

Dementia Capability Training

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HADI Hawai'i Alzheimer's Disease Initiative

A PROJECT OF THE UH CENTER ON AGING

www.hawaii.edu/aging/hadi



HADSSP

HAWAII ALZHEIMER'S DISEASE SUPPORTIVE SERVICES PROGRAM

Overall Training Objectives

- ◆ Understand the basics of Alzheimer's disease and related dementias
- ◆ Identify people with possible dementia and/or their care partners during the screening and assessment process, and
- ◆ Connect them to resources they need via warm handoff within the No Wrong Door system

Part I: The Basics

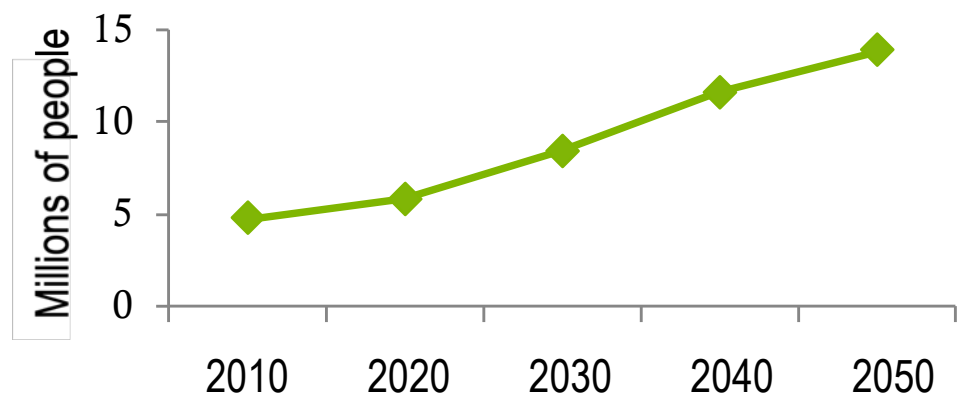


Why Are We Doing This?

- ◆ Cognitive impairment and dementia among older adults is more common than you think



Projected number of people 65+ years old in the U.S. with Alzheimer's disease (2010-2050)





African Americans

2x's more likely than
Caucasians



Hispanics/Latinos

1.5x's more likely than
Caucasians



Women

2x's more likely than men

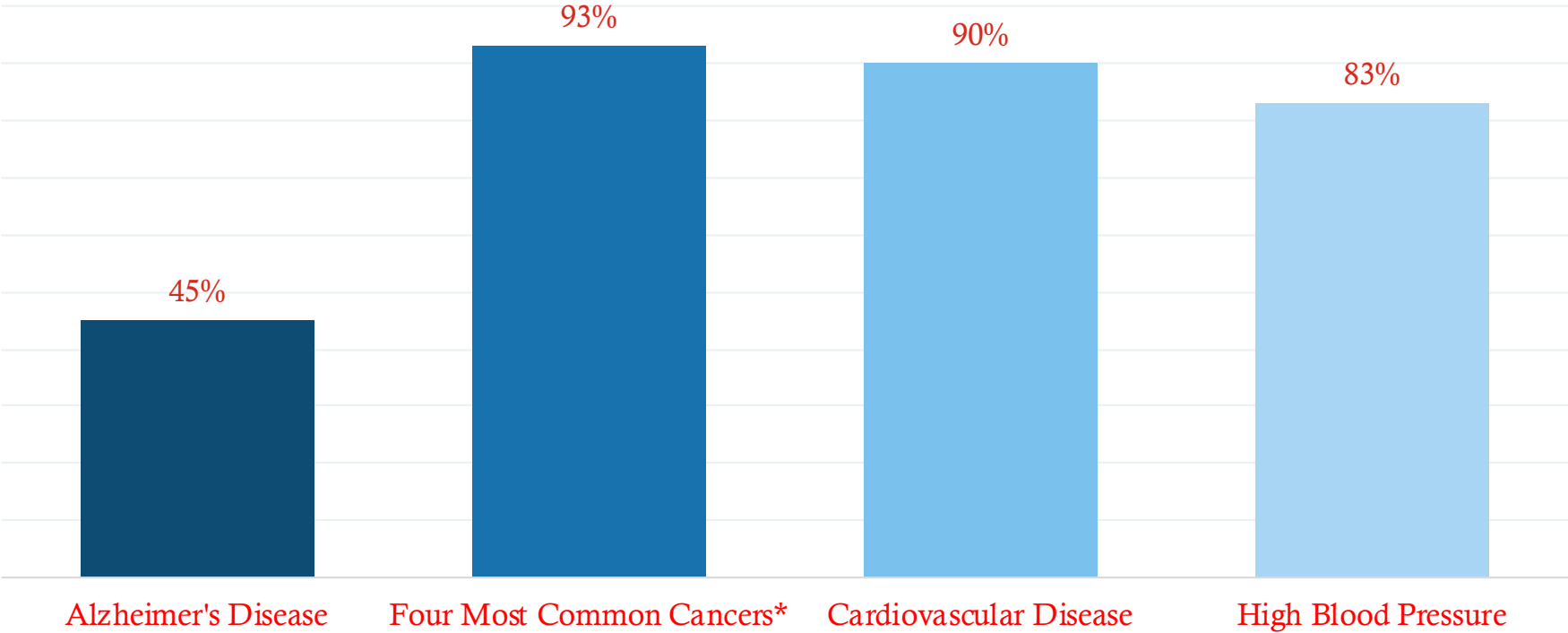
Why Are We Doing This?

