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continued

# Dementia Management

Techniques for Staging and Intervention

continued

## Learning Outcomes

After this course, participants will be able to:

- Identify at least three stages of dementia including related behaviors and abilities.
- Identify at least two standardized assessments used to accurately stage residents with dementia.
- Identify at least four treatment interventions and activity adaptations for patients with dementia.
- Discuss at least two appropriate documentation strategies to reflect skilled intervention.

# Cognition

## Cognition

- Definition – The process of thinking, perceiving and learning
- Specific cognitive functions include
  - Decision-making
  - Judgment
  - Spatial orientation
  - Thinking/reasoning
  - Verbal communication
  - Memory

continued

## Memory

- Definition – Ability to retain and retrieve previously learned information
- Long-term Memory
  - Procedural Memory – Memory for how to do things; accessed without conscious control
  - Declarative Memory – Consciously available memories
    - Episodic memory – Personal experiences/events
    - Semantic memory – General factual info

continued

## Normal Age-Related Changes

- ↑ sensitivity to distractions
- More difficulty concentrating
- Less efficient processing & storage of new information
- ↓ ability to shift attention among many objects (multi-tasking)
- Slowing down of free recall (proper nouns/ names/places)
- ↓ ability to recall information immediately when & where needed
- Brain function slows down just as muscles and all other bodily functions slow down
- Research shows we lose 1% of our capacity each year after age 30

continued

## Normal Aging and Memory

### Preserved Memory Functions

- Procedural memory
- Episodic memory
- Semantic memory

### Declining Memory Functions

- Learning new information
- Recalling new information

continued

## Cognitive Decline in the Elderly

- Age-associated Memory Impairment (AAMI)
  - General degradation of memory which results from aging
- Mild Cognitive Impairment (MCI)
  - Bridge or transition between normal cognitive aging and dementia
  - 10-20% of patients with MCI progress to dementia within 12 months

Etgen et al., 2011

continued

# Dementia

continued

## Dementia

- Progressive decline in cognition along with a short- and long-term memory loss due to brain damage/disease

ICD-9-CM, 2013

- Impairment in memory and at least 1 domain of cognitive functioning that represents a decrease from previous functional level & results in an impairment in daily activities

Buffington, Lipski, & Westfall, 2013

continued

## Background

- Estimated 5 million Americans suffer from dementia
  - More than 15 million provide caregiving
- Costly to treat (\$215 B in 2010)
- Caregiving is the most costly aspect of dementia care

(AHRQ, 2014)

continued

## Background (Alzheimer's Association, 2015)

- In the US 1 in 9 persons over 65 have AD
  - 16 million by 2050
- Estimated 75% of persons with AD are admitted to a SNF
- AD is the 6th leading cause of death in the US
  - Only disease in the Top 10 that cannot be prevented or cured



continued

## Types of Dementia (Alzheimer's Association, 2016)

- Alzheimer's Disease
  - Most common type (60-80% of cases)
  - Slow progressive decline in cognition and function
  - Neuronal cell death in parietal and temporal lobes and presence of plaques and tangles
  - Affects 5.4 million people

continued

## Alzheimer's Disease (alzheimersnewstoday.com)

- 44 million people worldwide have Alzheimer's disease or a related form of dementia
- In the U.S., 5.5 million people have Alzheimer's disease
  - 5.3 million are 65 and older
- About two-thirds of Americans with Alzheimer's disease are women
- Prevalence doubles every five years beyond the age of 65
- Someone in the U.S. develops Alzheimer's disease every 66 seconds
- Sixth-leading cause of death in the U.S.
- Typical life expectancy after an Alzheimer's diagnosis is 4-8 years
- Global cost estimated to be \$605 billion

continued

## Types of Dementia

(Association for Frontotemporal Degeneration, 2016)

- Frontotemporal lobar degeneration
  - Pick's disease
  - Young age 50-60
  - Changes in behavior and language
  - Memory preserved
  - Atrophy of the cortical regions of frontal and temporal lobes
  - Affects 50,000-60,000 persons

continued

## Types of Dementia

(Alzheimer's Association, 2015)

- Lewy Body disease
  - Impaired executive function, perception, memory
  - Fluctuating cognitive function
  - Visual hallucinations
  - Autonomic nervous system issues
  - Parkinson's like motor function
  - Lewy bodies in neurons and glia
  - 3rd most common after AD and vascular

continued

## Types of Dementia (Alzheimer's Association, 2016)

- Korsakoff syndrome
  - Caused by substance abuse or medications
  - Marked severe memory loss, confabulation, spared social cognition
  - Thiamine deficiency

continued

## Types of Dementia (Alzheimer's Association, 2016)

- Vascular dementia and disease
  - Previously known as multi-infarct dementia
  - Symptoms vary depending on area of brain affected
  - Impaired judgement and decision making
  - 2nd most common after AD

continued

## Types of Dementia

(AIDS Education and Training Center National Resource Center, 2016)

