

Alzheimer's Disease

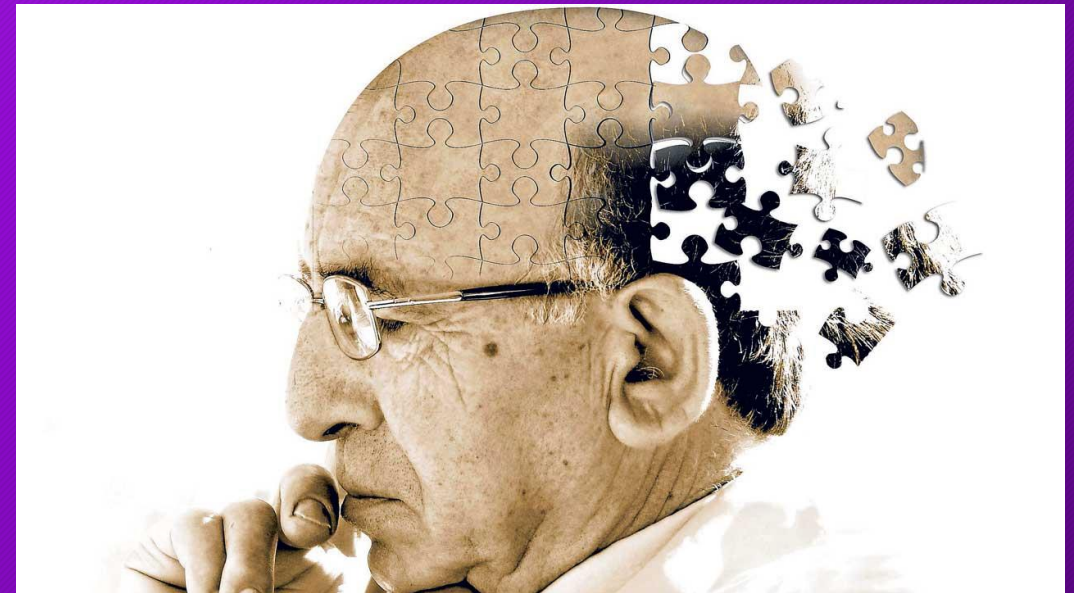
June 2017 Learn at Lunch Series Presentation

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Topics to be covered:

- Alzheimer's Disease Basics
- Alzheimer's in the U.S.
- Alzheimer's Fact or Fiction
- Risk Factors
- Symptoms
- Diagnosis
- Treatment
- Alzheimer's Disease and Caregiving



Source: <https://www.theodysseyonline.com/scientific-glimpse-alzheimers-disease>

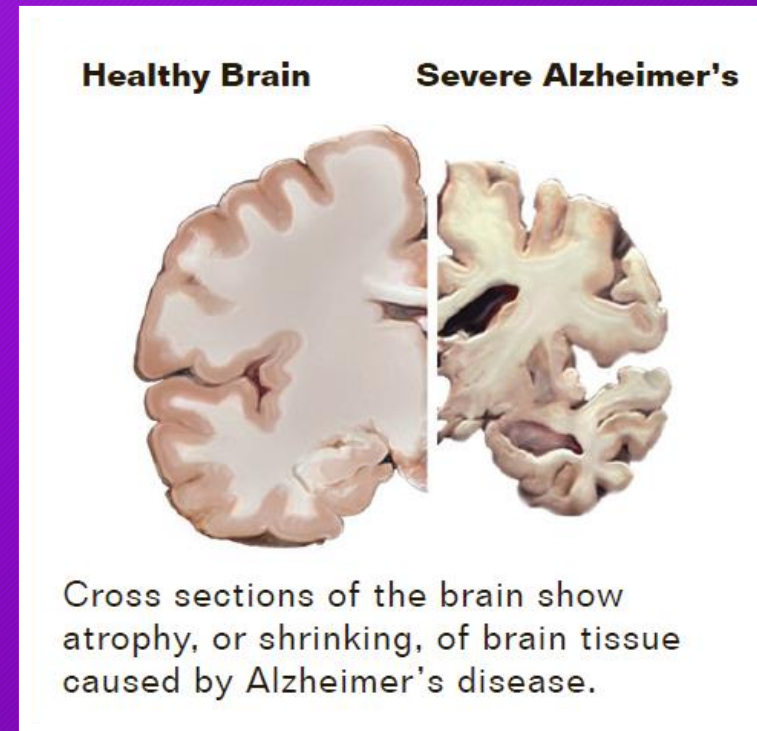
Basics of Alzheimer's Disease

What is Alzheimer's Disease?

