Integrating Therapy into Dementia Care Management
Michelle Lucas-Webb, OTR/L, RAC-CT, CAPS
www.rehabdimensionsinc.com
©2010 Rehab Dimensions, Inc.

Learning Objectives

• Differentiate between and develop an understanding of the various forms of dementia.

• Identify general care approaches and strategies based on the cognitive levels of your patients.

• Obtain a basic understanding of cognitive assessments.

Alzheimer’s Disease

• The word dementia comes from:

  The Latin dis, meaning away from, and mens, meaning mind
Alzheimer’s Disease

Dr. Alois Alzheimer – first described the disease in 1906.

Auguste D. – “I've lost myself”

-----------

Alzheimer’s Disease

I forgot where I put my car keys, do I have Alzheimer’s disease??

-----------

Alzheimer’s Disease

<table>
<thead>
<tr>
<th>Normal Aging</th>
<th>Alzheimer’s Disease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Memory deficits not that significant</td>
<td>Memory deficits significant</td>
</tr>
<tr>
<td>Tasks of daily living mostly intact</td>
<td>Tasks of daily living become problematic and function is impaired. Deterioration initially, begins to become markedly noticeable</td>
</tr>
<tr>
<td>No specific microscopic changes in brain tissue</td>
<td>Specific microscopic changes (i.e. plaques and tangles)</td>
</tr>
<tr>
<td>Personality mostly intact</td>
<td>Personality changes noted</td>
</tr>
</tbody>
</table>

-----------
Alzheimer’s Disease

<table>
<thead>
<tr>
<th>Normal Aging</th>
<th>Alzheimer’s Disease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Making a bad decision once in awhile</td>
<td>Poor judgment and decision making</td>
</tr>
<tr>
<td>Missing a monthly payment</td>
<td>Inability to manage a budget</td>
</tr>
<tr>
<td>Forgetting which day it is and remembering later</td>
<td>Losing track of the date and season</td>
</tr>
<tr>
<td>Sometimes forgetting which word to use</td>
<td>Difficulty having a conversation</td>
</tr>
<tr>
<td>Losing things from time to time</td>
<td>Misplacing things and being unable to retrace steps to find them</td>
</tr>
</tbody>
</table>

Alzheimer’s Disease

- 10 warning signs
  - Memory changes that disrupt daily life
  - Challenges in planning or problem solving
  - Difficulty completing familiar tasks at home, at work or with leisure pursuits
  - Confusion with time or place
  - Trouble understanding visual images and spatial relationships

Alzheimer’s Disease

- 10 warning signs (con’t)
  - New problems with words in speaking and writing
  - Misplacing things and losing the ability to retrace steps
  - Decreased or poor judgment
  - Withdrawal from work or social activities
  - Changes in mood and personality
Statistics

• 2010 Alzheimer’s Disease Facts and Figures cited from the Alzheimer’s Association

• An estimated 5.3 million American have Alzheimer’s disease
  – Approx 5.1 million Americans aged 65 and older
  – Approx 200,000 Americans under age 65

Statistics

• In 2010, 1 new case of Alzheimer’s is diagnosed every 70 seconds for people aged 65+

• By 2050, estimated that 1 new case will be diagnosed every 33 seconds for people aged 65+

Statistics

• Aging Population

• This year, estimated 5.5 million Americans are 85 years and older. By 2050 this number is expected to nearly quadruple to 19 million.
Impact of Coexisting Medical Conditions

- Coexisting Condition
  - Hypertension: 60%
  - Coronary heart disease: 28%
  - Stroke-late effects: 25%
  - Diabetes: 23%
  - Osteoporosis: 18%
  - Congestive heart failure: 16%
  - COPD: 15%
  - Cancer: 13%
  - Parkinson’s Disease: 8%

Percentage with Alzheimer’s or other Dementias and the Coexisting Condition

- By 2015, about 7.7 million Americans will have Alzheimer’s disease
- By 2050, 11 million to 16 million Americans will have Alzheimer’s disease

Statistics

Future Prevalence

- Unless science finds a way to prevent, cure or delay the onset and/or progression of Alzheimer’s disease:

Most Common Causes of Dementia
Types of Dementia

• Alzheimer’s Disease

Alzheimer’s disease is a progressive, neurodegenerative disease characterized by loss of function and death of nerve cells in several areas of the brain, leading to loss of memory and learning. It is the most common form of dementia.