- ◆ Most people with cognitive impairment do not report it to anyone
 - ◆ Fear
 - ◆ Stigma
 - ◆ Do not know what is normal
 - ◆ Lack of knowledge re: what can be done
 - ◆ Reduced insight

Why Are We Doing This?

- ◆ Healthcare providers do **not** routinely assess brain function!
- ◆ Less than 50% of people with dementia ever receive a diagnosis
 - ◆ Ageism
 - ◆ Lack of training
 - ◆ Not up to speed with pace of research / practice

Percent of Seniors Diagnosed with Condition Who Have Been Told of Their Diagnosis



*Breast, Lung, Prostate, and Colorectal

Source: Alzheimer's, Association. "2015 Alzheimer's disease facts and figures." *Alzheimer's & dementia: the journal of the Alzheimer's Association* 11.3 (2015): 332.

Why Are We Doing This?

- ◆ When a diagnosis is made, it most often occurs in mid-late stage when people are failing to thrive at home
 - ◆ Need placement

Why Are We Doing This?



Only 19% have discussed their symptoms (e.g., memory loss) with a healthcare provider



Diagnosis often delayed by 6+ years after symptom onset



With no diagnosis, it is very unlikely the individual will receive, connect with, or seek out effective care & support

The Healthy Brain Initiative: The Public Health Road Map for State and National Partnerships, 2013.

Patients with Dementia

- ◆ A population with complex care needs



**2.5 chronic
conditions
(average)**



**5+
medications
(average)**



**3 times more
likely to be
hospitalized**

**Many
admissions
from
preventable
conditions,
with higher
per person
costs**

- ◆ Indisputable correlation between chronic conditions and costs

Alzheimer's Association Facts
and Figures 2014

Why Are We Doing This?

- ◆ Dementia capable I&R and case management professionals:
 - ◆ Help create a healthier, dementia friendly community
- ◆ Screening provides an opportunity to:
 - ◆ Be proactive rather than reactive
 - ◆ Connect people to resources earlier so they can stay at home longer

Normal Aging



Normal (Healthy) Aging

- ◆ Characteristic pattern:
 - ◆ Sensory/motor declines (i.e., hearing, vision, gait)
 - ◆ Intelligence remains stable

Brain and Normal Aging

- ◆ Slowing of Neurons
- ◆ Word finding difficulties
 - Whatchumay call it?
- ◆ Mental flexibility reduces
 - Unable to multitask
- ◆ Mild short term memory loss
 - not affecting activities of daily living



Aging Changes in Cognition

Reading

Vocabulary

Long term factual memory

Immediate memory span

Sustained attention

Serial (practice-related) learning

Delayed recall

Motor speed

Visuo-spatial skills

Least change



Most change



Superman in his later years

Normal (Healthy) Aging

- ◆ Independence in daily activities **preserved**
 - ◆ Can operate common appliances
 - ◆ Balance checkbook, pay bills, manage finances
 - ◆ Manage medications
 - ◆ Drive safely
 - ◆ Grocery shop, prepare meals
 - ◆ Keep track of appointments, daily schedule
- ◆ Can live independently
- ◆ Memory intact for recent events
- ◆ Normal performance on memory screening

Dementia and Alzheimer's Disease



What is dementia?

A brain disorder that causes a decline in memory and intellectual functioning from some previously higher level of functioning severe enough to interfere with everyday life

Dementia is NOT normal aging!