- A condition that causes abnormal changes in the brain causing problems with memory, thinking, and behavior.
- Most common form of dementia in older adults
- Not a normal part of aging
- Worsens over time
- No current cure for Alzheimer's Disease

Alzheimer's and the Brain

- Small changes in the brain begin long before the first signs of memory loss.
- Two abnormal structures called plaques and tangles are prime suspects in damaging and killing nerve cells.
- http://www.alz.org/research/video/alzheimers_videos_and_media_inside.asp



Source:
<https://www.nia.nih.gov/alzheimers/publication/alzheimers-disease-fact-sheet>

Alzheimer's Disease in the U.S.

6
1 in 10
senior
with Alzh
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MORE
breast
and prostate cancer
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In 2017, Alzheimer's and other
dementias will cost the nation
\$259 billion
By 2050, these costs could
rise as high as

\$1.1 TRILLION



35% of caregivers for people with
Alzheimer's or another dementia
report that their health has gotten worse
due to care responsibilities, compared to
19% of caregivers for older people
without dementia

<http://www.alz.org/facts/overview.asp>

Alzheimer's Fact or Fiction

True or False

Alzheimer's disease is fatal

True

True or False

There is a cure for Alzheimer's disease

False

True or False

Only older people can get Alzheimer's.

False

True or False

Drinking out of aluminum cans or cooking in aluminum pots and pans can lead to Alzheimer's disease.

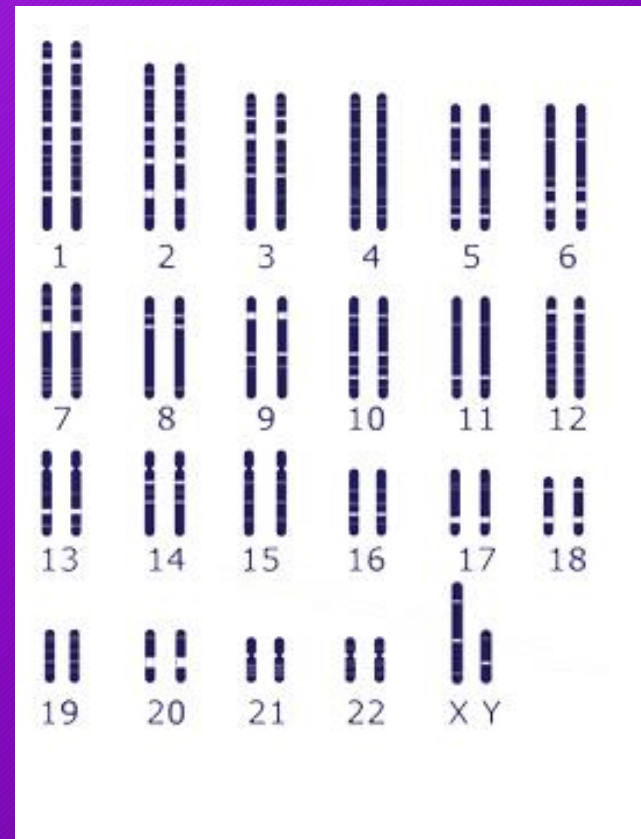
False

Risk Factors

Complex Interactions

- Increasing age
- Heredity/Genetics
- Head injury
- Heart-head connection
- Latinx and African Americans at risk

23 chromosome pairs



Amyloid precursor protein (APP): gene with mutations found to cause an inherited form of Alzheimer's.

Presenilin-1 (PS-1): gene with mutations found to cause early-onset of Alzheimer's. Variations in this gene are the most common cause of early-onset Alzheimer's.

Presenilin-2 (PS-2): gene with mutations found to cause early-onset Alzheimer's.

Apolipoprotein E-e4 (APOE4): gene variation found to increase risk of Alzheimer's and remains the risk gene with the greatest known impact. Having this mutation, however, does not mean that a person will develop the disease.

