

# Care and management of Alzheimer

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Alzheimer’s disease is the most common type of dementia. Dementia occurs as a result of changes in the brain that affect a person’s ability to think and remember. It can become severe enough to affect daily activities. Alzheimer’s Disease is not a normal part of aging. Alzheimer’s can be defined as neurological brain disorder which is most common form of dementia, a group of disorders that impairs mental functioning. This disease is progressive and irreversible. Memory loss is one of the earliest symptoms, along with a gradual decline of other intellectual and thinking abilities, called cognitive functions, and changes in personality or behaviour.

well as their family and friends, but information and support are available. No one has to face Alzheimer’s disease or another dementia alone.

**Risk factors in Alzheimer :** While we do not yet understand all the reasons some people develop Alzheimer’s disease while others do not, research has given us a better understanding of which factors put someone at a higher risk.

**Age :** Advancing age is the greatest risk factor for developing Alzheimer’s disease. The majority of people diagnosed with Alzheimer’s disease are 65 or older. Although far less common, younger-onset Alzheimer’s (also known as early-onset Alzheimer’s) affects people younger than 65. It is estimated that up to 5 percent of people with Alzheimer’s have younger-onset disease. Younger-onset Alzheimer’s is often misdiagnosed.

**Family members with Alzheimer’s :** If your parent or sibling develops Alzheimer’s, you are more likely to develop the disease than someone who does not have a first-degree relative with Alzheimer’s. Scientists do not completely understand what causes Alzheimer’s to run in families, but genetics, environmental factors and lifestyle may all play a part.

**Genetics :** Researchers have identified several gene variants that increase the chance of developing Alzheimer’s disease. The APOE-e4 gene is the most common risk gene associated with Alzheimer’s; it is estimated to play a role in as many as one-quarter of Alzheimer’s cases. Deterministic genes are different than risk genes in that they guarantee someone will develop a disease. The only known cause of Alzheimer’s is from inheriting a deterministic gene. Alzheimer’s caused by a deterministic gene is rare, and likely occurs in less than 1 percent of Alzheimer’s cases. When a deterministic gene causes Alzheimer’s, it is called “Autosomal Dominant Alzheimer’s disease (ADAD).”

**Mild Cognitive Impairment (MCI) :** The symptoms of MCI include changes in the ability to think, but these symptoms do not interfere with everyday life and are not as severe as those caused by Alzheimer’s or other progressive dementias. Having MCI, particularly MCI that involves memory problems, increases the risk of developing

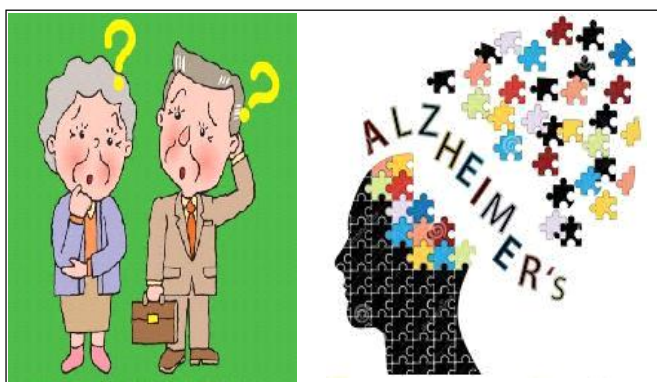
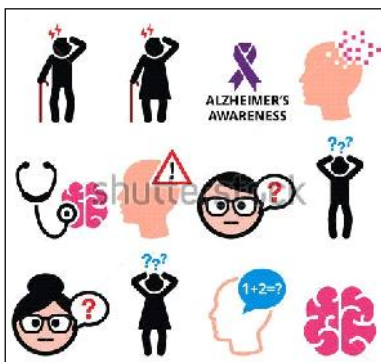


Fig. 1 : Alzheimer

**Prevalence:** Alzheimer is disease, generally diagnosed in people over 65 years of age. Only 5-10% of patients diagnosed with Alzheimer on Early-onset (before 65). In India, more than 4 million people have some form of dementia while worldwide, at least 44 million people are living with dementia.

One in six women over 55 and one in ten men over 55 are living with dementia, making this disease a global health crisis that must be addressed. A diagnosis of Alzheimer’s is life changing for the person with the disease, as



Alzheimer’s and other dementias. However, MCI does not always progress. In some cases, it reverses or remains stable.

