

Slide 1

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Cognition and Older Adults

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or the **Exit** button to leave the module.*

Use the forward arrow to continue.




Cognition and Older Adults, Part 2

*At any time, feel free to select the **CC** button to see captions text
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Learning Objectives


After this completing this module, learners will be able to:

- Understand abnormal cognitive changes
- Learn about treatable causes of cognitive impairment
- Identify the causes of dementia and clinical presentation
- Use communication strategies
- Discuss approaches for behavioral management of dementia-related behaviors

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Treatable Causes of Cognitive Impairment

There are cognitive changes in older adults that are acute and potentially reversible

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Delirium

- Acute state of confusion resulting from an underlying medical problem
- Serious problem that is often under-recognized
 - 2.6 million adults over the age of 65 develop delirium every year
- Associated with prolonged hospitalizations, nursing home placement, and mortality



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Symptoms of Delirium


- Fluctuation in attention or arousal, disorientation, delusions, hallucinations, sleep-wake disturbances
- Hyperactive delirium
 - Less common but easier to recognize as older adults are agitated, restless, or combative
- Hypoactive delirium
 - More common but less frequently recognized as the older adult is quiet or withdrawn



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Delirium Risk Factors

PREDISPOSING RISK FACTORS


- Older age
- Baseline cognitive impairment
- Functional disability
- Sensory loss
- Multiple co-existing medical conditions

PRECIPITATING RISK FACTORS

- Medications
- Surgery
- Undergoing anesthesia
- High levels of pain
- Infection
- Acute illness

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Delirium at Any Age

- Younger adults
 - Transient and resolves quickly with treatment of the underlying condition
- Older adults
 - More predisposing factors leads to greater likelihood of developing delirium and prolonged recovery
 - Some never fully return to pre-delirium baseline

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Depression

- Treatable cause of cognitive change
- Symptoms can interfere with daily activities and look like dementia, sometimes called "pseudodementia"
- Depression can be an early sign of impending dementia
- Dementia and depression can co-exist



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Take Home Message

- Delirium and depression are two causes of cognitive impairment that are reversible
- Both can happen at any age but are particularly harmful for older adults and must be treated as soon as possible



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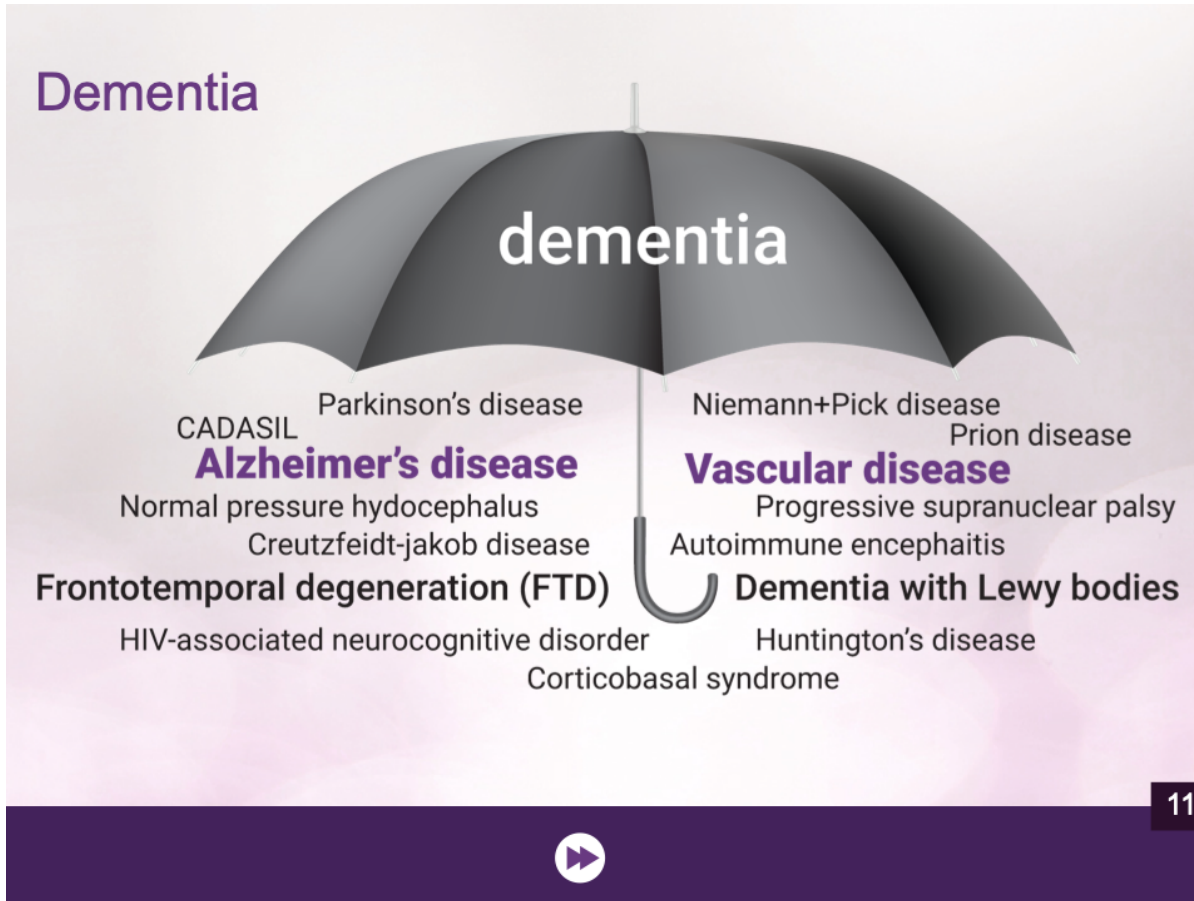