Source:

www.alz.org/alzheimers_disease/causes_riskfactors.asp

Symptoms

Stages of Alzheimer's Disease

1. Mild (early-stage)

- May function independently
- Memory lapses
- Friends/Family may start to notice difficulties

2. Moderate (middle-stage)

- Longest stage
- Requires greater level of care
- Confusing words, getting frustrated or angry, or acting in unexpected ways
- Difficulty expressing thoughts and performing routine tasks

3. Severe (late-stage)

- Lose ability to respond to their environment
- Unable to carry a conversation
- Unable to control movements
- Communication difficult
- Significant personality changes
- Need extensive help with daily activities

10 Early Signs & Symptoms of Alzheimer's

1. Memory loss that disrupts daily life
2. Challenges in planning or solving problems
3. Difficulty completing familiar tasks at home, work, or at leisure
4. Confusion with time or place
5. Trouble understanding visual images and spatial relationships
6. New problems with words in speaking or writing
7. Misplacing things and losing the ability to retrace steps
8. Decreased or poor judgement
9. Withdrawal from work or social activities
10. Changes in mood and personality

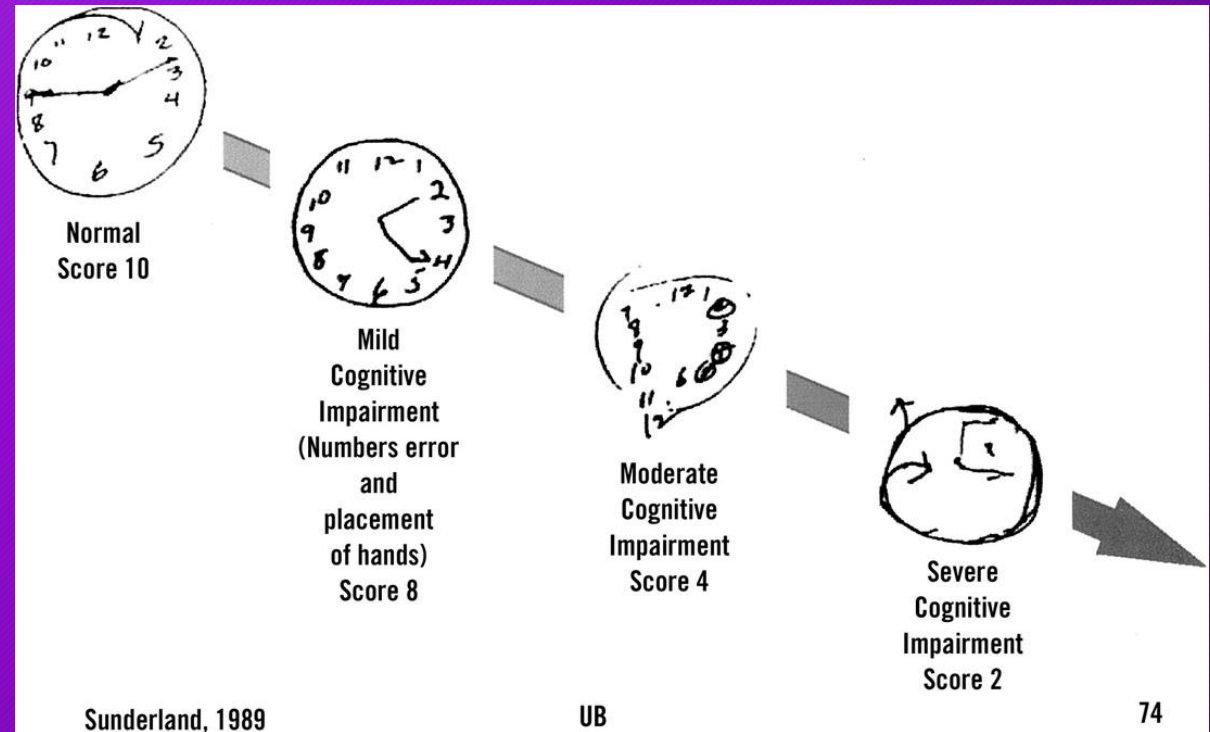
Difference between Alzheimer's and Typical Age-related changes