- HIV Associated
  - Cognitive, motor, and behavioral impairments
    - Concentration, attention, memory, executive function, apathy and social withdrawal, unsteadiness, clumsiness
  - Demyelination in frontal cortex.

continued

## Types of Dementia

(National Institutes of Health Genetics Home Reference, 2016)

- Prion Disease
  - Creutzfeldt-Jakob is the most common
  - Rapidly fatal disorder
  - Motor symptoms like ataxia and myoclonus
  - Neuronal cell death caused by prion proteins in the brain
  - 350 new cases each year

continued

## Types of Dementia (Alzheimer's Association, 2016)

- Parkinson's Disease
  - Motor symptoms
  - Cognitive symptoms similar to Lewy Body
  - Loss of dopamine producing cells in the substantia nigra
  - 50-80% of the 1 million with PD have cognitive decline

continued

## Types of Dementia (Alzheimer's Association, 2016)

- Huntington's Disease
  - Onset between 30 and 50 years
  - Involuntary movement
  - Changes in personality, mood, and other cognitive functions
  - Loss of brain cells in striatum (cortex and basal ganglia)
  - 30,000 (1 in every 10,000)

continued

## Types of Dementia

- Multiple etiologies
  - Referred to as mixed or multi-factorial dementia
  - Classified by presence of more than 1 type of cognitive disease excluding substance abuse with co-existing AD and vascular disease being the most common

continued

## Modifiable Risk Factors

- Cardiovascular risk factors
- Metabolic factors
- Endocrine factors
- Lifestyle factors

Etgen et al., 2011; Kirk-Sanchez & McGough, 2014

continued

## Key Points

- MCI/dementia influenced by modifiable risk factors
- Associated w/ classic cardiovascular risk factors
- CRF newly discovered risk factor—no treatment related to cognitive decline yet determined
- Substitution therapy generally not recommended (e.g., Vit B12, Vit D, testosterone, estrogen, etc.)
- Mediterranean diet & physical activity recommended
- Stop smoking; low alcohol consumption

Etgen et al., 2011

continued

## Risk Factors for Dementia

- Heredity
- Down syndrome
- Health problems
- Environmental factors
- Brain trauma

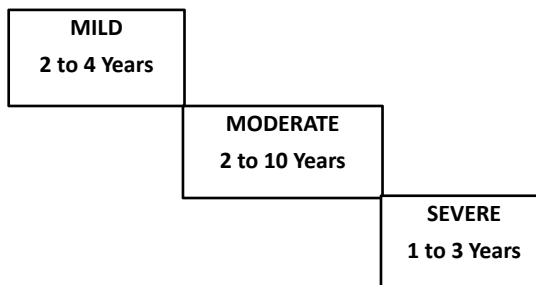
## Stages of Dementia

Mild/Early  
First Stage

Moderate/  
Middle  
Second Stage  
Third Stage

Severe/Late/  
End Stage  
Third Stage  
Fourth Stage

These are general patterns that do not apply to everyone. Stages may vary in length and symptoms may overlap between stages.



From "Keepsake: A Program on Memory, Aging & Alzheimer's"

## Early Dementia

- Appear more apathetic, with less sparkle
- Lose interest in hobbies, activities
- Unwilling to try new things
- Unable to adapt to change
- Show poor judgment and make poor decisions
- Slower to grasp complex ideas and take longer with routine jobs



continued

## Early Dementia

- Blame others for “stealing” lost items
- Become more self-centered and less concerned with others and their feelings
- Become more forgetful of details of recent events
- More likely to repeat themselves or lose the thread of their conversation
- More irritable or upset if they fail at something
- Have difficulty handling money

continued

## Early Dementia

- Looks “normal”
- Good speech/language/social skills
- Immediate memory relatively intact
- No changes in posture and/or gait
- Knowledge of past, present and future
- Believes still has responsibilities
- Doesn't believe needs assistance

continued

## Early Dementia

- Wandering
- Exit-seeking, eloper or runaway
- Delusions, suspiciousness, anxiety
- Tearfulness, depression and catastrophic outbursts
- ADL relatively intact

continued

## Early Dementia

- Problems coming up with the right word or name
- Trouble remembering names when introduced to new people
- Challenges performing tasks in social or work settings.
- Forgetting material that one has just read
- Losing or misplacing a valuable object
- Increasing trouble with planning or organizing

continued

## Middle Dementia

- Very forgetful of recent events; memory for the distant past generally seems better, but some details may be forgotten or confused
- Confused regarding time and place
- Become lost if away from familiar surroundings
- Forget names of family or friends, or confuse one family member with another
- Forget saucepans and kettles on the stove; may leave gas unlit