Signs & Symptoms of Dementia

- ◆ Memory loss
 - ◆ Recent information vs. old memories
- ◆ Disorientation to time, place, and people
- ◆ Language problems
- ◆ Diminished concentration
- ◆ Changes in personality / mood / behavior
- ◆ Visual-spatial and perception problems
 - ◆ Sense of direction
- ◆ Difficulty with complex tasks and learning new things
- ◆ Problems with abstract reasoning, problem-solving, judgment

Behavioral Symptoms

- ◆ Agitation
- ◆ Anxiety
- ◆ Catastrophic reactions
- ◆ Confusion (can wax and wane)
- ◆ Delusions
- ◆ Hallucinations
- ◆ Hoarding
- ◆ Paranoia
- ◆ Inappropriate sexual behavior
- ◆ Repetitive behaviors
- ◆ Withdrawal
- ◆ Sun-downing
- ◆ Wandering

Risk Factors of Dementia

- ◆ **Age**
- ◆ Family history
- ◆ Genetics
- ◆ Cerebrovascular disease
 - ◆ High blood pressure
 - ◆ High cholesterol
 - ◆ Diabetes
 - ◆ Smoking
 - ◆ Obesity
 - ◆ Heart attack
 - ◆ Stroke
- ◆ Female gender
- ◆ African American and Hispanic / Latino ethnicity
- ◆ Traumatic brain injury
- ◆ Low level of education
- ◆ Mild Cognitive Impairment (MCI) diagnosis

Age: The Greatest Risk Factor

Age Range	Percent with Alzheimer's
< 65	4%
65 -74	13%
75 -84	44%
85 +	38%

How is Dementia Diagnosed?

- ◆ Physical exam
- ◆ Neurological exam
- ◆ **Cognitive assessment**
- ◆ Lab tests
- ◆ Brain scans
- ◆ Other diagnostic tests:
 - ◆ Functional assessment (OT/PT)



No single test can diagnose dementia

How is Dementia Diagnosed?

- ◆ The work-up is designed to rule out other conditions that can mimic dementia, but are treatable:
 - ◆ Depression, mood disturbance
 - ◆ Alcohol and substance abuse
 - ◆ Medication side effects
 - ◆ Vitamin and nutritional deficiencies

Dementia vs. Alzheimer's

What is the difference between
dementia and Alzheimer's
disease?

Flowers

```
graph TD; Flowers[Flowers] --> Pansies[Pansies]; Flowers --> Tulips[Tulips]; Flowers --> Roses[Roses]; Flowers --> Daisies[Daisies]; Flowers --> Mums[Mums];
```

