a <u>brain</u> condition that causes a progressive decline in memory, thinking, learning and organizing skills. It eventually affects a person's ability to carry out basic daily activities. Alzheimer's disease (AD) is the most common cause of <u>dementia</u>.

The symptoms of Alzheimer's worsen over time. Researchers believe the disease process may start 10 years or more before the first symptoms appear. AD most commonly affects people over the age of 65.

What is the difference between Azheimers and dementia?

Dementia describes the state of a person's mental function. It's not a specific disease. It's a decline in mental function from a previously higher level that's severe enough to interfere with daily living.

A person with dementia has two or more of these specific difficulties, including a change or decline in:

- Memory.
- Reasoning and handling of complex tasks.
- Language.
- Understanding visual form and space relationship.
- Behavior and personality.

Dementia ranges in severity. In the mildest stage, you may notice a slight decline in your mental functioning and require some assistance on daily tasks. At the most severe stage, a person depends completely on others for help with simple daily tasks.

Dementia develops when infections or diseases impact the parts of your brain involved with learning, memory, decision-making or language. Alzheimer's disease is the most common cause of dementia, accounting for at least two-thirds of dementia cases in people 65 and older.

Alzheimer's disease

Alzheimer's disease is not a normal part of aging — it is a progressive brain disease that causes problems with memory, thinking and behavior. Alzheimer's is the most common cause of dementia, contributing to 60% to 80% of dementia cases. Although there is currently no cure for Alzheimer's, a class of treatments that target the underlying biology and impact disease progression has been introduced.

Risk Factors

Researchers believe there is not a single cause of Alzheimer's disease. It likely develops from multiple factors, such as genetics, lifestyle and environment. Scientists have identified factors that increase the risk of Alzheimer's. While some risk factors like age, family history and genetics can't be changed, emerging evidence suggests there may be other factors people can influence.

AL MUSTAQBAL UNIVERSI

Age

The greatest risk for Alzheimer's disease is age. After age 65, a person's risk of developing the disease increases dramatically. About a third of people age 85 or older have Alzheimer's.

Family history

Researchers have learned that people who have a parent, brother or sister with Alzheimer's are more likely to develop it than those who do not. The risk increases if more than one family member has the disease.

Genetics

Two types of genes influence whether a person develops a disease: risk genes and deterministic genes. Risk genes increase the chance of developing a disease but do not guarantee it will happen. Deterministic genes cause a disease. This means anyone who inherits a deterministic gene will develop a disorder.

Rare deterministic genes cause Alzheimer's in a few hundred extended families worldwide. Scientists estimate these genes cause less than 1% of cases. Individuals with these genes usually develop symptoms in their 40s or 50s.

Hispanic people, Black Americans and women

Research shows Black Americans are about twice as likely as White Americans to have Alzheimer's or another dementia, and Hispanic Americans are one-and-a-half times as likely. Though no one knows the exact reason for these differences, researchers believe they are related to disparities produced by the historic and continued marginalization of Black and Hispanic people in the United States — disparities between older Black and Hispanic populations and older White populations in life experiences, socioeconomic indicators and, ultimately, health conditions.