continued

## Middle Dementia

- Wander around streets, perhaps at night, sometimes becoming lost
- Behave inappropriately, for example going outdoors in nightwear
- See or hear things that are not there
- Become very repetitive
- Neglectful of hygiene or eating
- Become angry, upset, distressed or frustrated

continued

## Middle Dementia

- Looks “unfinished”
- Ambivalent about social graces
- Noticeable speech/language deficits
- Difficulty using common objects
- Changes in posture, gait, balance, vision
- Knowledge past and immediate present
- Gives up previous “responsibilities”
- Unconcerned about whereabouts
- No longer able to think abstractly

continued

## Middle Dementia

- Wandering, self-stimulation
- Becoming sensory oriented
- Searching for things/persons
- Repetitive “tasks”
- Delusions, suspiciousness, anxiety
- Catastrophic outbursts
- Resistance to care, ADL simplification
- Social “butterfly”

continued

## Middle Dementia

- Forgetfulness of events or about one's own personal history
- Feeling moody or withdrawn, especially in socially or mentally challenging situations
- Being unable to recall their own address or telephone number or the high school or college from which they graduated
- Confusion about where they are or what day it is
- The need for help choosing proper clothing for the season or the occasion
- Trouble controlling bladder and bowels in some individuals
- Changes in sleep patterns, such as sleeping during the day and becoming restless at night
- An increased risk of wandering and becoming lost
- Personality and behavioral changes, including suspiciousness and delusions or compulsive, repetitive behavior like hand-wringing or tissue shredding

continued

## Late/End Stage Dementia

- Unable to remember, for even a few minutes, that they have had, for example, a meal
- Lose ability to understand or use speech
- Incontinent
- Show no recognition of friends and family
- Need help with eating, washing, bathing, using the toilet, dressing
- Fail to recognize everyday objects

continued

## Late/End Stage Dementia

- Disturbed at night
- Restless, perhaps looking for a long-dead relative
- Aggressive, especially when feeling threatened or closed in
- Have difficulty walking, eventually perhaps becoming confined to a wheelchair
- Have uncontrolled movements
- Immobility will become permanent; in the final weeks or months the person will be bedridden

continued

## Late/End Stage Dementia

- Looks “abnormal”
- Severe speech/comprehension deficits
- Severe difficulty using common objects
- Appears “lost in thought”
- Difficult to get and keep attention
- Significant posture, gait and/or balance deficits
- Downward restricted gaze

continued

## Late/End Stage Dementia

- Need round-the-clock assistance with daily activities and personal care
- Lose awareness of recent experiences as well as of their surroundings
- Experience changes in physical abilities, including the ability to walk, sit and, eventually, swallow
- Have increasing difficulty communicating
- Become vulnerable to infections, especially pneumonia

continued

## Reasons for Referral

- Unsafe gait pattern
- Swallowing issues
- Positioning or restraint concerns
- Weight loss without medical cause
- Postural guarding; signs of balance disorders
- Need to modify the environment to prevent falls
- Contractures or decreasing ROM
- Patient unable to participate in activities
- Caregiver does not understand cueing
- Need to establish an ADL routine
- Patient unable to communicate needs

continued

## Why use a staging tool?

- To enhance the quality of life
- To identify a patient's baseline
- To develop appropriate intervention strategies
- To modify/adapt the environment
- To train caregivers
- To provide reassurance

continued

## Staging Tools

- Mini-Mental State Examination
- FROMJE
- Global Deterioration Scale
- Brief Cognitive Rating Scale
- Functional Assessment Staging
- Brief Interview for Mental Status
- Short Blessed Test
- St. Louis University Mental Status Examination
- Test Your Memory
- Brief Cognitive Assessment Tool
- Self-Administered Gerocognitive Examination



continued

# Behaviors

continued

## BPSD

- Behavioral and psychological symptoms of dementia
  - Symptoms of disturbed perception, thought content, mood or behavior that frequently occur in patients with dementia.
- As many 76% of residents have BPSD
- Labels used to describe include agitated, aggressive, and disruptive

(AHRQ, 2014)

## Caregiver Burden

- AD is the 12<sup>th</sup> most burdensome disease
- Caregivers report symptoms like decline in emotional well-being, physical health, depression
- Post acute care cost projected to increase from \$236 billion in 2016 to over \$1 trillion in 2050

## Caregiver Strategies

- Support groups led by professionals that address depression, burden (Chien et al, 2011)
- Attending support group report higher QOL (Bartfay & Bartfay, 2013)
- Limited evidence for internet-based support group (Marziali & Garcia, 2011)
- Skill training DVD with periodic phone calls from a practitioner reduced stress (Gallagher-Thompson et al., 2010)
- Reframing distressing beliefs (Eggenberger, Heimerl, & Bennett, 2013)