Pansies

Tulips

Roses

Daisies

Mums

Dementia

```
graph TD; Dementia --> Frontotemporal_dementia; Dementia --> Vascular_dementia; Dementia --> Alzheimer's_dementia; Dementia --> Lewy_body_dementia; Dementia --> Parkinson's_dementia;
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Frontotemporal
dementia

Vascular dementia

Alzheimer's dementia

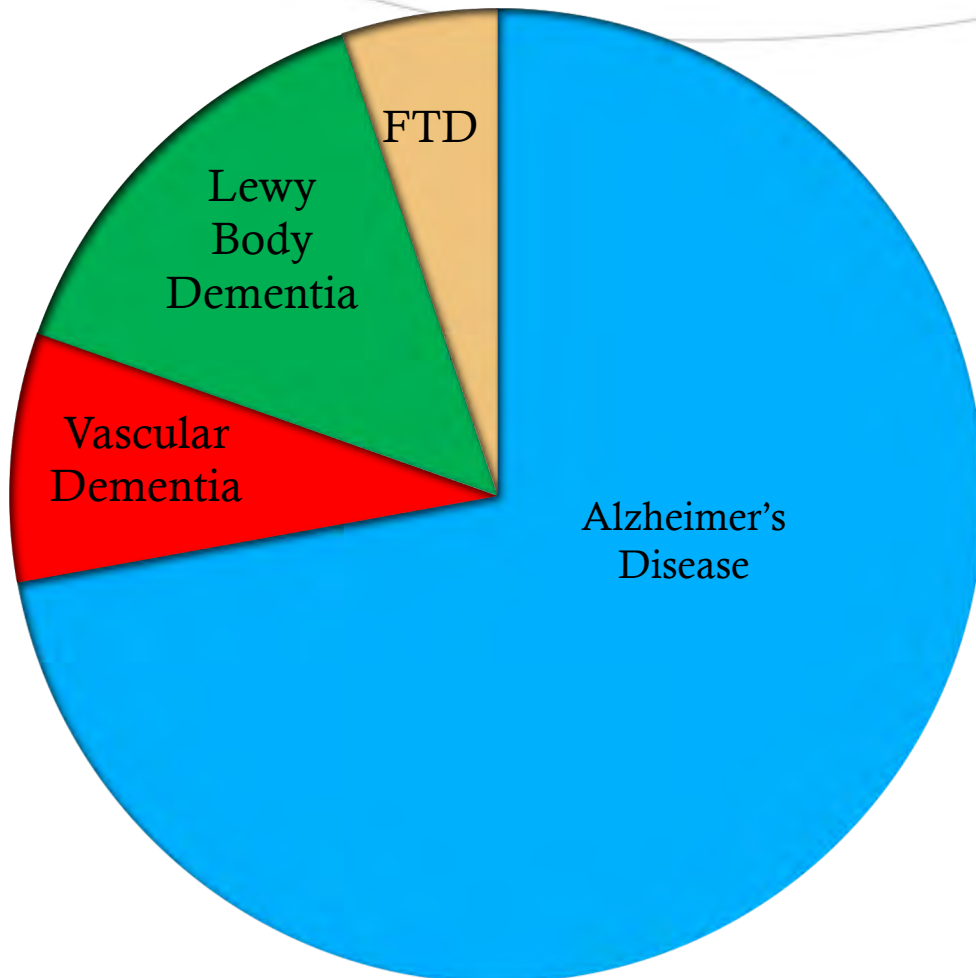
Lewy body dementia

Parkinson's
dementia

Many Causes of Dementia

- ◆ Alzheimer's disease
- ◆ Stroke
- ◆ Parkinson's disease
- ◆ HIV / AIDS
- ◆ Multiple Sclerosis
- ◆ Huntington's disease
- ◆ Lewy Body dementia
- ◆ Frontotemporal dementia
- ◆ Creutzfeldt-Jakob disease
- ◆ Traumatic brain injury
- ◆ Toxic exposures
- ◆ Chronic hypoxia
- ◆ Syphilis
- ◆ Brain tumors
- ◆ Normal pressure hydrocephalus
- ◆ Wernicke-Korsakoff's Syndrome

Alzheimer's is One Type of Dementia



Alzheimer's disease: **60-80%**

◆ Includes mixed AD + VD

Lewy Body Dementia: **10-25%**

◆ Parkinson spectrum

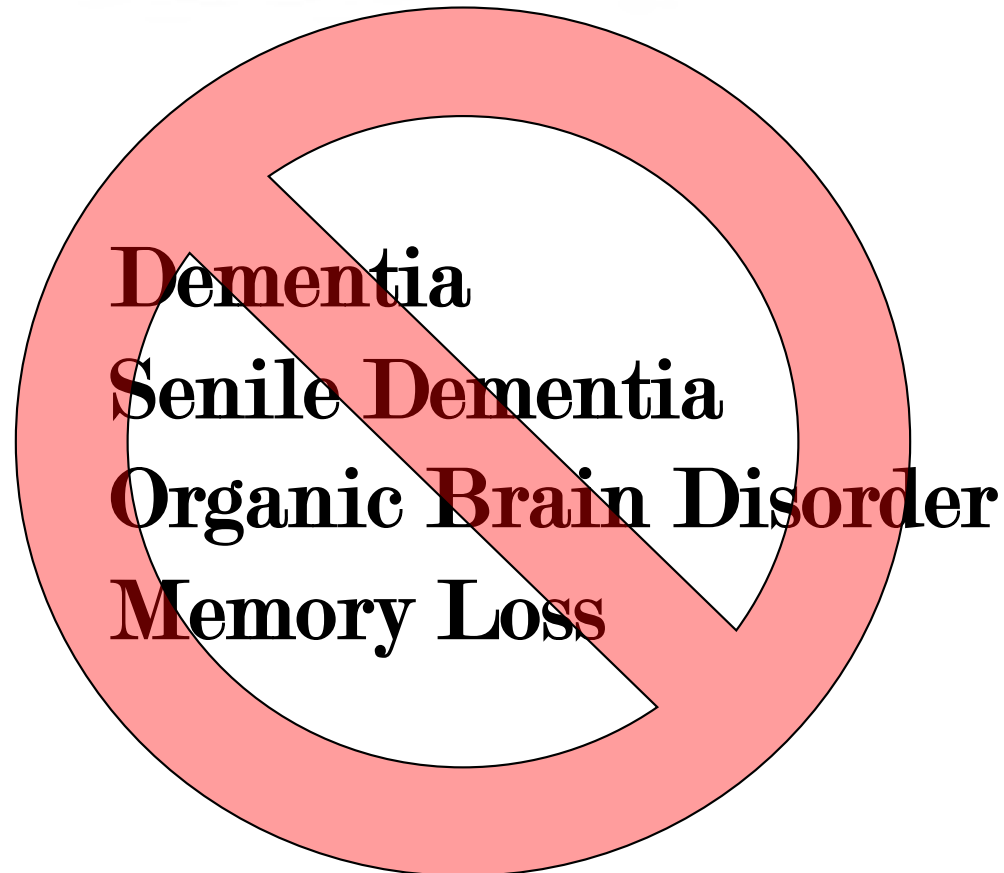
Vascular Dementia: **6-10%**

◆ Stroke related

Frontotemporal Dementia: **2-5%**

◆ Personality or language disturbance

What's In A Name?



Alzheimer's Disease



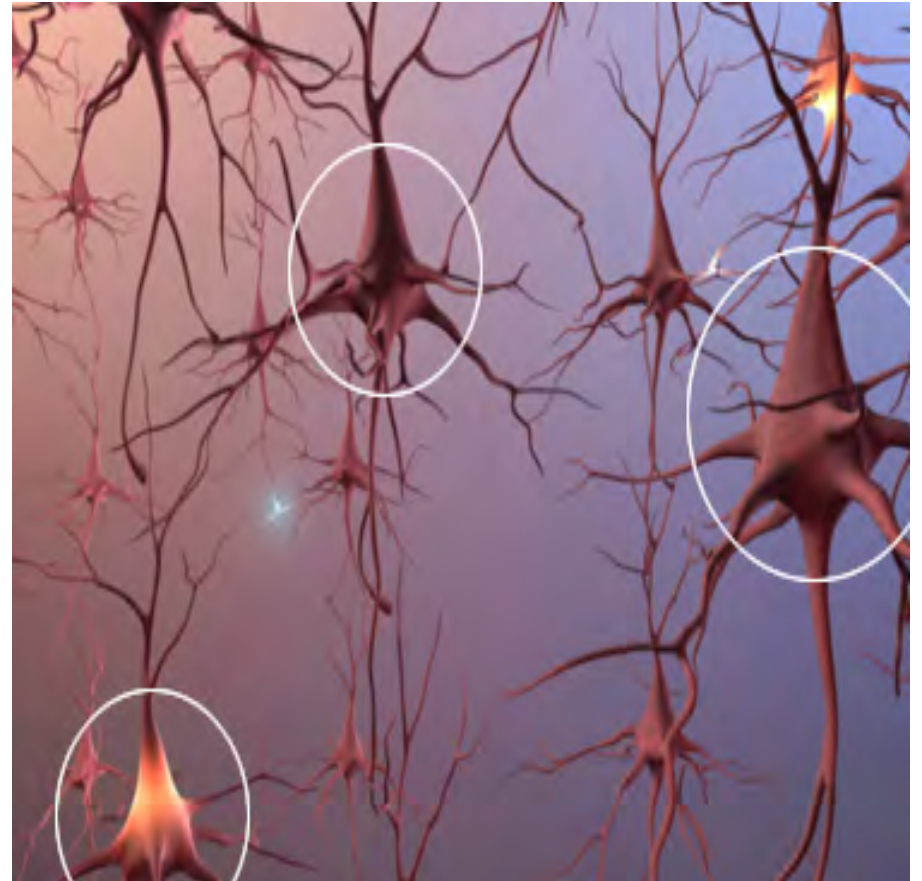
What is Alzheimer's Disease?



