- If you are viewing this course as a recorded course after the live webinar, you can use the scroll bar at the bottom of the player window to pause and navigate the course.

- This handout is for reference only. Non-essential images have been removed for your convenience. Any links included in the handout are current at the time of the live webinar, but are subject to change and may not be current at a later date.

Technical issues with the Recording?

- Clear browser cache using these instructions
- Switch to another browser
- Use a hardwired Internet connection
- Restart your computer/device

Still having issues?

- Call 866-782-6258 (M-F, 8 AM-8 PM ET)
- Email customerservice@PhysicalTherapy.com

Put Down the Drugs: Evidence-Based Interventions to Reduce Unwanted Behaviors with Dementia

Kathleen Weissberg, OTD, OTR/L
redhead_lxx@yahoo.com

Objectives

1. List at least three triggers and causes of behaviors in persons with dementia.
2. Identify at least three evidence-based interventions to address behaviors related to emotion, sensation & agitation.
3. Describe at least three ways routine and meaningful activity impact task performance.

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)

3

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)

4

Distress to Caregivers

- Associated with increases in caregiver anger, resentment, stress, and decreased psychological health
- Stressed caregivers may be inclined to abuse the client or turn to antipsychotic medications

5

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)

6

Basic Needs

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

7

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

8

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

9

Responses to Stress

Typical Stress Relievers	Dementia Behaviors
▪ Go for walk	▪ Wandering
▪ Talk on the phone	▪ Asking same thing over and over
▪ Take a bath	▪ Taking off clothes
▪ Put on comfortable clothes	
▪ Go shopping	▪ Rummaging
▪ Exercise	▪ Pacing
▪ Read a book	
▪ Sex	▪ Inappropriate sexual behavior

10

CONTINUED

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

11

CONTINUED

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

12

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

13

Causes of Problematic Behaviors

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

14

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

15

Addressing Problematic Behaviors

- Observe the behavior/determine cause
- Behaviors may be indicative of needs
- 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

Kovach et al., 2012

16

Evidence Related to General Interventions

17

Cognitive/Emotion-Oriented Interventions

- Reminiscence Therapy
  - Discussion of past activities, events, experiences with another person or a group of people
  - No supportive evidence (Woods, et al., 2009; Livingston, et al. 2005)
- Simulated Presence Therapy (SPT)
  - Audiotapes by family members with scripted conversation about cherished memories
  - Overall good evidence, though may cause adverse effects in some residents (Zetteler, 2008; O'Connor, et al., 2009)

18

Cognitive/Emotion-Oriented Interventions

- Validation Therapy
  - Opportunity to resolve unfinished conflicts by encouraging and validating expressions of feeling
  - Mixed evidence (Neal, Barton, & Wright, 2009)
- Overall, insufficient evidence to draw conclusions about the efficacy of cognitive and emotional interventions

19

Multi-Sensory Interventions

Increased engagement in multi-sensory environments (Heyn, 2003)

- Sound
  - Natural environments decrease agitation (Whall et al, 1997)
- Sight
  - Light intensity improves performance and sleep (Koss & Gilmore, 1998)
- Smell
  - Lavender oil decreases agitation (Holmes et al., 2002; Thorgrimsen, Spector, Wiles, & Orrell, 2003)

20

CONTINUED

Multi-Sensory Interventions

- Snoezelen Multisensory Stimulation Therapy (MMS)
  - Combines the therapeutic use of light, tactile surfaces, music, and aroma
  - Neuropsychiatric symptoms may result from periods of sensory deprivation
  - Short-term benefits on behaviors were significant (Chung & Lai, 2009)

21

CONTINUED

Benefits of a Sensory Room

- Stimulation provided in a controlled way
- Can be stimulating or calming in their effects
- Positive changes in mood and behavior for late stage dementia
- Improves staff interactions with residents

22

Deficiencies of Sensory Rooms

- Aesthetics and functionality are not satisfying and appropriate
- The equipment and set up is not age appropriate; juvenile
- Difficult to connect with
- Cluttered and distracting
- Insufficient multi-sensory stimulation

23

Stimulation and Relaxation

- Stimulating
  - Sight
    - Lights of high intensity, color red, reminiscent images and objects
  - Smell
    - Citrus smells, peppermint
  - Sound
    - Loud music, fast tempo, sing-along tunes, abstract sounds
  - Touch
    - Textured objects, spiky balls, random contact
  - Taste
    - Citrus fruits, peppermint, sour sweets, sherbet
  - Movement
    - Random movements, spinning