## Caregiver Strategies

- Mindfulness-based interventions improve mental health (Oken et al., 2010; Whitebird et al., 2013)
- A telephone-based intervention improved interactions with staff (Davies et al., 2011)
- Home monitoring systems did nothing to help with caregiver worry, did not improve caregiver sleep (Rowe et al., 2010)
- The strongest evidence for caregivers came from interventions targeted at communication skills, use of memory aids, and mindfulness to reduce stress

## Theoretical Frameworks

Four theoretical frameworks to explain etiology of behavioral disorders

- Biologic/genetic
  - Due to symptoms of dementia
- Behavioral
  - Relationship between patients and environment
- Reduced stress threshold
  - Lower threshold to stimuli
- Unmet needs  
(Cohen-Mansfield, 2013)

continued

## Theory of Retrogenesis

(ret-roh-JEN-uh-sis) *n.* The loss of mental abilities in old age in the opposite order in which they are gained in childhood, especially as exhibited by Alzheimer's patients

continued

## Theory of Retrogenesis

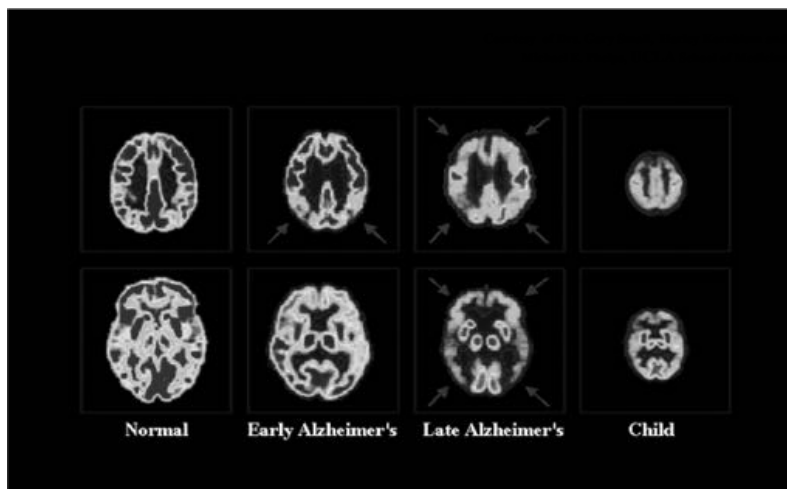
### Brain Development

- Begins first in the primary motor area
- One of the last brain structures to be myelinated is the hippocampus

### Alzheimer's Degeneration

- Brain damage begins in the hippocampus
- The primary motor area is finally affected in late stages of AD

continued



continued

## Basic Needs

- Physiological
- Safety/security
- Belonging and love
- Esteem

## Care Models Addressing Behaviors

- Progressively Lowered Stress Threshold Model (Hall & Buckwalter, 1987)
  - Six principles of care
    - Modify the environment
    - Unconditional positive regard
    - Use anxiety as a gauge
    - Listen for behaviors
    - Support loss and enhance safety
    - Provide caregiver education

## Care Models Addressing Behaviors

- Need-Driven Dementia-Compromised Behavior Model (Algase et al., 1996)
  - Background factors
    - Dementia compromised functioning
    - Poor health status
    - Demographic and psychosocial variables
  - Proximal factors
    - Unmet physiologic and psychological needs
    - Disturbing environmental factors
    - Uncomfortable social surroundings

continued

## Responses to Stress

### Typical Stress Relievers

- Go for walk
- Talk on the phone
- Take a bath
- Put on comfortable clothes
- Go shopping
- Exercise
- Read a book
- Sex

### Dementia Behaviors

- Wandering
- Asking same thing over and over
- Taking off clothes
- Rummaging
- Pacing
- Inappropriate sexual behavior

continued

## Behaviors and Dementia

- “Behavioral symptoms related to dementia are defined as verbal, vocal or motor activities that are considered to be aggressive, excessive or lack adherence to social standards.”
- Behaviors result from interactions between the resident, the caregiver and the setting
- 56-66% of residents in LTC facilities exhibit behavioral symptoms related to dementia

Boustani et al, 2005

## Disruptive Behaviors

- Inappropriate, repetitive or dangerous behaviors which are disruptive to the living and working environment in the NH
- Most common disruptive behaviors
  - Wandering
  - Aggression
  - Agitation