<http://youtu.be/ECbjK4Ra-Ys>

AD: What does it look like?

- Neurofibrillary tangles
- Amyloid plaques
- Decrease in chemicals that facilitate memory
- Cell death



Cell Death: Brain Shrinkage

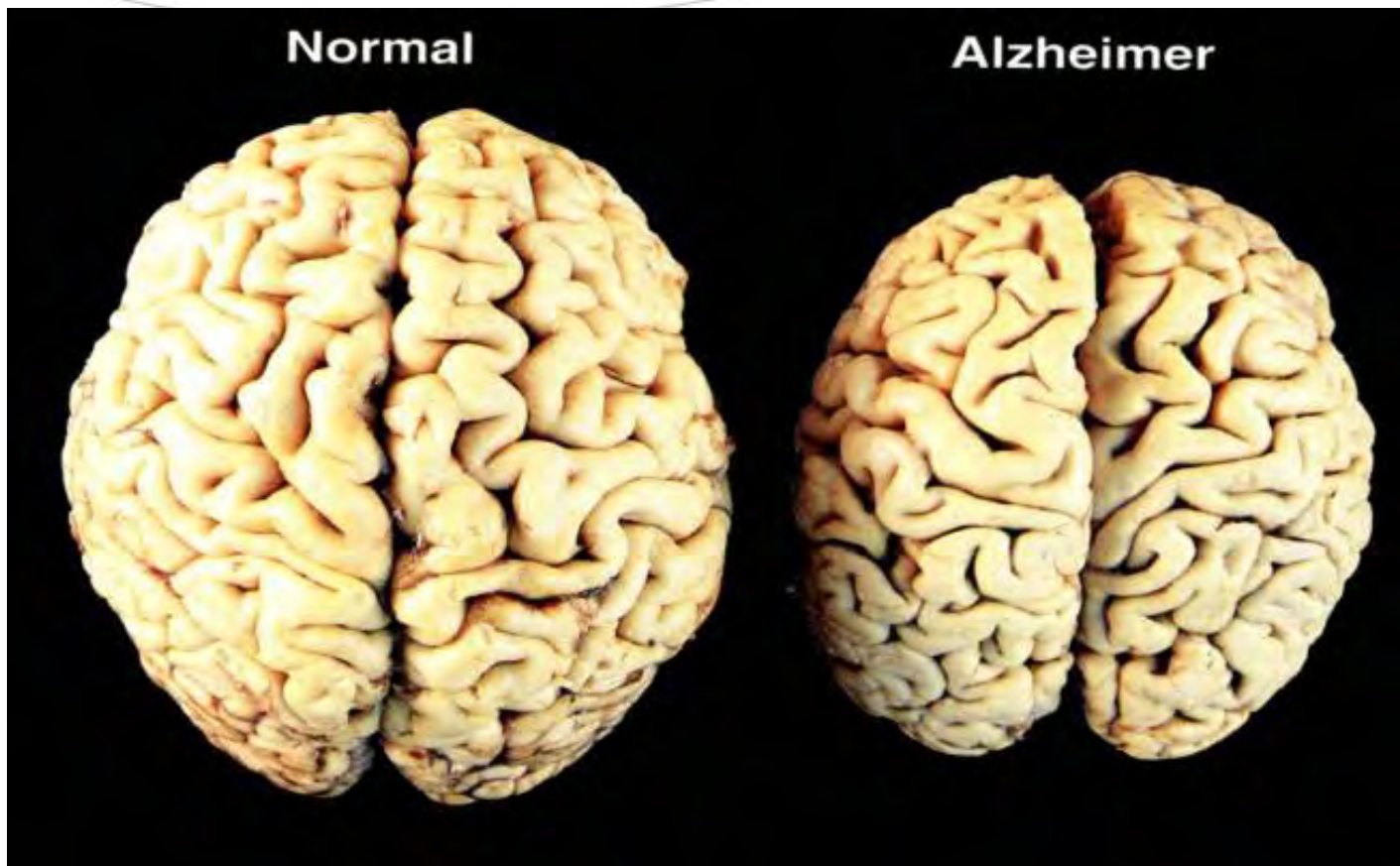


Image appears courtesy of Dr. Richard E. Powers,
Director of the Alabama Bureau of Geriatric Psychiatry, alzbrain.org



Early Stage AD

2 - 4 Years

- ◆ Short-term memory loss (appointments, conversations)
- ◆ Writes reminders, but may lack context, loses them
- ◆ Shows up at the wrong time or day
- ◆ Trouble multi-tasking
- ◆ Difficulty planning or solving problems
- ◆ New problems with words when speaking or writing
- ◆ Social withdrawal, preference for familiar things
- ◆ Mood, personality changes

Middle Stage AD

2 - 10 Years

- ◆ Fluctuating disorientation
- ◆ Diminished insight
- ◆ Learning new things becomes quite difficult
- ◆ Declining recognition of acquaintances, distant relatives, then more significant relationships
- ◆ More pronounced mood and behavioral changes
- ◆ Broader functional declines
- ◆ Alterations in sleep and appetite
- ◆ Wandering
- ◆ Hallucinations, delusions

Late Stage AD

1 - 3 Years

- ◆ Severe disorientation to time and place
- ◆ No short term memory
- ◆ Loss of speech
- ◆ Difficulty walking
