Understanding Dementia Behaviors

Kim P. Petersen  MD
Spring Green, WI
Why Persons with Dementia Do What They Do
Environmental Triggers

- Relocation
- Architectural maze
- Uncomfortable environment: (too hot/cold, uncomfortable seating)
- Noise
- Hubbub
- Sensory stimulation: over or under
- Inadequate lighting cues
- Reflective surfaces
- Varied flooring surfaces
Physical/ Psychosocial Triggers

- Pain
- Illness: UTI, MI, CVA, Dental problems, etc.
- Medications
- Disruption of circadian rhythms
- Depression
- Boredom
- Pre-morbid personality
- Interaction with peers
- Depressed caregiver
Caregiver Interactions

- Lack of knowledge about dementia
- Lack of knowledge about the person
- Carried-over emotions from personal life
- Hurry
- Communication failures
How Can We Communicate Better with Persons with Dementia?
General Communication Principles

- Set the Stage
  - Quiet environment
  - Even bright lighting
    - Avoid strong backlights
  - Reduce clutter and distraction
  - Turn off the television!
    - Disasters portrayed on tv may seem real and immediate
General Communication Principles

- Earn attention
  - Make eye contact
  - Use touch, if appropriate
  - Sit if the person is sitting
    - Be at the same level
  - Smile genuinely
  - Greet the person
  - Use the person’s preferred name
  - Introduce yourself

- Be willing to come back, if this isn’t a good time
General Communication Principles

- Vocal Quality
  - Lower pitch
  - Calm
  - Slow down
  - Don’t use Elderspeak
    - Sing-songy voice, childish intonation and language, “Imperial we”
  - If a person is hard of hearing, consider using a pocket talker or other assistive device
  - A loud voice may be perceived as angry or cross
General Communication Principles

- Non-Verbal Cues
  - “Center” and collect yourself, so your body language will be calm, positive, open
  - Smile with the eyes, as well as the mouth- mean it!
  - Open, non-threatening stance, hands relaxed, visible
  - Be aware of each person’s personal space comfort zone
Keep Language Simple

☐ One step at a time
☐ Add descriptors and gestures:
  ■ Please sit down in this chair right here
  ■ This blue chair
  ■ This blue rocking chair
☐ Don’t argue or confront
☐ NEVER SAY NO!
<table>
<thead>
<tr>
<th>Positive Language</th>
<th>Negative Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Let’s explore the garden.</td>
<td>□ Don’t go out to the street!</td>
</tr>
<tr>
<td>□ I’m sorry, I must have bumped the table and spilled your juice.</td>
<td>□ Oops, you spilled your juice all over!</td>
</tr>
<tr>
<td>□ Let’s us early-birds have some coffee.</td>
<td>□ You can’t get up now- it’s 4 a.m.</td>
</tr>
<tr>
<td>□ Let’s go freshen up.</td>
<td>□ I need to clean you up, you had an accident.</td>
</tr>
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</table>
The Art of Questions

1. Who is this?
   - Open-ended question

2. Is this a picture of John Wayne?
   - Question that gives the answer

3. Gee, John Wayne looks serious here, don’t you think?
   - Make a commentary

4. How do you feel when you see this picture of John Wayne?
   - Creative question, with no right or wrong answer
Responding

- “Give me the .......the.....you know...”
  - It must be really frustrating when you can’t find the word you’re looking for.

- “I was in the Navy on an aircraft carrier...”
  - What an interesting story– I love to hear you talk about being in the navy!

- “I want to go home...I want to go home..”
  - I wish I could take you home
Responding

☐ “Please don’t leave me, stay here...”
   ▪ I hate to leave, but I’ll look forward to seeing you tomorrow.

☐ “Nobody loves me or wants me...”
   ▪ I cherish your friendship, love.

☐ “I don’t want to go back in...let’s stay outside.”
   ▪ I had so much fun watching the squirrels play in the yard. Thank you for sharing this time with me.
What Are Your Feelings About The Following People?
How do you feel about these people?
Is she friendly?
Do you want this man to help you dress?
Is she helpful?
Would you ask her to take you to the toilet?
Would you work with this lady?
Is this boy happy to see you?
Is this a genuine smile?
Is this boy interested in what you are saying?
Is she laughing at you or with you?
Why We Behave As We Do
Recommended Reading

Daniel Goleman

Social Intelligence: The New Science of Human Relations,

The anatomy of emotions

- The Amygdala
  - Almond-shaped structure in mid-brain
  - Brain’s “emotion central”
  - Triggers fight, flight or freeze reaction to danger
    - Always on, never sleeps
Amygdala

[Diagram of the brain highlighting the amygdala, prefrontal cortex, hippocampus, and cerebellum]
The Anatomy of Emotions

- Of all of the emotions, fear most powerfully arouses the amygdala.
  - When driven by alarm, the amygdala heightens our alertness to emotional cues in other people.
- People with dementia often have a heightened sense of alarm due to damage to their amygdala.
Emotional Contagion

- The amygdala is highly sensitive to other people’s non-verbal cues: a scowl, grin, shift of body position or vocal tone
  - Detects the emotion before we know what we are looking at or hearing
Emotional Contagion

- The Amygdala—Low Emotional Road
  - Has no immediate access to the speech or reasoning parts of our brain
  - Makes us mimic the same emotion in our own body
  - We don’t see emotions on someone else’s face, but rather feel them
Emotional Contagion

- When someone dumps their toxic feelings on us—like anger, disgust, contempt—they activate our brain circuitry for those same emotions.
Emotional Contagion