24

Stimulation and Relaxation

- Relaxing
  - Sight
    - Low level, slow changing lighting, fairy lights, Christmas tree lights
  - Sound:
    - Quiet music, slow tempo, natural sounds
  - Touch
    - Hand massage, stroking, soft fabrics such as fur, velvet, silk or fleece
  - Taste
    - Milky foods such as chocolate, pudding, yogurt
  - Smell
    - Lavender, smell of baking cakes or bread
  - Movement
    - Linear rocking such as a rocking chair

25

Multi-Sensory Interventions

- Massage and Touch
  - To reduce depression and anxiety
    - Hand massage with calming music
    - Tactile input during meals
    - Gentle massage 3X/day
    - Intermittent touch with talking
  - Massage and touch therapy may have beneficial effects

(Hansen, et al., 2009; Gleeson & Timmins, 2004)

26

CONTINUED

Multi-Sensory Interventions

Music

- Reduces repetitive disruptive vocalizations and self-stim behavior (Casby & Holm, 1994)
- Promotes mobility skills and body awareness (Pomeroy, 1993)
- Improves posture, competence, and sensory awareness (Gotell, Brown, & Ekman, 2003).
- Reduces agitation and time spent with meals (Sherratt, Thornton, & Hatton, 2004)

27

CONTINUED

Other Interventions

- Animal-Assisted Therapy
  - Robotic cats, plush toys, fish tanks, resident cat/dog
    - Decreases in agitated and disrupted behaviors
    - Increases in social and verbal interactions
    - Decreases in passivity
    - Increases in nutritional intake

(Greer, et al., 2001; Martindale, 2008; McCabe, et al., 2002)

28

CONTINUED

Other Interventions

- Exercise
  - No specific guidelines re: intensity or frequency
    - Increased sleep time, decreased daytime sleep, decreased nighttime awakenings
    - Improved mobility and decreased falls

(Alessi, et al., 1999; McCurry, et al., 2005; Alessi, et al., 2005)

29

CONTINUED

Interventions for Perception

- Optical interventions for hallucinations (Letts at al., 2011)
- Wayfinding has limited evidence (Letts et al., 2011; Padilla, 2011)
- Visual barriers have mixed evidence (Letts et al., 2011; Fleming & Purandare, 2010)
- High contrast (Fleming & Purandare, 2010)
- L shaped hallways (Letts at al., 2011)

30

CONTINUED

Cognitive Interventions

31

CONTINUED

Cognitive Interventions

- Errorless learning is effective for enhancing performance of ADL (Dechamps et al., 2011)
- Cognitive rehabilitation not effective for long-term gains (Kurtz et al., 2012)
- Cognitive stimulation helps QOL and social interaction
  - No impact on ADL performance (Woods et al., 2012 and Cooper at al., 2012)

32

CONTINUED

Cognitive Interventions

- Cognitive training has no significant benefit on ADL performance (Bahar-Fuchs et al., 2013)
- Reminiscence had no effect on ADL or cognitive performance (Cooper et al., 2012)

33

CONTINUED

Errorless Learning (DeWerd et al., 2013)

- No guessing
- Stepwise approach
- Modeling
- Verbal instruction
- Visual instruction
- Vanishing cues
- Spaced retrieval

34

Interventions Targeting Specific Behavioral Symptoms

35

Agitation

- Sensory interventions (aromatherapy, thermal bath, calming music, and hand massage) show decreased agitation
- Social contact, environmental modification, caregiver training, and behavior therapy showed limited effects on agitation

36

Agitation Strategies

- 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

37

Agitation Strategies

- 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

38

Wandering Strategies

- Visual cliffing
- Deterrents
- Message
- Authority figures
- Camouflage
- Diversions

39

Visual Barriers/Interventions

- Concealment of doorknobs, painted doorknobs, wall mural on an exit door are effective for wandering

(Dickinson, McLainKark, & Marshall-Baker, 1995; Kincaid & Peacock, 2003; Namazi & Johnson, 1992; Namazi, Rosner, & Calkins, 1989)

- Dividers facilitate engagement in activity and improve attention

(Namazi & Johnson, 1992)

- Wall murals and posters decrease exit-seeking behavior; nature and homelike scenes

(Cohen-Mansfield & Werner, 1998; Day et al., 2000)

40

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)

41

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

42

Occupation Based Interventions

- Montessori (Lin et al., 2011) and spaced retrieval (Lin et al., 2010) improved self-feeding
- Individualized activity sessions can reduce unwanted behaviors (van der Ploeg et al., 2013)
- Personalized bathing protocols including environmental modification help with bathing (Zimmerman et al., 2013)