*There are over 100 types of dementia, most of which are progressive and irreversible.

Types of Dementia

• Alzheimer’s Disease

Plaques and Tangles

➢ **Plaques** (beta-amyloid protein deposits) build up between nerve cells. Cells and nerve pathways get strangled by plaques and tangles.

➢ **Tangles** form inside dying cells. They are twisted fibers of a protein called tau.

Types of Dementia

• Vascular (multi-infarct) dementia

Refers to impairment caused by reduced blood flow to parts of the brain. The most common type is what used to be called “multi-infarct dementia” in which a series of very small strokes block small arteries. Symptoms of vascular dementia can be similar to Alzheimer’s disease. They include problems with memory, confusion and difficulty following instructions.
Types of Dementia

• Lewy Body Dementia

Associated with protein deposits called Lewy bodies, found in the cortex of the brain. May see wide variations in attention and alertness. Often presents with visual hallucinations, delusions, muscle rigidity and tremors similar to Parkinson’s disease.

Types of Dementia

• Frontotemporal dementia (previously known as Pick’s disease)

Types of Dementia

• Frontotemporal dementia (FTD) results in a deterioration of the anterior temporal lobe and frontal lobes of the brain. These areas are associated with decision making, control of behavior and emotion and language.

• Hallmark of this disorder is a decreasing self-awareness, patient displays little insight. May display inappropriate social behavior (swearing, hypersexual behavior, impulsivity, loss of empathy).
Types of Dementia

• Huntington’s disease

Inherited, progressive disorder that causes irregular movements of the arms, legs and facial muscles, personality changes and a decline in ability to think clearly.

Perceptions and Feelings

• What are some perceptions or assumptions we make regarding those with dementia?

What do you see?
What do you see?

What do you see?

What do you see?
Perceptions and Feelings

• What might you see differently about a person with dementia if you had a change in perception or assumption?

Stages

• Mild AD
  - Loses spark (change in personality)
  - Loses recent memory without a change in casual conversation
  - Trouble with word finding
  - Shorter attention span
  - May stop talking to avoid mistakes
  - May lose way going to familiar places

Stages

• Mild AD (con’t)
  - Asks repetitive questions
  - May have difficulty making decisions
  - Takes longer to do routine chores
  - May forget to eat or eats constantly
  - Loses or misplaces things by hiding them in odd places
  - May display hoarding behavior
Stages

• Moderate AD
  - Appearance may change
  - Mixes up identity of people (confuses son for a brother)
  - Poor judgment creates safety issues – may wander
  - Continuously repeats stories, statements
  - Trouble following written notes or completing tasks
  - May demonstrate resistive behavior (hitting, kicking)

Stages

• Moderate AD (con’t)
  - Changes in sleep patterns
  - Problems with sequencing or multi-step directions
  - May have delusions or paranoia
  - Needs help with ADLs
  - Time confusion
  - Inappropriate sexual behavior may be noted

Stages

• Moderate AD (con’t)
  - May be able to read but cannot formulate correct response to a written request
  - Has difficulty with positioning body on toilet or in chair
  - May think mirror image is following him/her
  - May see, hear, smell or taste things that are not there
Stages

• Severe AD
  - Unable to recognize self or family
  - May moan or groan or speak incoherently (may be mute)
  - Sleeps more often
  - Weight loss
  - Lack of bowel or bladder control

Stages

• Severe AD (con’t)
  - Contractures or positioning issues
  - If walking – unsafe
  - Skin infections and pressure ulcers
  - Aspiration risk
  - Total assist for ADLs