Irreversible Causes of Cognitive Impairment

Most common causes of cognitive impairment that effect older adults for which we do not currently have effective treatments

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Preclinical Stage

PRECLINICAL DEMENTIA

- Diseases that cause dementia can be present in brain before diagnosis or evidence of decline

MILD COGNITIVE IMPAIRMENT (MCI)

- Period of decline beyond normal cognition but before dementia
- Not all individuals with MCI develop dementia

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Alzheimer's Disease (AD)

- Most common cause of dementia in older adults
 - 60-80% of dementia cases
- Half of individuals have one or more other dementia-causing pathologies concurrently
- Two main pathologies that involve the accumulation of abnormal proteins
 - Accumulation of beta amyloid plaques outside brain cells
 - Accumulation of Tau protein tangles inside brain cells

Alzheimer's Disease is the most common cause of dementia in older adults



Alzheimer's Disease and Memory

- First sign is typically memory loss
- Causes problems with memory storage which leads to failure to make new memories
- As the disease progresses to other brain areas, memories from the distant past will be affected
- Temporal lobe language areas are affected early in the disease process causing problems with naming and word finding



Alzheimer's Disease Progression

- Usually have poor awareness of their memory problem
- As disease progresses, more brain areas are involved, resulting in loss of other thinking abilities
- In late stages, people are increasingly susceptible to infections



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Susan Buehler, PhD



Cerebrovascular Disease

- Second most common cause of cognitive decline in older adults, also known as vascular dementia
- When blood vessel damage causes bleeding or blockage in the brain
 - Stroke or microvascular ischemic disease
- Accounts for 5 to 10% of dementia cases



Stroke

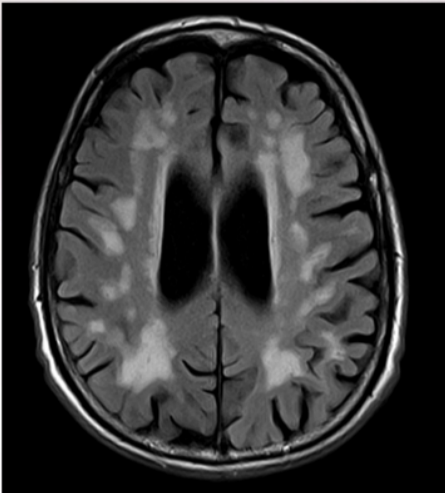
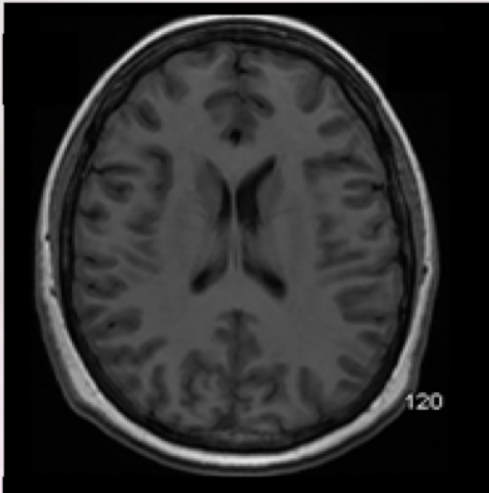
- Can have one or more large strokes that result in significant cognitive impairment
- Impairment would not necessarily be progressive if no further strokes
- Less common than it once was as a result of improvements in prevention and ability to intervene early