43

Eating

- Improved consumption when:
  - CNA allows resident to control more of the eating process (Amella, 1999)
  - Verbal prompts and positive reinforcement (Coyne and Hoskins, 1997)
  - Listening to music while eating (Ragneskog et al., 1996)
  - Small dining rooms next to living space (Day et al., 2000)
  - Consistency of caregivers and increased nutritional value of foods (Burgener and Twigg, 2002)

44

Toileting/Continence

- Improved continence when:
  - Toilets are visibly accessible to residents (Day et al., 2000)
  - Prompted voiding, behavior modification, and scheduled toileting (Doody et al., 2001)

45

Sleep Behavior (Graessel at al., 2011)

- Bright light therapy to improve circadian rhythms and increase time sleeping at night
- Higher doses of melatonin
  - Neither has solid conclusive evidence
- Environmental modification may help to improve sleep behavior
  - E.g., less noise, light, interruptions
- Strong evidence for exercise based interventions
- Engagement in daytime activities and social activity help with night time sleep

46

Bathing and Dressing

- Improved independence when:
  - Listening to favorite music (Clark et al., 1998)
  - Environment with nature sounds, large, bright pictures, sweet food (Whall, 1997)
  - Tailor care to capabilities of the individual resident (Beck et al., 1997)
  - Verbal prompts and physical assists (Rogers et al., 1999)
  - Present clothing in sequential order (Day et al., 2000)

47

Routines

- To maintain occupational performance (Nygård & Öhman, 2002)
- To address wandering, aggression, or to prevent catastrophic reactions (Corcoran, 2001; Lewis, 2003; Ward, 2003)
- Routines must be flexible to meet the resident's needs, not staff (Skovdahl, Kihlgren, & Kihlgren, 2003)
- Residents should follow preferred routines (Donovan & Dupuis, 2000)

48

Environmental Interventions

Environmental Modifications

- Ambient music played other than at mealtimes can reduce undesired behaviors (Padilla, 2011)
- Bright light therapy is mixed evidence for behaviors
- Aromatherapy and proprioceptive input also mixed (Burns et al., 2011)

Specialized Environments

- Moderate level noise promotes improved engagement in activities (Mercado & Mercado, 2006; Cohen-Mansfield, 2010)
- Homelike, personalized rooms reduce behaviors
- Small dining rooms, large clock, printed mealtimes help with confusion (Chaudhury et al., 2013)

51

Pain Management

52

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)

53

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

54

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

55

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

56

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

57

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

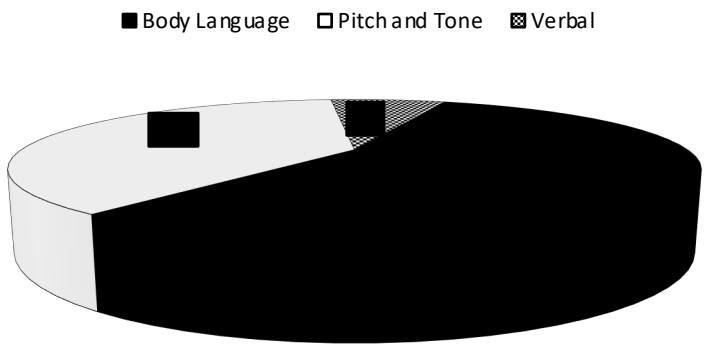
(Johnson, 2008; Cameron, Lonergan, & Lee, 2009)

58

Communication

59

Verbal vs. Non-Verbal Communication



Albert Mehrabian, Ph.D.

60

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

61

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

62

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

63

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

64

Caregiver Approach

- The caregiver's approach affects the resident's behavior
- Behavior management skills training program
  - Inservice, direct observation and feedback
  - Decreased use of ineffective strategies (e.g., arguing), decreased disruptive vocalization, restlessness, aggression during ADL

(Burgio, et al., 2002)

65

Activity

66

Importance of Activity

- Tailored Activity Programs reduce behaviors and increase engagement (Gitlin et al., 2008)
- Activity kits improve quality of visits and QOL (Crispi & Heitner, 2004)
- Individualized and meaningful activities show positive results (Pool, 2001)

67

Assessment of History/Background

- 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?

68

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

69

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
- Tailored to match skills and interests (Kolanowski, 2001)

70

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

71

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

72

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

73

IDT Techniques

74

Interdisciplinary Treatment Techniques

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

75

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

76

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

77

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

78

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

79

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

80

In Conclusion

- BPSD can contribute institutionalization, increased cost, heightened stress, and decreased QOL
- Nonpharmacological approaches are preferred
- Several underlying themes:
  - Environmental modification
  - Properly trained staff

81

Thank You

Kathleen Weissberg
redhead_lxx@yahoo.com

82