Ahn & Horgas, 2013

## Behaviors

- ALL behavior has meaning and is indicating something
- Behavior is a form of communication
- Look at every behavior as unmet need
- Behaviors are considered a problem when
  - Safety or well-being of patient or others is compromised
  - A trigger or cause cannot be identified



continued

## Common Behaviors

- Anger/agitation
- Sleep problems
- Paranoia/delusions
- Resistance to ADL
- Continence difficulty
- Getting lost/  
wandering
- Sundowning
- Catastrophic reactions
- Rummaging
- Repetitive actions
- Crying out
- Inappropriate social  
and sexual behavior

continued

## Causes of Problematic Behaviors

- Environmental
- Physiological
- Psychological
- Medication induced
- Communication
- Task-related
- Pain

continued

## Addressing Problematic Behaviors

- Prevent the incidence of agitation and aggressive behaviors
- Respond to episodes to reduce severity, duration, caregiver distress
- Interventions may be
  - Patient focused: directly intervene with patients
  - Caregiver focused: intervene through caregivers and environment

continued

## Addressing Problematic Behaviors

- Staff nurses under-identify behavior changes and the need for additional physical assessment
- The Serial Trial Intervention (STI) can be initiated to determine the cause of a behavior change and address it

Kovach et al., 2012

continued

## Addressing Problematic Behaviors

- Observe the behavior and try to determine cause
- Behaviors may be indicative of needs that should be addressed
- Could be due to inability to manage stress
  - Change in routine/caregiver/environment
  - Demands that exceed ability
  - Multiple and competing stimuli
  - Pain/illness/discomfort
  - Medication side effects

continued

## Interventions/ Treatment Strategies

## Fall Management

- Incidence of falls with AD is around 60% (twice that of normal elderly)

(Shaw et al., 2003).

- Embed physical training focused on improving gait, strength, balance, and flexibility in occupation-based intervention

(Hauer et al., 2006; Oliver et al., 2007)

- Close supervision and participation in activity-based intervention

(Detweiler et al., 2005)

## Fall Management

- Unrestricted daytime access to the wander gardens decreased falls (Detweiler et al., 2009)
- Environmental modification should be used with a multi-faceted intervention
- Strong evidence for wander guards (Tchalla et al., 2013)
- Evidence for music is limited

continued

### Dementia-Specific Fall Risk Factors Assessment

General	Mobility
<input type="checkbox"/> New admission or transfer to another unit	<input type="checkbox"/> Ambulatory and active
<input type="checkbox"/> Falls within last 30 days	<input type="checkbox"/> Ambulatory but weak or debilitated
<input type="checkbox"/> No trauma	<input type="checkbox"/> Using assistive device
<input type="checkbox"/> Injury _____	<input type="checkbox"/> Unable to use assistive device properly
<input type="checkbox"/> Bladder or bowel incontinence	<input type="checkbox"/> Non-ambulatory
<input type="checkbox"/> Low body mass	<input type="checkbox"/> Self-propelled wheelchair
<input type="checkbox"/> Seizures	<input type="checkbox"/> Relies on proprioception for balance
<input type="checkbox"/> Episode of acute illness	

Cognition	Neuromotor Changes
<input type="checkbox"/> Depression	<input type="checkbox"/> Rigidity present
<input type="checkbox"/> GDS Stage 6	<input type="checkbox"/> _____ Arms
<input type="checkbox"/> GDS Stage 7	<input type="checkbox"/> _____ Legs
<input type="checkbox"/> Change in cognitive level on GDS	<input type="checkbox"/> _____ Neck
<input type="checkbox"/> Poor reasoning or judgement	<input type="checkbox"/> _____ Trunk
<input type="checkbox"/> Unable to recognize ambulation deficits	<input type="checkbox"/> Rigidity induced by bed/chair alarm sound
<input type="checkbox"/> Unable to tolerate wearing eyeglasses	<input type="checkbox"/> Decreased grip strength
<input type="checkbox"/> Unable to tolerate wearing hearing aids	<input type="checkbox"/> Loss of protective reflexes
<input type="checkbox"/> Unable to verbally communicate needs	<input type="checkbox"/> Impaired balance recovery
<input type="checkbox"/> Unable to comprehend bed or chair alarm	<input type="checkbox"/> Impaired protective extension

continued

Altered Gait and Balance	Vision Changes
<input type="checkbox"/> Start hesitancy and freezing	<input type="checkbox"/> Decreased depth perception
<input type="checkbox"/> Shuffling	<input type="checkbox"/> Decreased peripheral vision
<input type="checkbox"/> Scissoring	<input type="checkbox"/> Visual neglect _____left _____right
<input type="checkbox"/> Non-continual walk with hesitation	
<input type="checkbox"/> Deviated from straight path	
<input type="checkbox"/> Difficulty making turns	
<input type="checkbox"/> Feet scrape ground surface	
<input type="checkbox"/> Unable to step over obstacle	
<input type="checkbox"/> Unable to navigate around obstacles	
<input type="checkbox"/> Reduced walking speed	
<input type="checkbox"/> Unsteady standing balance	
<input type="checkbox"/> Uses furniture for walking or balance	
<input type="checkbox"/> Postural sway _____forward _____backward	
<input type="checkbox"/> _____left side _____right side	
<input type="checkbox"/> Unstable rising from seated position	
<input type="checkbox"/> Unstable getting out of bed	
<input type="checkbox"/> Unstable sitting balance	
<input type="checkbox"/> Unable to sit up	
<input type="checkbox"/> Unable to perform unassisted transfers	
<input type="checkbox"/> Feet slide away during transfers	