- ◆ Loss of bladder/bowel control
- ◆ No longer recognizes family members
- ◆ Inability to survive without total care

Mild Cognitive Impairment



Cognitive Continuum

Normal



Mild Cognitive
Impairment

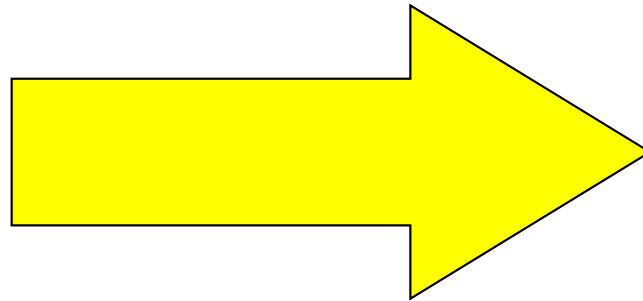
Dementia

MCI Diagnostic Criteria

1. Someone is concerned about the patient's cognitive status:
 - ◆ Patient
 - ◆ Family member / informant
 - ◆ Healthcare provider
2. Objective evidence of impairment in 1 or more cognitive domains
 - ◆ Performance compared to thousands of healthy individuals of the same age and level of education
3. General maintenance of independent function in daily life with minimal assistance
4. No dementia
 - ◆ No significant impairment in social or occupational functioning

MCI and Alzheimer's

5+
Years



>50%

Young Onset AD

- ◆ Same disease
- ◆ Affects people under the age of 65, many in their 40s and 50s
- ◆ Accounts for roughly 5% of all cases of Alzheimer's
- ◆ Sometimes called "Early Onset AD"
 - ◆ Do not confuse with early stage AD
- ◆ Most have the common form of the disease
 - ◆ Same pathology, younger age of onset
 - ◆ Small percentage (13%) have "deterministic genes"
 - ◆ 100% chance of developing the disease, as young as 30's

Many Unique Challenges

1. Difficulty getting an accurate diagnosis