**Cardiovascular disease :** Research suggests that brain health is closely related to heart and blood vessel health. The brain gets the oxygen and nutrients needed to function normally from blood, and the heart is responsible for pumping blood to the brain. Therefore, factors that cause cardiovascular disease also may be linked to a higher risk of developing Alzheimer’s and other dementias, including smoking, obesity, diabetes, and high cholesterol and high blood pressure in midlife.

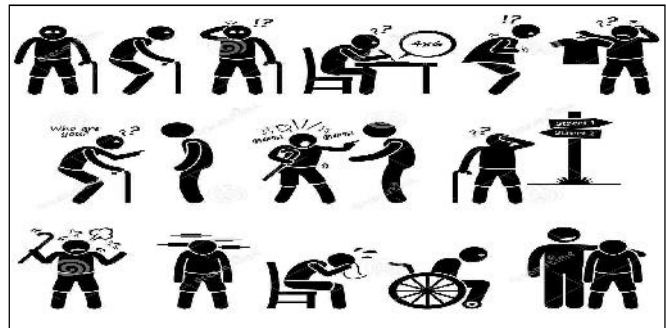
**Education and Alzheimer’s :** Studies have linked fewer years of formal education with an increased risk of Alzheimer’s and other dementias. There is not a clear reason for this association, but some scientists believe more years of formal education may help increase connections between neurons, allowing the brain to use alternative routes of neuron-to-neuron communication when changes related to Alzheimer’s and other dementias occur.

**Traumatic Brain Injury :** The risk of Alzheimer’s disease and other dementias increases after a moderate or severe traumatic brain injury, such as a blow to the head or injury of the skull that causes amnesia or loss of consciousness for more than 30 minutes. Fifty per cent of traumatic brain injuries are caused by motor vehicle accidents. Individuals who sustain repeated brain injuries, such as athletes and those in combat, are also at a higher risk of developing dementia and impairment of thinking skills.

**Warning signs :** The signs start slowly and can vary or

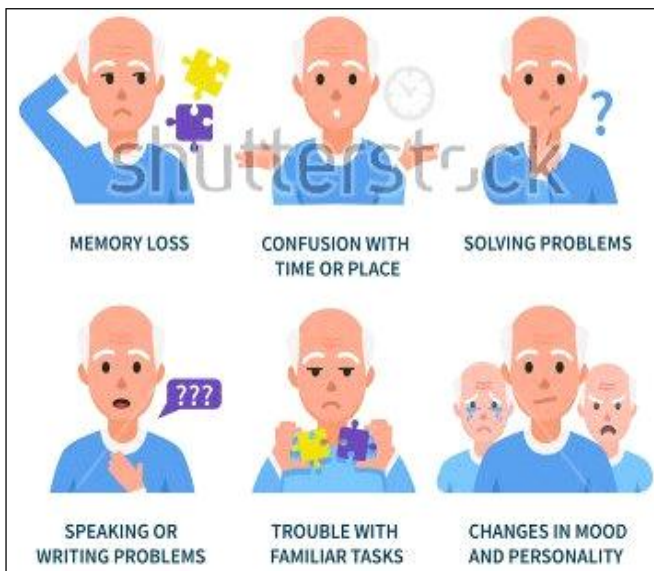
worsen over time. A person cannot control the signs. Treatment can help, but it does not cure the disease. Signs may include:

- Memory loss, especially about recent events
- Confusion about time and place
- Poor judgment
- Trouble learning new information, visual images and spatial relationships
- Changes in being able to do such things as drive, handle money, take medicine, cook, dress and bathe
- Misplacing things and losing the ability to retrace steps.
- Decreased or poor judgment.
- Withdrawal from work or social activities.
- Changes in mood and personality.