Behavior Changes
<input type="checkbox"/> Self-stimulating wandering
<input type="checkbox"/> Restless pacing
<input type="checkbox"/> Resistive to ADL care
<input type="checkbox"/> Anxiety, agitation
<input type="checkbox"/> Sleep disturbance

continued

## Agitation

- Do not fight, scream or scold
- If possible leave the room (tell person you'll be back)
- Do not turn your back on the person
- Simple, firm, clear language
- Do not try to reason
- Keep your hands in view
- Avoid exaggerated gestures
- Stand to one side and slightly sideways

continued

## Agitation

- Stay out of personal space
- Use soft eye contact
- Appear non-confrontational
- Tell person gently what you want him/her to do
- Do not restrain from wandering, go with them
- Ask others to leave the room
- Reassure family members

continued

## Wandering Strategies

- Illusions
- Visual cliffing
- Deterrents
- Message
- Camouflage
- Diversions

continued

## Pain in the Elderly

- 50-80% of NH patients are reported to be in pain (Achterberg et al, 2013; Ahn & Horgas, 2013; Patel et al., 2013; Takai et al., 2010)
- Pain is positively correlated with ↑ aggression and agitation scores (Ahn & Horgas, 2013)
- Analgesics were significantly less often prescribed and/or used for patients with dementia (Hoffman et al., 2014; Takai et al., 2010)

continued

## Pain Management Protocol

- Ensure all comfort needs are met
- Look for treatable conditions
- Look for other potential sources of the unusual behavior
- Try non-drug comfort strategies
- Begin an analgesic trial
- Use a pain rating/assessment tool

continued

## Pain Behaviors

(American Geriatric Society Panel)

1. Facial expressions
    - Slight frown/sad, grimacing, wrinkled forehead, closed eyes, rapid blinking
  2. Verbalizations/vocalizations
    - Sighing/moaning/groaning, grunting/chanting, calling out, noisy breathing, asking for help, verbally abusive
  3. Body movements
    - Rigid/tense, fidgeting, ↑ pacing, rocking, gait/mobility changes
- Achterberg et al., 2013



continued

## Pain Behaviors

(American Geriatric Society Panel)

4. Changes in interpersonal interactions
    - Aggressive/combative/resisting care, ↓ social interactions, socially inappropriate/disruptive, withdrawn
  5. Changes in activity patterns or routines
    - Refusing food/appetite change, ↑ rest periods, sleep pattern change, cessation of common routine, ↑ wandering
  6. Mental status changes
    - Crying/tears, ↑ confusion, irritability,/distress
- Achterberg et al., 2013

continued

### Pain Assessment in Advanced Dementia Scale (PAINAD)

**Instructions:** Observe the patient for five minutes before scoring his or her behaviors. Score the behaviors according to the following chart. Definitions of each item are provided on the following page. The patient can be observed under different conditions (e.g., at rest, during a pleasant activity, during caregiving, after the administration of pain medication).

	0	1	2	Score
Breathing Independent of vocalization	Normal	Occasional labored breathing. Short period of hyperventilation	Noisy labored breathing. Long period of hyperventilation. Cheyne-stokes respirations	
Negative Vocalization	None	Occasional moan or groan. Low level speech with a negative or disapproving quality	Repeated troubled calling out. Loud moaning or groaning. Crying	
Facial expression	Smiling, or inexpressive	Sad, Frightened, Frown	Facial grimacing	
Body Language	Relaxed	Tense. Distressed pacing. Fidgeting	Rigid. Fists clenched, Knees pulled up. Pulling or pushing away. Striking out	
Consolability	No need to console	Distracted or reassured by voice or touch	Unable to console, distract or reassure	

Total \_\_\_\_\_

**Scoring:**

The total score ranges from 0-10 points. A possible interpretation of the scores is: 1-3-mild pain; 4-6-moderate pain; 7-10-severe pain. These ranges are based on a standard 0-10 scale of pain, but have not been substantiated in the literature for this tool.

continued

## Barriers to Pain Management

- Poor or absent communication
- Psychotropic meds to deal with behavior
- Lack of knowledge for pain assessment & management
- Reluctance to change/increase meds

continued

## Multi-Sensory Interventions

- Transcutaneous Electrical Nerve Stimulation (TENS)
  - Most often used for pain control
  - Positive short-term benefits on sleep disturbances and behavioral symptoms, evaluated immediately after treatment or at six-week follow-up