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Microvascular Ischemic Disease and Cognitive Impairment



Microvascular Ischemic Disease and Risk Factors

- More common cause of vascular dementia
- Usually associated with high blood pressure, diabetes, high cholesterol, cardiac conditions
- Blacks, Hispanics, LGBTQ and indigenous older adults are at higher risk
- Considered a non-reversible cause of dementia
 - Possible to modify risk factors and decrease risk by engaging in effective health behaviors and chronic disease management



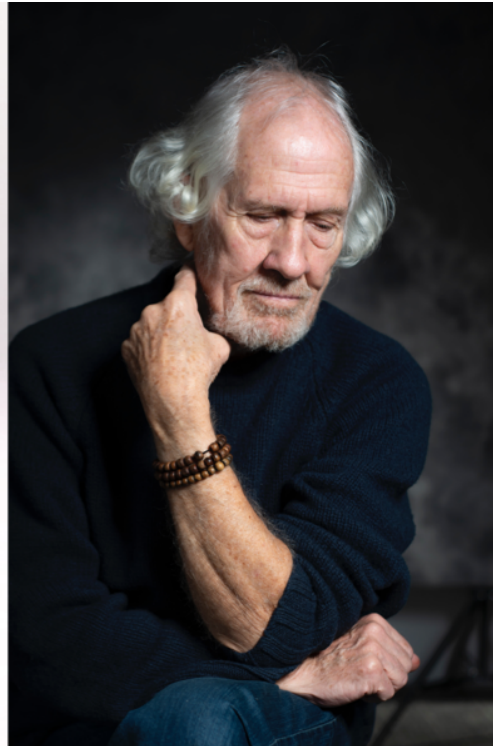
Lewy Body Disease

- 4-16% of people with dementia have dementia with Lewy bodies
- Abnormal proteins that cause brain cells to die
- Problems with attention, complex thinking, visuospatial abilities and visual hallucinations
 - Memory impairment is less prominent
- Found in other disorders such as Parkinson's disease
 - Can experience symptoms of Parkinson's disease, including slow movement, shuffling walk, lack of facial expression



Frontotemporal Lobar Degeneration

- Common cause of early-onset dementia
- Accounts for about 5-10% of dementia cases
- Three basic forms
 - Behavioral variant
 - Language variant
 - Motor variant
- Memory often remains intact because the memory center is not affected initially