Cognitive Assessments
Mini Mental Status Examination

- Mini Mental
  - 11 questions
  - Evaluates 6 areas of cognitive function:
    Orientation
    Attention
    Immediate Recall
    Short-term Recall
    Language
    Simple verbal and written commands

St. Louis University Mental Status Examination

- SLUMS
  - 11 questions
  - Measures cognitive domains similar to the Mini-Mental
  - Created to screen patients who have higher level of education

Global Deterioration Scale

- Global Deterioration Scale (GDS)
  - 7 Stages of decreasing ability
    Stage 1 – No cognitive decline
    Stage 2 – Very mild decline
    Stage 3 – Mild cognitive decline
    Stage 4 – Moderate cognitive decline
    Stage 5 – Moderately severe cognitive decline
    Stage 6 – Severe cognitive decline
    Stage 7 – Very severe cognitive decline
<table>
<thead>
<tr>
<th>Global Deterioration Scale</th>
<th></th>
</tr>
</thead>
</table>
| **Stage 2 (Very mild decline)** | ❖ Word finding deficits  
 ❖ Forgets names and location of objects  
 ❖ Reported subjectively, may not see objective evidence of memory deficit during clinical interview |
| **Stage 3 (Mild cognitive decline)** | ❖ May get lost traveling to an unfamiliar location  
 ❖ Co-workers become aware of poor work performance  
 ❖ Word finding and name finding deficits become evident to family |
| **Stage 4 (Moderate cognitive decline)** | ❖ Decreased ability to travel, handle finances  
 ❖ Denial is dominant defense mechanism  
 ❖ Decreased knowledge of current and recent events |
Global Deterioration Scale

• Stage 5 (Moderately severe cognitive decline)
  - Patient requires some assistance
  - Frequently some disorientation to time or place
  - Need help choosing clothing

Global Deterioration Scale

• Stage 6 (Severe cognitive decline)
  - Assistance required for all BADLs
  - May see agitation
  - Frequently recall their own name

Global Deterioration Scale

• Stage 7 (Very severe cognitive decline)
  - Vocabulary limited (utterances)
  - Postural control lost
  - Generalized rigidity and neurologic reflexes present
GrayMatters® Cognitive Screening

Developed by Samuel Brinkman, Ph.D.
President of Dementia Screening, Inc.
325.677.3172

GrayMatters® Cognitive Screening

• GrayMatters dementia screening system designed to using narration and an easy to master touch screen.
• Designed to be completed in only 20-30 min
• Helps to establish a cognitive baseline and can be used to re-assess the patient at regular intervals as memory problems evolve.
Claudia Allen Cognitive Assessment

Claudia Allen, OTR developed the Allen Cognitive Disability Theory. She created various cognitive assessment tools that evaluate cognitive and functional skill as opposed to focusing solely on memory.

Claudia Allen Cognitive Assessment

• Why is it important to focus on function?

We need to shift our mindset from what the patient can’t do to what functional abilities are present. We must ensure that cognitive capability and functional performance are matched appropriately. If not, we find something called EXCESS DISABILITY.
Claudia Allen Cognitive Assessment

• What are some examples of excess disability?
• How can we prevent this from happening?

Claudia Allen Cognitive Assessment

Scale

Level 1 – Automatic Actions
Level 2 – Postural Actions
Level 3 – Manual Actions
Level 4 – Goal Directed Activity
Level 5 – Independent Activity
Level 6 – Planned Activity

Claudia Allen Cognitive Assessment

• Theory of Retrogenesis
  Theory was developed by Dr. Barry Reisberg, MD (who also developed the GDS). Retrogenesis means “back to birth”. Alzheimer’s affects the brain in almost exactly the reverse order it develops from birth. You can associate behaviors with those of teenagers, children and infants. By no means does this mean we treat residents like children. We must always show dignity and respect.
Claudia Allen Cognitive Assessment