(Johnson, 2008; Cameron, Lonergan, & Lee, 2009)

continued

## Factors Affecting Communication

- Family/staff stress and frustration
- Environment
- Time
- Distractions in the environment
- Medications
- As dementia progresses, the ability to correctly interpret communication decreases
- Depression and anxiety

continued

## Challenges in Communication

- Word-finding difficulty
- Repetition
- Unable to read and/or understand written communication
- Revert back to their native language
- Lose ability to speak in sentences
- Loss of ability to understand
- Unable to use words

continued

## Communication Strategies

- Avoid arguing or reasoning
- Ask closed-ended questions
- Observe non-verbals
- Allow time to respond
- Be ready to repeat
- Use short sentences
- Speak slowly, clearly, audibly
- Use the person's name
- Use gestures/visual cues

continued

## Communication Strategies

- Communication skills vary
- Assume most of the conversation
- Grade the conversation
- Be an active listener
- Avoid shouting
- Use adult language
- Use eye contact
- Use touch

continued

## Using History to Guide Treatment

- What do they like to do?
- What is their history?
- Strengths and limitations?
- Environment -- what contributes to successful engagement and what hinders it?
- Relevant life experiences, values, interests?

continued

## Intervention

- Promotion
- Modification
- Remediation
- Maintenance
- Prevention

continued

## Activity Requirements

- Gross motor
- Repetitive
- Uses familiar motions
- Involves 1 or 2 steps
- Observable effect on the environment
- Non-competitive
- Involves few or no rules

continued

## Meaningful Activity

Every activity must . . .

- Have a purpose that is obvious to the participant
- Be voluntary
- Be pleasurable
- Be socially and age appropriate
- Be failure proof

continued

## Considerations When Adapting Activities

(Warchol, Copeland, & Ebell, 2002)

- Attention span
- Environmental scanning
- Awareness of purpose/goal
- Communication
- Physical attributes
- Quality of work
- Problem solving
- Sequencing
- Social factors
- Environment
- Ability to initiate
- Ability to choose
- New learning ability
- Direction following
- Response time

continued

## Activities by Stage

- Early stage of dementia
  - Activities that focus on the whole task
- Mid-stage of dementia
  - Activities that focus on the individual steps of the activity
- Late stages of dementia
  - Activities that focus on the sensory part of the activity

continued

## Successful Activities

1. Assess cognitive function
2. Learn about past habits and interests
3. Choose activities based on past interests
4. Adapt the activity to match physical and cognitive abilities
5. Assess success of the activity

continued

## General Treatment Approaches

- Determine spared skills
- Provide resident with activity choices
- Structure treatment with simple activities
- Establish programs to follow post-discharge
- External memory aides
- Determine effective cueing methods



continued

## Skilled Interventions – PT Gait

- Use of assistive device:
- Assess resident's cognitive/physical ability to use an assistive device
  - Rolling walker vs. standard walker
  - Cane vs. hand-held assist
  - Is this a new device?
  - Ability to learn to use new device
  - Ability to re-learn to use current device
  - Is this the least restrictive device?

continued

## Skilled Interventions – PT Gait

- Visual and proprioceptive/tactile cues
  - Demonstrate task; provide tactile cues
  - Tactile cues to trunk/hips/LEs
- Safe environment
  - Proper footwear during gait
  - Lighting/nightlights
  - Remove environmental hazards
  - Properly maintain assistive device
  - Visual cues

continued

## Skilled Interventions – PT Bed Mobility/Transfers

- Visual cues
- Safe environment
  - Appropriate bathroom equipment
  - Rearrange room for safety
- Appropriate equipment
- Adapt environment
- Maintain assistive device

continued

## Skilled Interventions – PT Balance

- Postural response training
  - Ankle strategies
  - Hip strategies
  - Stepping strategies
- Training strategies
  - Progressive therapeutic tasks
  - Visual/proprioceptive/tactile cues
  - Demonstrate task while providing cues

continued

## Skilled Interventions – PT Education

- Balance status upon discharge
- Use of assistive device and strategies for transfers and gait
- Fall risk
- Proper “getting up from a fall” techniques
- General safety issues

continued

## Treatment Considerations by Stage Early PT

- Tendency to forget where objects have been placed
- Reliance on routine
- Poor concentration

continued

## Treatment Considerations by Stage Middle PT

- Deterioration of judgment
- Exhibits wandering
- Impaired learning

continued

## Treatment Considerations by Stage Late PT

- Unaware of surroundings
- Non-ambulatory without assistance
- Cannot learn new tasks
- Requires environmental adaptation

continued

## Treatment Approach By Stage

### Mobility: Early Stage

- Teach resident in use of:
  - Assistive devices
  - Environmental cues
  - Previously learned and new sequences
  - Secondary effects and hazards
  - New equipment
  - Safety precautions
  - Routine maintenance of equipment
  - Pacing with respect to time constraints