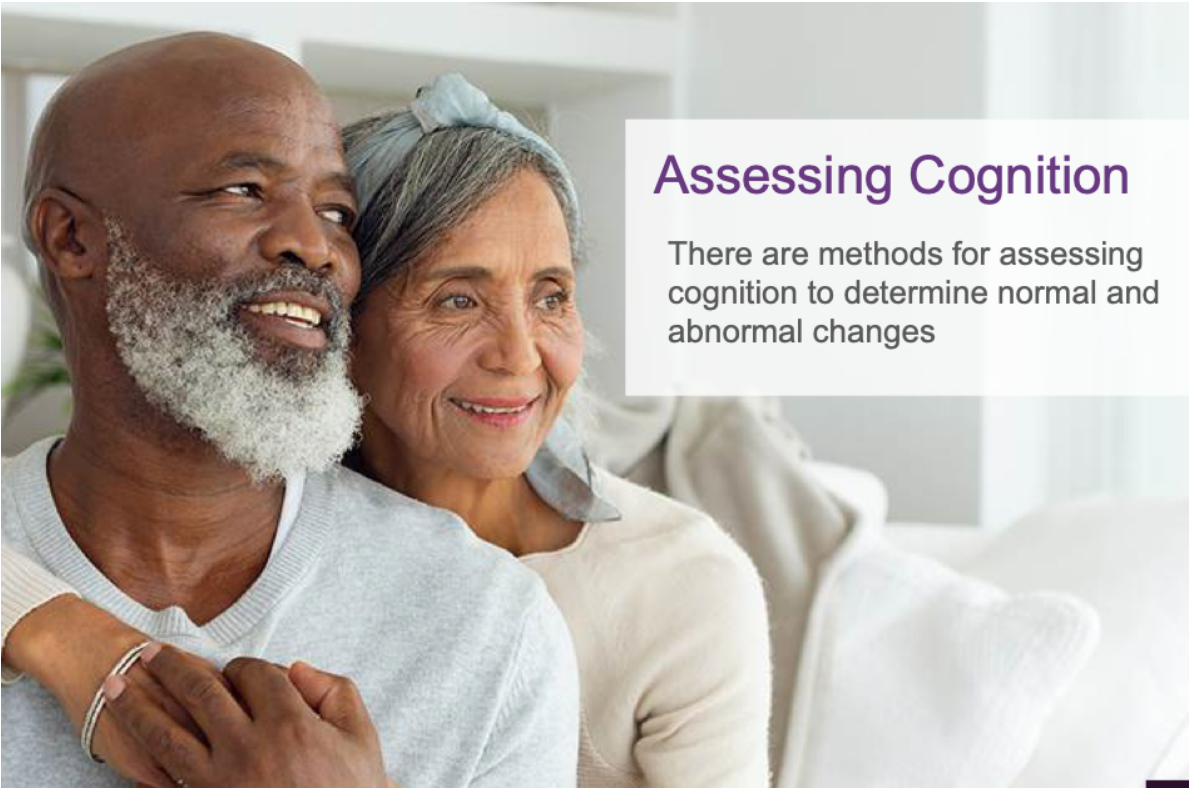




Take Home Message

- Dementia is an umbrella term referring to diseases which cause irreversible cognitive decline
- Most common cause of dementia is Alzheimer's disease followed by cerebrovascular disease
- Lewy body and Frontotemporal dementia are also types






Assessing Cognition

There are methods for assessing cognition to determine normal and abnormal changes

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Clinical Interview

- Critical element of assessment of cognitive functioning
- Collateral information from a person they interact with frequently is imperative
- Gather information about the nature and time course of the first symptoms noted



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Medical Evaluation

- Rule out potentially reversible causes of cognitive impairment
- Neuroimaging should also be considered to evaluate for non-neurodegenerative causes of cognitive impairment



Cognitive Screening

- Can help with detection of cognitive impairment
- Measures should be brief, easy to administer and interpret, measure multiple cognitive domains
- Limitations
 - Education level
 - May lack sensitivity or specificity
- Helpful in identifying individuals who may benefit from more thorough cognitive assessment



Cognitive Screening Tools

- Standard cognitive screening tools
 - Montreal Cognitive Assessment (MoCA)
 - Mini-Mental Status Exam (MMSE)
 - Saint Louis University Mental Status Exam (SLUMS)
- Screening measures for delirium
 - Confusion Assessment Method (CAM)
- 4 'A's' Test (4AT)



Neuropsychological Evaluation

- Considered to refine diagnosis and provide recommendations for safety and supervision needs
 - Clinical interview
 - Detailed assessment of all cognitive domains
 - Evaluation of emotional functioning
- Help determine whether current functioning is different from premorbid functioning



Diagnosing Dementia

- Diagnosis can represent
 - Disease that is causing the dementia
 - Where in the brain the disease starts
 - What the disease looks like clinically
- What the dementia looks like clinically depends on where in the brain it starts





More about Mike Jing
and his mother Doris Jing

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Take Home Message

- Assessing and diagnosing cognitive impairment includes a medical exam, clinical interview, and cognitive screening
- Neuropsychological evaluation can provide important information about cognitive functioning





Managing Cognitive Impairment

There are best practices for communicating with older adults who have cognitive impairment and behavioral interventions for people experiencing delirium which include strategies for managing challenging behaviors.

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Communicating with Older Adults Living with Alzheimer's Dementia

- Knowing what kind of cognitive impairment a person is experiencing can help adjust communication
- Repeating questions or stories is common
- Hints and cues are not helpful for people who have a storage problem
- Do not remind them they have forgotten, simply tell them again
- Since memory for recent events is poor, it is more helpful to converse about events that occurred in the distant past



Communicating with Older Adults with other Dementias

- Hints and cues are helpful
- Providing extra context can help trigger memory recall
- Easier for persons with this type of memory impairment to converse about recent events than for a person with Alzheimer's disease

**Provide extra context to
help trigger memory recall**

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Best Practices for Communicating with Older Adults with Any Kind of Cognitive Impairment