2. Loss of employment and income
3. Loss of health insurance
4. Young or teenage children at home
5. Lack of appropriate community resources
6. Caregiving challenges

Dementia with Lewy Bodies

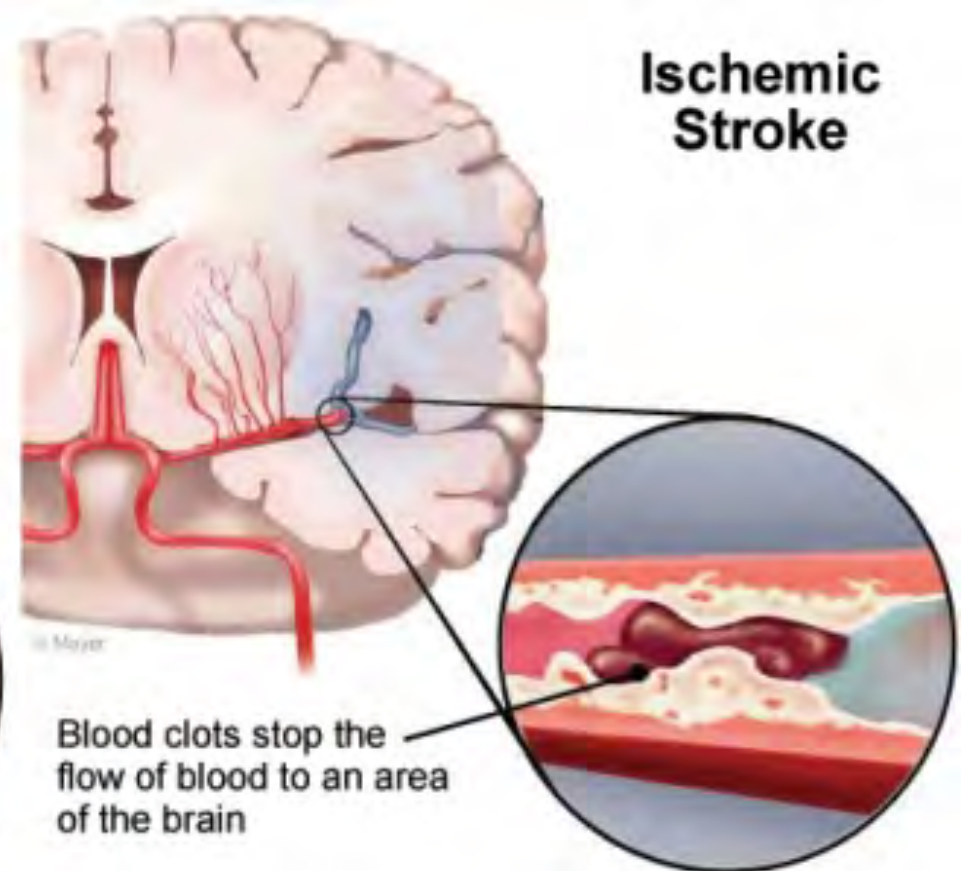
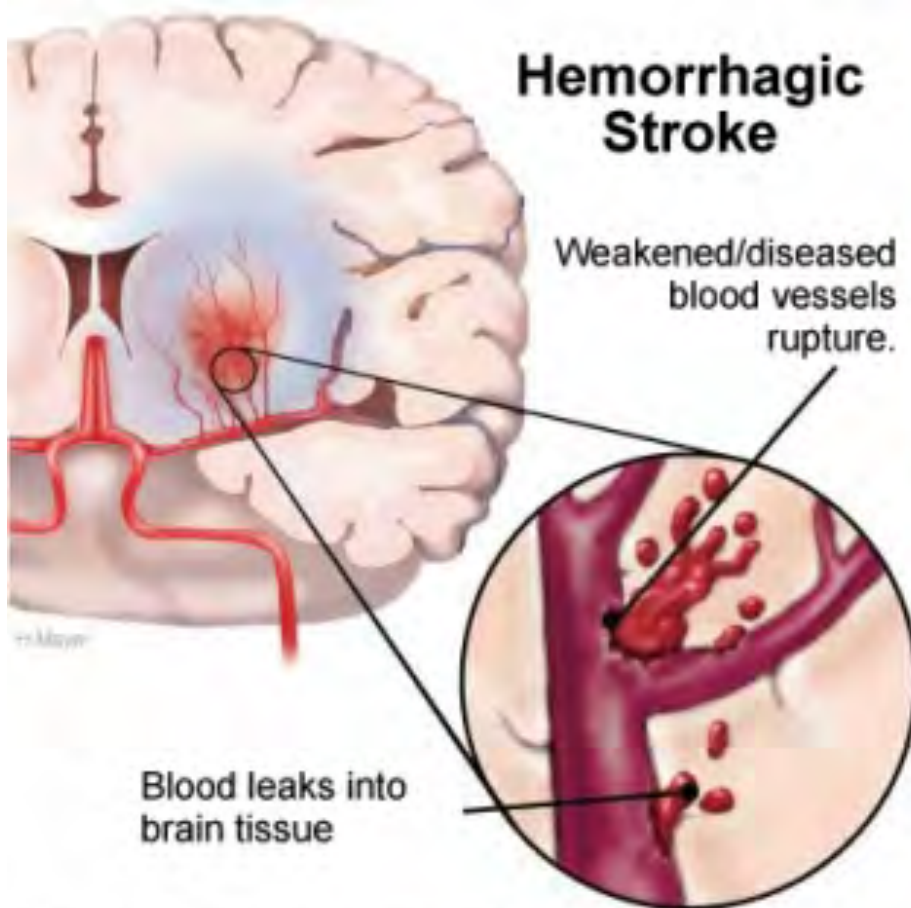
On the Parkinson's
spectrum

- ◆ Second most common type of dementia (up to **25%** of cases)
- ◆ Frequently **misdiagnosed** as AD or Parkinson's
- ◆ Hallmark symptoms include:
 - ◆ Motor slowing, tremor
 - ◆ Early visual hallucinations
 - ◆ Acting out dreams

Vascular Dementia (VaD)

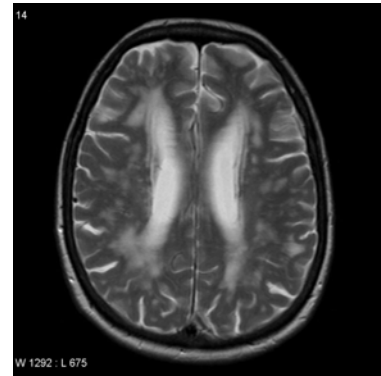
- Third most common type of dementia (up to **6-10%** of cases)
- Symptoms often overlap with those of Alzheimer's
- Sudden deterioration in cognitive function common
- Caused by stroke or significant breakdown of blood vessels in the brain

Types of Stroke



Vascular Dementia

- ◆ Cerebrovascular disease (stroke)
 - ◆ Variable threshold to dementia
- ◆ Typically abrupt deterioration of cognitive function
- ◆ Cognitive impairment in at least 2 thinking skills
 - ◆ Cognitive slowing
 - ◆ Poor attention/concentration
 - ◆ Spontaneous memory poor but better with cues and reminders
- ◆ Depression common feature



Frontotemporal Dementia