<table>
<thead>
<tr>
<th>Level</th>
<th>Corresponding Developmental Age/Stages of Dementia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1</td>
<td>Infant/End Stage Dementia</td>
</tr>
<tr>
<td>Level 2</td>
<td>1-2 year old/Late Stage Dementia</td>
</tr>
<tr>
<td>Level 3</td>
<td>2-4 year old/Middle Stage</td>
</tr>
<tr>
<td>Level 4</td>
<td>4-12 year old/Early Stage</td>
</tr>
<tr>
<td>Level 5</td>
<td>Teenage years/MCI</td>
</tr>
<tr>
<td>Level 6</td>
<td>Adults/Normal – No Impairment</td>
</tr>
</tbody>
</table>

Level 1 (Automatic Actions)
Responses are automatic or reflexive

- Locates strong stimuli (sounds, smell)
- Turns head to track objects
- Raises body parts from bed
- Requires total assist for all needs

Level 2 (Postural Actions)
Actions are postural, resident is able to move against gravity

- Sits unsupported
- Stands and walks (may be spontaneous, decreased safety)
- Holds onto objects for support
- Responds yes/no to questions
Claudia Allen Cognitive Assessment

Level 3 (Manual Actions)
Residents begin to use hands more often and appropriately, but no real understanding of the effects of their action.

- Handles, manipulates objects
- Uses different grasps for objects
- Maintains action for short periods (gets lost in task)
- Limited area of perception

Claudia Allen Cognitive Assessment

Level 4 (Goal Directed Activity)
Actions are goal directed, see a purpose to activity

- Sequences through basic ADL tasks
- Compliance is important to the patient
- Striking features are noted
- Decreased safety with limited awareness of disease

Claudia Allen Cognitive Assessment

Level 5 (Independent Activity)

- Learns through exploring
- Understands trial and error
- May seem impulsive at times
Claudia Allen Cognitive Assessment

Level 6 (Planned Activity)

- Plans ahead
- Thinks abstractly
- No cognitive impairment
Therapy Specific Referrals

• Occupational Therapy
  ➢ Feeding Difficulties (adapted utensils, tray set up, strengthening, coordination activities, environmental adaptations, positioning needs)
  ➢ ADL deficits (adapted clothing - i.e. elastic shoelaces, limit choices, strengthening)
  ➢ Positioning needs (wheelchair cushions, wheelchair selection, alarms, postural aids, trunk strengthening)

• Physical Therapy
  ➢ Ambulation problems (gait training, music incorporated into session, simple equipment – rolling walker vs. standard)
  ➢ Weakness (strengthening exercises – use familiar objects such as balls, wiping down tables, possible pulley exercises or restorator as this mimics a bicycle)
Therapy Specific Referrals

- **Speech Therapy**
  - Swallowing/Eating deficits (diet changes, oral motor strengthening – blowing bubbles, singing, increasing verbalization, caregiver education is of major importance)
  - Cognition- Memory aids (Level 4) memory boxes, complete training in space that makes sense, keep activities functional – if working on sequencing actually do the activity

Interdisciplinary Team Role

- **Nursing** – medication interactions, monitoring, toileting schedules, education for front line staff
- **Housekeeping** – keeping halls clear, watching for safety hazards, lowering beds (if elevating to clean underneath), locking bed brakes after cleaning
- **Maintenance** – keeping wheelchairs in good working order (armrests, brakes), lighting in rooms, handrails secure
- **Activities** – current events groups, sensory stimulation activities, identifying the right 1:1 activity for the resident
- **Social Services** – work history, family history, likes/dislikes, hobbies, sleeping patterns, pet history. Data gathering!

Validation Therapy

Developed by Naomi Feil, M.S., A.C.S.W. as a method of communication for those who are severely disoriented. Author of the “Validation Breakthrough”.

Validation

1. Painful feelings that are expressed, acknowledged and validated by a trusted listener will diminish.
2. Painful feelings that are ignored or suppressed will gain strength and become “toxic”.
3. Early, well-established, emotional memories remain on some level into old-old age.
4. When more recent memory fails, older adults try to restore balance to their lives by retrieving early memories.