- Face at their physical level and make eye contact
- Wait until you are fully in room and have their attention
- Turn off any nearby televisions or radios
- Make sure older adult has any sensory assistive devices
- Use short, concrete, and straightforward language
- Pause briefly between statements
- Avoid interrupting or trying to fill in words
- Take care to speak at a normal volume and rate
- Avoid Elderspeak



Language Difficulty

- Language difficulty is common in persons with cognitive impairment
- Determine whether requests for repetition are due to a failure to hear versus a failure to understand
- Ask a "yes or no" question two different ways
- Use direct and concise language with straightforward syntax
- Use gestures, pictures, other nonverbal cues to aid communication
- For persons with language expression problems, working with a speech-language therapist can be helpful

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Behavioral Management of Delirium

- Delirium is a symptom, not a disease
- Interventions include frequent re-orientation, repairing sleep-wake cycle, and managing sensory inputs
- Essential aspects of prevention of delirium
 - Pain management, nutrition, adequate hydration, getting out of bed at least 3 times per day for hospitalized older adults
- Pharmacologic interventions should only be considered if an older adult with delirium poses a safety risk to themselves or others



Challenging Behaviors Related to Cognitive Impairment

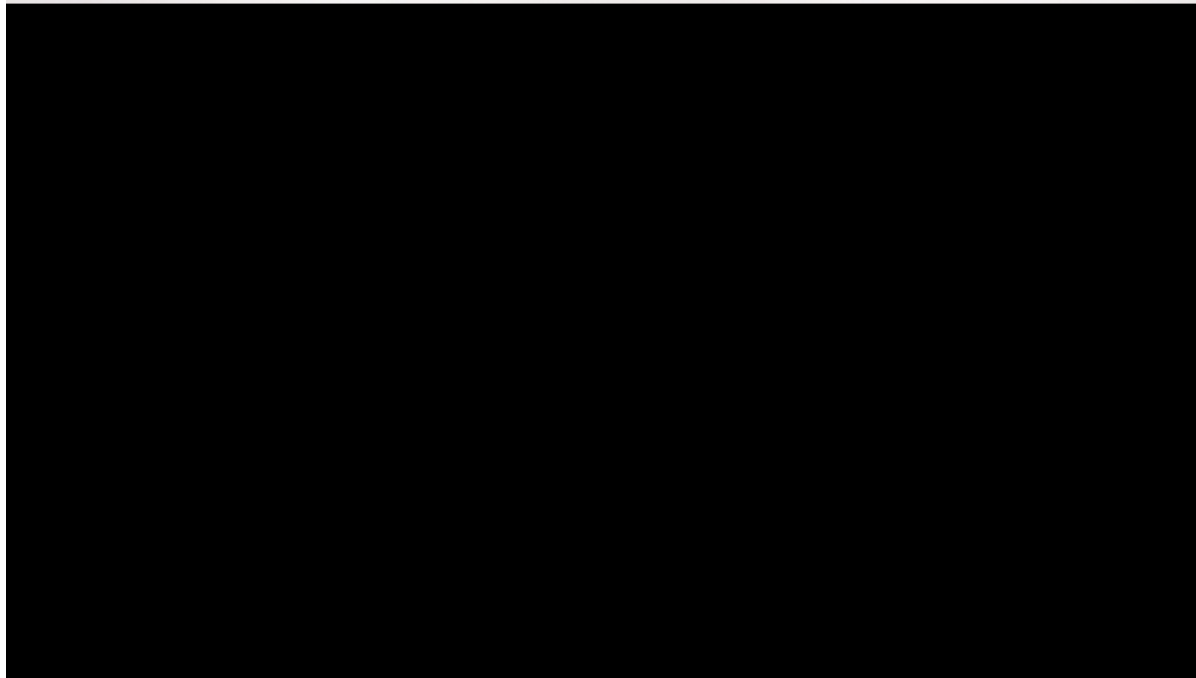
- May cause older adults to engage in challenging behaviors that are symptoms of the disease
- Understanding the reasons for the behavior can help caregivers remain calm and help them defuse the situation



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Eve Escalante, LCSW



Sundowning

- Term used to describe an emergence or exacerbation of neuropsychiatric symptoms in the late afternoon or early evening
- Often seen in people with dementia as well as delirium
- Common symptoms include agitation, anxiety, aggression, wandering, yelling, auditory and visual hallucinations
- Pathophysiology is likely multifactorial and ideally managed non-pharmacologically
- Limiting unnecessary sensory stimulation in the evening and implementing a daily routine can help mitigate sundowning