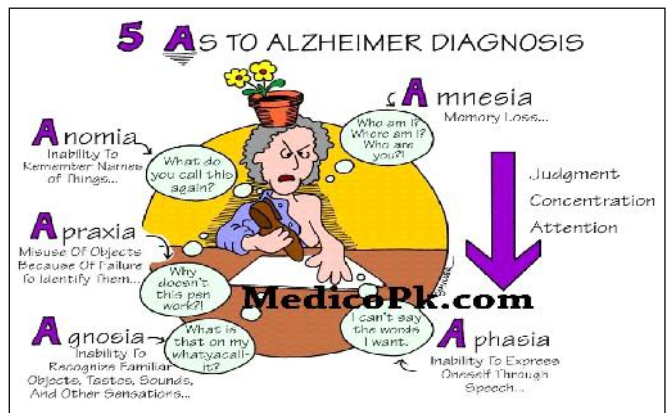


**Fig. 3 : Warning signs in Alzheimer**  
Source- <https://www.dreamstime.com/stock-illustration-alzheimer->

**5 A Of alzheimer :**



**Fig. 2 : Warning signs in Alzheimer**  
Source- <https://www.shutterstock.com/search/alzheimer>



**Fig. 4 : 5 A of Alzheimer**  
(Sources- <http://alzheimerdiseaseinindia.blogspot.in/2012/07/photo-inside-brain-neurodegenerative.html>)

**Diagnostic evaluation:** There is no simple way to detect Alzheimer’s. Diagnosis requires a complete medical exam. Blood tests, mental status tests and brain imaging may be used to determine the cause of symptoms which

may include:

- Family's medical history
- A neurological exam
- Cognitive tests to evaluate memory and thinking
- Blood tests (to rule out other possible causes of symptoms)
- Brain imaging
- Physical examination
- MSE- Mental State Examination (used to evaluate the cognitive impairments)
- C.T. Scan
- MRI
- PET: scan of the brain of a person with AD showing a loss of function in the temporal lobe.

**Care and management of Alzheimer :**

*Approach to doctor:* Your doctor may order tests to check your brain such as a CT scan, a MRI or a PET scan. Your doctor may also:

- Use tests to eliminate other causes of memory loss and confusion.
- Look at the pattern of memory loss and the person's awareness of the changes.
- Get a list of medicines and information from the family.
- Do a physical exam.
- Check the person's mental status by asking memory and thinking questions.



**Alzheimer's care in daily tasks :**

*Reduce frustrations:* A person with Alzheimer's disease might become agitated when once-simple tasks become difficult. To limit challenges and ease frustration:

*Schedule wisely :* Establish a routine to make each day less agitating and confusing. People with Alzheimer's disease can still learn and follow routines. Often it is best to schedule tasks, such as bathing or medical appointments, when the person is most alert and refreshed. Allow some flexibility within the routine for spontaneous activities.

*Take your time :* Expect things to take longer than they used to. Allow the person with Alzheimer's disease to have frequent breaks. Schedule more time for tasks so that you don't need to hurry him or her.

*Involve the person :* Allow your loved one to do as much as possible with the least amount of assistance. For example, people with Alzheimer's disease might be able to set the table with the help of visual cues or dress independently if you lay out clothes in the order they go on.

*Provide choices :* Fewer options are better but give the

person with Alzheimer's disease choices every day. For example, provide two outfits to



choose from, ask if he or she prefers a hot or cold beverage, or ask if he or she would rather go for a walk or see a movie.

*Provide simple instructions :* People with Alzheimer's disease best understand clear, one-step communication.

*Reduce distractions :* Turn off the TV and minimize other distractions at mealtime and during conversations to make it easier for the person with Alzheimer's disease to focus.

**Be flexible:** Over time, a person living with dementia will become more dependent. But there's a lot you can do to maximize the quality of your interactions and reduce frustration. Try to stay flexible and adapt your routine and expectations as needed. For example, if your loved one starts insisting on wearing the same outfit every day, consider buying a few identical outfits. If bathing is met with resistance, consider doing it less often. Relaxing your expectations can go a long way toward self-care and well-being.

**Create a safe environment:** Alzheimer's disease impairs judgment and problem-solving skills, increasing a person's risk of injury. To promote safety:

*Prevent falls :* Avoid scatter rugs, extension cords and any clutter that could cause your loved one to trip or fall. Install handrails or grab bars in critical areas.

*Use locks :* Install locks on cabinets that contain anything potentially dangerous, such as medicine, alcohol, guns, toxic cleaning substances, dangerous utensils and tools.

*Check water temperature :* Lower the thermostat on the hot-water heater to prevent burns.

*Take fire safety precautions :* Keep matches and lighters out of reach. If your loved one smokes, make sure he or she does so only with supervision. Make sure a fire extinguisher is accessible, and the smoke alarms have fresh



**Fig. 5 : Safe environments for Alzheimer patients**

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