

# Mental Disorder: An Overview of Alzheimer’s Disease and Its Impact on Dementia

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## Abstract

Alzheimer’s disease (AD) is a chronic neurodegenerative disorder that represents the leading cause of dementia, accounting for 60% to 70% of cases. This review article aims to provide a comprehensive overview of Alzheimer’s disease, detailing its pathology, progression, symptoms, diagnosis, and current treatment options. Additionally, the impact of Alzheimer’s on individuals, families, and healthcare systems is examined, highlighting the need for continued research and improved therapeutic strategies.

**Keywords:** Alzheimer’s disease; Dementia; Mental disorder; Neurodegenerative disorder; Chronic neurodegenerative disorder

## Introduction

Alzheimer’s disease (AD) is a chronic neurodegenerative disorder that represents the leading cause of dementia, accounting for 60% to 70% of cases. It was first described by Alois Alzheimer in 1906, and since then, it has become a major public health concern. The disease is characterized by the presence of amyloid plaques and neurofibrillary tangles in the brain, leading to progressive cognitive decline and memory loss.

## Pathophysiology

The pathophysiology of Alzheimer’s disease is complex and involves multiple factors. The primary pathological features are the accumulation of amyloid plaques and neurofibrillary tangles. Amyloid plaques are composed of beta-amyloid protein, which is derived from the amyloid precursor protein (APP). Neurofibrillary tangles are composed of tau protein, which normally stabilizes microtubules in neurons. The accumulation of these proteins leads to neuronal dysfunction and cell death, ultimately resulting in the cognitive impairment characteristic of AD.

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