Signs of Alzheimer's/dementia	Typical Age-related Changes
Poor judgement and decision-making	Making a bad decision once in a while
Inability to manage a budget	Missing a monthly payment
Losing track of the date or the season	Forgetting which day it is and remembering it later
Difficultly having a conversation	Sometimes forgetting which word to use
Misplacing things and being unable to retrace steps to find them	Losing things from time to time

Diagnosis

Medical Evaluation

- Thorough medical history
- A physical and neurological exam
- Mental status and Mood testing
- Blood tests and brain imaging
- Genetic Tests



Source: <http://www.mindmate-app.com/blog/your-ultimate-alzheimers-dementia-test-guide>

Questions for Your Doctor

1. What treatment options are available?
2. Which option do you think best fits our situation?
3. What kind of assessment will you use to determine if the treatment is effective?
4. How much time will pass before you will be able to assess the treatment's effectiveness?
5. How will you monitor for possible drug side effects?
6. What side effects should we watch for at home?
7. When should we call you?
8. Is one treatment option more like than another to interfere with medications for other conditions?
9. What are the concerns with stopping one drug treatment and beginning another?
10. At what stage of the disease would you consider it appropriate to stop using the drug?

Treatment

Types of Medications

- **Cholinesterase Inhibitors** (Aricept[®], Exelon[®], Razadyne[®])
 - Approved for early to moderate stages
 - Prevents the breakdown of **acetylcholine** supporting communication between nerve cells by keeping levels high.
 - Acetylcholine: chemical messenger important for learning & memory
- **Memantine** (Namenda[®])
 - Approved for moderate to severe stages
 - Used alone or with other treatments
 - Regulates the activity of **glutamate**
 - Glutamate: chemical involved in information processing, storage, and retrieval



Source: <https://www.sharecare.com/health/alzheimers-disease>

Treatments-at-a-Glance

Generic	Brand	Indication	Side Effects
Donepezil	Aricept®	All stages	Nausea, vomiting, loss of appetite, and increased frequency of bowel movements
Galantamine	Razadyne®	Mild to moderate stages	Nausea, vomiting, loss of appetite, and increased frequency of bowel movements
Rivastigmine	Exelon®	Mild to moderate stages	Nausea, vomiting, loss of appetite, and increased frequency of bowel movements
Memantine	Namenda®	Moderate to severe stages	Headache, constipation, confusion, and dizziness
Memantine + Donepezil	Namzaric®	Moderate to severe	Nausea, vomiting, loss of appetite, increased frequency of bowel movements, headache, constipation, confusion, and dizziness

Changes in Behavior and Treatment

- **Alzheimer's disease often affects the way people feel and act.**
- **Most challenging and distressing effect of the disease**
- **Medications, environmental influences, and medical conditions can cause or worsen symptoms**

Early Stages	<ul style="list-style-type: none">• Irritability• Anxiety• Depression
Later Stages	<ul style="list-style-type: none">• Anger• Agitation• Aggression• General emotional distress• Physical or verbal outbursts• Restlessness, pacing, shredding paper or tissues• Hallucinations• Delusions• Sleep disturbances

Non-Drug Approaches

- **Maintain a healthy well-being**

- Proper nutrition
- Exercise
- Social activities
- Mental stimulation

- **Manage other medical conditions**

- **Immunizations**

- **Dietary Supplements**

- Use caution with “too good to be true” claims
- For more detailed information on supplement use in Alzheimer’s disease:
http://www.alz.org/alzheimers_alternative_treatments.asp



Source: <https://justdoc.com/blog/lifestyle-modification/>

Advice for Caregivers

Early–Stage Caregiving

- **Learning**

- Learn as much as you can about the early and middle stages of AD
- Find other caregivers to talk to can be a great way to learn about and make sense of your own experience
- Remember that behavior changes are due to the disease process