5. When eyesight fails, they use the mind’s eye to see. When hearing goes, they listen to sounds from the past.
6. Human beings have many levels of awareness.
7. When present reality becomes painful, some old-old survive by retreating and stimulating memories of the past.
8. Emotions felt in present time can trigger similar emotions felt in the past.

Strategies

• Communication
  - Choose simple words and short sentences
  - Speak calmly, low tones are preferable
  - Minimize distractions
  - Gain attention before speaking
  - Allow enough time for a response
  - Be positive!
Strategies

• Bathing
  - Find time that works best for resident
  - Bathing can be scary. Be calm and reassuring
  - Give step by step instruction
  - Allow sensory experiences before bathing begins
  - Sponge bathes sometimes more effective

Strategies

• Dressing
  - Keep routine if possible
  - Encourage resident to participate as much as possible (give opportunity for success)
  - Identical outfits sometimes best option
  - Arrange clothing in order to be put on
  - Elastic waists, velcro shoes minimize struggle

Strategies

• Eating
  - Minimize distractions
  - Limit the number of choices. Try to offer foods with familiar flavors, varied textures, different colors
  - Offer small portions, finger foods, shakes
  - Try passive adaptive equipment
  - Try alternatives such as using covered cup for strained soups vs. a bowl
Strategies

- Activities
  - Help resident initiate activity. Break down into small steps
  - Watch for signs of agitation or frustration
  - Incorporate activities resident enjoys into daily routine
  - Give praise for a job well done!

Strategies

- Exercise
  - Try pulleys or exercise bike if other forms of exercise are difficult
  - Push hydration/fluids during treatment session
  - Incorporate music if possible
  - Sorting activities may be enjoyable
  - Functional tasks work best (i.e. instead of picking up cones from table use towels and have resident place them in laundry basket)

Conclusion

What are you willing to change today?
To comply with professional boards/associations standards:
- I declare that I or my family do not have any financial relationship in any amount, occurring in
the last 12 months with a commercial interest whose products or services are discussed in my
presentation. Additionally all Planner’s involved do not have any financial relationship.
-Requirements for successful completion is attendance for the full session along with a
completed session evaluation form.
-Cross Country Education and all current accreditation statuses does not imply endorsement
of any commercial products displayed in conjunction with this activity.

Integrating Therapy into Dementia Care Management
Michelle Lucas-Webb, OTR/L, RAC-CT, CAPS

Cross Country Education
Leading the Way in Professional Development.
www.CrossCountryEducation.com

Resources

Alzheimer’s Association – www.alz.org

Alzheimer’s Weekly Newsletter – articles and blogs
www.alzheimersweekly.com

Alzheimer’s Daily Newsletter – articles and research updates
www.alznews.com

National Institute on Aging – research, health and news updates
www.nia.nih.org

References

Feil, Naomi. (2002). The Validation Breakthrough (2nd ed.).
Baltimore, MD: Health Professions Press, Inc.


New York: Wellness Central.
Resources

- Alzheimer’s Association
- Occupational Therapy Treatment Goals for the Physically and Cognitively Disabled
  Claudia Allen
  American Occupational Therapy Association
- Dementia Care Guidelines for Families (3rd Edition)
  Division of Geriatric Psychiatry and Neuropsychiatry
  Johns Hopkins University
  Constantine G. Lyketsos
  Peter V. Rabins
- Mini-Mental Status Examination
  Marshall Folstein
  Susan Folstein

Resources

- Global Deterioration Scale
  Barry Reisberg
- The Association for Frontotemporal Dementias
- Gerry Richards Hall, PhD
  Caring for People with Frontal Lobe Syndromes and Lewy Body Dementia
- Dementia Care Specialists
  www.dementiacarespecialists.com
- Alzheimer’s Broken Brain
- www.health24.com

Contact Information

Michelle Lucas-Webb, OTR, RAC-CT, CAPS
Rehab Dimensions, Inc.
704.892.7896 Office
704.496.2129 Fax
mwebb@rehabdimensionsinc.com
www.rehabdimensionsinc.com