- ◆ Fourth most common type of dementia (only 2-5% of cases)
- ◆ Begins in the front of the brain and moves back
- ◆ Frequently misdiagnosed as a psychiatric condition
- ◆ Hallmark symptoms include:
 - ◆ Marked changes in emotions, behavior, personality
 - ◆ Disregard for social norms
 - ◆ Loss of empathy
 - ◆ Obsessive-compulsive behavior
 - ◆ Lack of insight
- ◆ **Language variant:** difficulty with speech production or comprehension

Unique Challenges

- ◆ Heavy toll on personal and family life prior to diagnosis
- ◆ Family distress, discord
- ◆ Extremely challenging behaviors
 - ◆ Embarrassment
 - ◆ Physical strength often intact
- ◆ Financial / legal complications
- ◆ Guardianship
- ◆ Placement challenges
- ◆ Refusal to accept treatment

Why is Early Detection so Important?



<https://youtu.be/CoC5lInL88>

- ✓ Cognitive impairment may be due to something other than dementia (e.g., mental health, medication side effects, nutritional deficiencies)
- ✓ Understand the symptoms and how to manage them
- ✓ Start treatment sooner
- ✓ Make decisions and future plans
- ✓ Build a support system
- ✓ Family and friends know what to expect and how to help
- ✓ Avoid crises

Why is Early Detection so Important?

<https://youtu.be/jCoC5IIInL8>
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