continued

## Treatment Approach By Stage

### Mobility: Middle Stage

- Compensate by:
  - Walking with supervision
  - Allowing additional time to perform task (2-3 times longer)
  - Incorporating repetitive training into previously learned tasks
  - Using repetitive sequence to facilitate long-term learning
  - Using a consistent routine and sequence and incorporating counting when applicable
  - Using demonstration, striking visual cues and verbal cues
  - Teaching resident to use grab bars and other safety items
  - Reduce distraction from interesting objects by removing them from view

continued

## Treatment Approach By Stage

- Mobility: Late Stage
  - Ambulation program and related safety issues
  - Fall prevention strategies
  - Sitting schedule and recommended method
  - Use color contrast to distinguish between floors and furniture
  - Contracture management program
  - Use strengths/abilities (e.g., grasping objects for support to assist with transfers)

continued

## Documentation

continued

## Advocacy Model of Care

- Restoration
- Compensation
- Adaptation/Maintenance

continued

## Documentation

- Medicare Requirements
  - Diagnosis coding (ICD-10) w/ correct onset date
  - Prior level of function
  - Medical necessity
  - Rationale/Justification for treatment
  - Supportive nursing documentation

continued

## Skilled Intervention

- Activity analysis
- Task segmentation
- Environmental adaptation to increase safety and functional independence with least amount of supervision in least restrictive environment (describe the specific adaptation)
- Techniques to compensate for decreased vision (describe the techniques and resident's response)

continued

## Skilled Interventions

- Compensatory techniques
- Cueing hierarchy
- Analysis of resident response
- Analysis of ability to generalize and/or transfer learned skills
- Functional maintenance or restorative program



continued

## Skilled Intervention

- Type and amount of cueing required to complete a task
- Adaptive/assistive equipment utilized including resident's response
- Staff and/or family/caregiver education and training with resident

continued

## Goals

- Resident or caregiver centered, not the “therapist will assess”
- Avoid non-skilled words like “maintain,” “tolerate” or “participate”
- Goals must be functional, measurable, objective
- Appropriate to language, cognitive, functional and motor abilities

continued

## Sample Goals

### Functional Mobility

- Ambulate 50 ft w/o falls or loss of balance when changing from even to uneven surfaces w/ 25% VCs regarding surface change
- Resident will safely utilize handrail w/ 25% verbal and tactile cues w/ no episodes of balance loss when ambulating from bedroom to dining room
- Self-correct during dynamic standing balance activities w/ center of mass over base of support 3 out of 5 times to reduce fall risk
- Roll bilaterally using bedrails and max (A) in order for staff to complete hygiene tasks

continued

## IDT Techniques

continued

## Interdisciplinary Treatment Techniques

- Establish simple routine
  - Short simple phrases for instruction
  - Concrete, not abstract
  - Consistent with sequence of tasks/instruction
  - Predictable routine

continued

## Interdisciplinary Treatment Techniques

- Task segmentation
  - Simplify tasks
  - One-step commands
  - Hand-over-hand guidance
  - Familiar area
  - Allow for slower reaction time
  - Repeat commands
  - Limit adaptive equipment

continued

## General Behavior Management Strategies

- Keep tasks simple
- Be flexible
- Provide soothing activities
- Tolerate wandering or pacing
- Get into the person's reality
- Validate the person's feelings
- Keep a calm demeanor
- Distract with meaningful activity
- Use routines, keep environment and approach consistent and familiar

continued

## Interdisciplinary Treatment Techniques

- Provide one-step commands
- Speak slowly
- Repeat and rephrase sentences
- Utilize gestures with speech
- Praise and encourage patient often
- Limit distractions/structure environment
- Eye contact
- Avoid open-ended questions, offer choices
- Demonstrate the activity

continued

## Interdisciplinary Treatment Techniques

- Encourage automatic responses
- Activities performed with, not “for” patient
- Use other senses
- Topic maintenance
- Label objects
- Educate staff and family

continued

## Cueing Strategies

- Cues should be short and provide clear direction  
(Padilla, 2011)
- Verbal prompts along with positive reinforcement improve performance (Coyne & Hoskins, 1997)
- Demonstrate the activity
- Series of pictures that symbolize activity
- Provide tactile stimulation along with verbal instruction

continued

## Cueing Strategies

- Use hand signals, pictures, facial expressions
- Provide familiar visual and auditory stimuli
- Provide cues when changing topic
- Use of redirections
- Hand-over-hand technique
- Utilize multi-modality cueing

continued

## Principles of Care

- Acknowledge abilities and disabilities
- Increase cues to assist performance
- Demonstrate the activity
- Familiar activities are most successful
  - Tap into overlearned skills
- Decrease environment distractions
- Interrupt stereotypic behavior
- Get patient's attention
  - Allow ample processing time

continued

