Dementia Capability Training

Presenter:
Ritabelle Fernandes, MD, MPH
Associate Professor
Dept. of Geriatric Medicine
John A. Burns School of Medicine, U.H.
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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

| Condition                        | Diagnosis Told
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Alzheimer's Disease</td>
<td>45%</td>
</tr>
<tr>
<td>Four Most Common Cancers*</td>
<td>93%</td>
</tr>
<tr>
<td>Cardiovascular Disease</td>
<td>90%</td>
</tr>
<tr>
<td>High Blood Pressure</td>
<td>83%</td>
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</tbody>
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*Breast, Lung, Prostate, and Colorectal

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.*
A population with complex care needs

- 2.5 chronic conditions (average)
- 5+ medications (average)
- 3 times more likely to be hospitalized

Indisputable correlation between chronic conditions and costs

Many admissions from preventable conditions, with higher per person 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
"Dang!... Now where was I going?"

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

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Percent with Alzheimer’s</th>
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<tbody>
<tr>
<td>&lt; 65</td>
<td>4%</td>
</tr>
<tr>
<td>65 - 74</td>
<td>13%</td>
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<tr>
<td>75 - 84</td>
<td>44%</td>
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<tr>
<td>85 +</td>
<td>38%</td>
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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**?
Dementia

- Frontotemporal dementia
- Vascular dementia
- Parkinson’s dementia
- Lewy body dementia

Alzheimer’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?

Dementia
Senile Dementia
Organic Brain Disorder
Memory Loss
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
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

- 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

On the Parkinson’s spectrum
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

Hemorrhagic Stroke
- Weakened/diseased blood vessels rupture.
- Blood leaks into brain tissue

Ischemic Stroke
- Blood clots stop the flow of blood to an area of the brain
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?

- 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/jCoC5IInL88