- **Emotional Support**

- Counseling, a support group, or other family members

- **Family Roles**

- Caregiver may have to take on more household roles

- **Finances**

- Begin mapping out strategies for the increasing financial demands

- **Legal**

- Complete legal documents as early as possible

Middle–Stage Caregiving

- **Dealing with challenging behaviors**
 - Often the right thing to do is exactly opposite of what seems like the right thing to do
- **Emotional Support**
 - Get support from professionals, family, friends, and/or support group
- **Respite Care**
 - Get in-home and out-of-home help to give you a regular break
- **Safety**
 - Create a safe and comfortable environment
 - Alert local police in case of wandering occurs
- **Medical Care**
 - Medical chart release
 - Make sure to take care of yourself
- **Plan for the Future**
 - More care or different type of care may be necessary
 - Consider residential facility or in-home help

Late-Stage Caregiving

- **Placement**

- Consider placement in skilled nursing facility or dementia care facility

- **Hospice**

- Services designed to support individuals at the end of life
- May include support groups, visiting nurses, pain management, and home care

Coping Tips for Caregivers

1. Monitor personal comfort
2. Avoid being confrontational
3. Redirect the person's attention
4. Create a calm environment
5. Allow adequate rest
6. Provide a security object
7. Acknowledge requests
8. Look for reasons behind each behavior
9. Explore various solutions
10. Don't take the behavior personally



Source: <http://www.medicalnewstoday.com/articles/159442.php>

Caregiver Resources

 **FAMILY CAREGIVER ALLIANCE®**
National Center on Caregiving

<https://www.caregiver.org/>

 **ALZHEIMER'S FOUNDATION OF AMERICA (AFA)**
Helping more people today than we did yesterday.

AFA National Toll-Free Helpline – 866-232-8484

<http://www.alzfdn.org/>

alz.org® | alzheimer's  association®

24/7 Helpline: 1-800-272-3900

<http://www.alz.org/care/>

 **eldercare locator**
— Celebrating 20 Years —
Connecting You to Community Services

<http://www.eldercare.gov>

Caregiver Resources (cont.)



<https://www.AlaSafe.gov/>



www.alabamarespite.org ;
866-RESTALA (866-737-8252)



www.aarp.org/cargiving/

Caregiver Resources (cont.)

alz.org® | alzheimer's  association®

Alzheimer's and Dementia
Caregiver Center

24/7 Helpline: 1.800.272.3900

www.alz.org/care

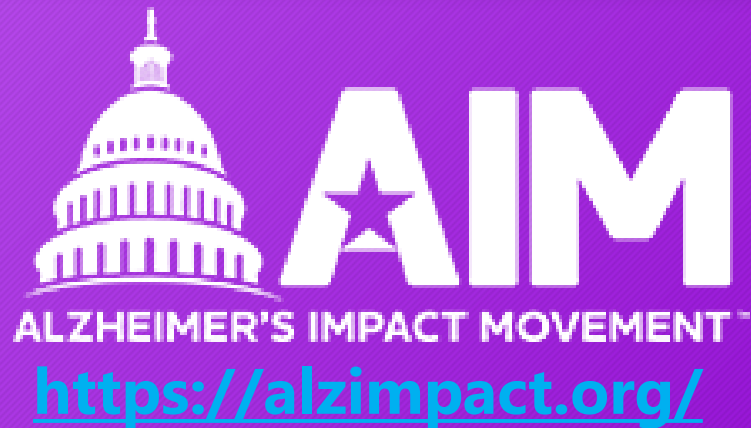
alz.org® | **research center**

advancing alzheimer's research worldwide



http://www.alz.org/research/clinical_trials/find_clinical_trials_trialmatch.asp

Caregiver Resources (cont.)



<http://centralalabamaaging.org/>
(800) 264-4680



<http://hilarityforcharity.org/>

References

1. Alzheimer's Association. (n.d.). Retrieved June 8, 2017, from <http://www.alz.org/>
2. Alzheimer's Disease Fact Sheet. (2011, August 17). Retrieved June 9, 2017, from <https://www.nia.nih.gov/alzheimers/publication/alzheimers-disease-fact-sheet>
3. Alzheimer's Disease and Caregiving. (n.d.). Retrieved June 12, 2017, from <https://www.caregiver.org/alzheimers-disease-caregiving>



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River Region 2017 Walk to End Alzheimer's

Take the first step to a world without Alzheimer's.

Sunday, October 15, 2017

http://act.alz.org/site/TR?fr_id=10254&pg=entry