Managing Unhelpful Behaviors

- Unhelpful behaviors can occur in response to a trigger and be maintained by caregivers reinforcing the behavior
- Unhelpful behavior can sometimes be the only way for older adults with dementia to communicate unmet needs
- Try to identify the need and address it, rather than “fix” the behavior
- Common unmet needs in people with dementia include boredom, sensory deprivation, loneliness, need for social interaction, need to engage in meaningful activity, pain, discomfort



Prevention

- Best way to maintain cognitive health is through healthy lifestyle
 - Smoking cessation
 - Controlling chronic conditions
 - Regular physical exercise
 - Heart-healthy diet
 - Remaining cognitively active and socially engaged
 - Healthy sleep habits



Take Home Message

- Face the person at their physical level and make eye contact
- Make sure the older adult has sensory devices
- Use short, concrete, and straightforward language
- Address memory issues based on the type of memory impairment
- Unhelpful behavior can sometimes be the only way for older adults with dementia to communicate their unmet needs
- Best way an older adult can maintain their cognitive health as they age is through a healthy lifestyle



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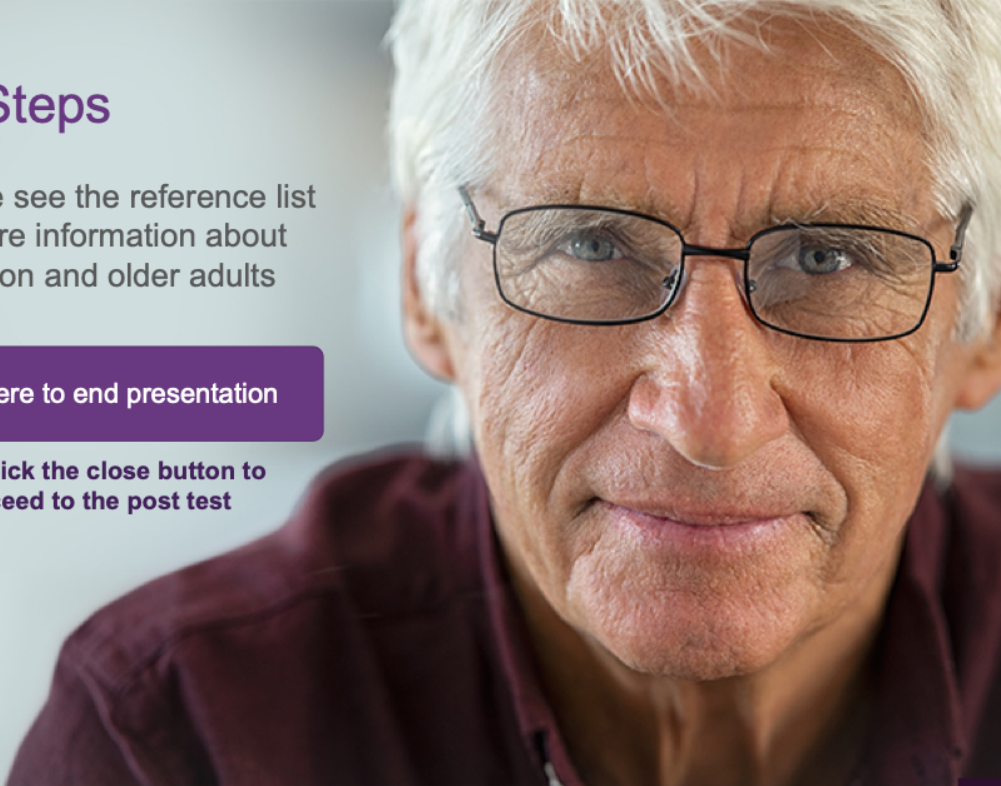


In Summary

In this section, we discussed:

- ✓ Abnormal cognitive changes that are not part of normal aging
- ✓ Causes of cognitive impairment that are treatable
- ✓ Various presentations and causes of dementia
- ✓ Strategies for communicating with older adults who are experiencing cognitive impairment, as well as behavioral interventions





Next Steps

- Please see the reference list for more information about cognition and older adults

[Click here to end presentation](#)

Then click the close button to proceed to the post test

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