- Conversely, when someone shares a smile or a laugh, we “catch” that happy emotion
- That mood stays with us long after the interaction ends
- The net balance of feelings that we have “caught” throughout the day determines whether we have had a “good” or “bad” day
Mirror Neurons

- A special type of neuron found in all primates
  - Reflect back an action we observe in someone else
  - “When you’re smiling, the whole world smiles with you.”
  - Also reflect back the emotions of others - making emotions contagious
Mirror Neurons

- Social skills are based on mirror neurons
- Creates a sense of sharing a moment- “empathic resonance”
The Happy Face Advantage

- The human brain prefers happy faces—recognizing them more readily and quickly than those with negative expressions
The Happy Face Advantage

- A moment of playfulness, silliness forms an instant resonance between people

- Laughter may be the shortest distance between two brains
  - Unstoppable, contagious
  - Builds an instant social bond
ANY PERSONS (EXCEPT PLAYERS) CAUGHT COLLECTING GOLF BALLS ON THIS COURSE WILL BE PROSECUTED AND HAVE THEIR BALLS REMOVED
Aging Underwear
Keys to Success with Dementia Residents

- Lack of knowledge about dementia
  - You need to know what type of dementia the person has
  - Remember—it’s the disease, not the person, that is in control

- Lack of knowledge about the person
  - Really know the person and what interests them

- We all need to “do” things
  - Having meaningful days
    - Lessens anxiety
    - Helps keep emotions in balance
    - Increases feelings of comfort & belonging
    - Reduces behaviors
Keys to Success with Dementia Residents

☐ Carried-over emotions from personal life
  ■ How’s Your day going?

☐ Hurry
  ■ The Tortoise ALWAYS wins

☐ Communication failures
Keys to Success with Dementia Residents

- Persons with dementia are just the same as You & Me
- EXCEPT their brains are devastated by a disease that destroys brain cells & connections and causes their behavior
- They need (and deserve) our empathy & love
Behaviors of Different Dementias
Key Behaviors of Different Dementias

- Alzheimer’s Disease
  - Delusions
  - Misidentifications
  - Depression & anxiety
  - Apathy
  - Wandering
  - Agitation with catastrophic reactions
  - Disinhibition
Key Behaviors of Different Dementias

- **Lewy Body & Parkinson’s Dementia**
  - Visual hallucinations
  - Delusions
  - Misidentifications
  - Depression
  - Risk for delirium with meds
  - Agitation during “Lewy Spells”
Key Behaviors of Different Dementias

- Vascular Cognitive Impairment & Dementia
  - Apathy
  - Depression
  - Agitation with catastrophic reactions
  - Anxiety
  - Disinhibition
  - Perseveration
Key Behaviors of Different Dementias

- Frontal Temporal Dementias
  - Early loss of insight
  - Early loss of social skills
    - Anti-social
  - Mental rigidity, inflexibility
  - Distractibility
  - Hyperorality, craving for sweets
  - Perseveration and stereotyped behavior
  - Utilization behavior
  - Hypersexuality
Tools for Assessing BPSD

- Neuropsychiatric Inventory—NPI
- Geriatric Depression Scale
- Pain-AD
Neuropsychiatric Inventory by Jeff Cummings of UCLA

- Tool for assessing changes in behavioral and psychological disturbances
- Also evaluates impact of behavior on caregivers
- Numeric scale 1 – 144
  - <20 Mild
  - 20 – 50 Moderate
  - >50 Severe
- Can be used to monitor treatment efficacy
Neuropsychiatric Inventory Domains

- Delusions (paranoia)
- Hallucinations
- Agitation / aggression
- Dysphoria
- Anxiety
- Apathy
- Irritability
- Euphoria
- Disinhibition
- Aberrant motor behavior
- Nighttime behavior disturbance
- Appetite/ eating abnormalities
### Scoring the NPI

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Severity</th>
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<tr>
<td>Occasionally, less than 1/week</td>
<td>Mild (noticeable, but not a significant change)</td>
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<tr>
<td>Often, about 1/week</td>
<td>Moderate (significant, but not a dramatic change)</td>
</tr>
<tr>
<td>Frequently, several times per week, but less than every day</td>
<td>Severe (very marked, a dramatic change)</td>
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<tr>
<td>Very frequently, once or more/ day</td>
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Jeff Cumming’s Categories of Behavior Subsyndromes Using the NPI

- **Hyperactivity**
  - Agitation or aggression
  - Irritability
  - Euphoria
  - Disinhibition
  - Aberrant motor behavior

- **Apathy**
  - Apathy
  - Appetite/eating abnormalities
  - Aberrant motor behavior
  - Nighttime behavior

- **Affective**
  - Dysphoria/depressed mood
  - Anxiety
  - Nighttime behavior
  - Appetite/eating abnormalities

- **Psychosis**
  - Delusions
  - Hallucinations
  - Anxiety
Cumming’s Conclusions Using the NPI to Analyze Dementia Behaviors

- Apathy sub-syndrome the most common
- Hyperactivity behaviors second most common
- Psychosis behaviors least common
  - Associated with most severe behavioral problems
- Anxiety can be classified with both psychosis and mood/apathy groups
- Using subsyndromes improves selection of medications & monitoring of treatments
Geriatric Depression Scales

- Long & short form “yes” and “no” questions
- Minimizes distress from somatic symptoms
- Can be used through mid stages of dementia
- Can be repeated to assess medication efficacy
Pain-AD Scale

- Observational tool devised for use with advanced dementia patients
- Five domains
  - Breathing
  - Negative vocalization
  - Facial expression
  - Body Language
  - Consolability
- Score =>4/10 indicates need for pain management
Medication Management of Dementia Behaviors
Using the NPI Subsyndromes for Medication Selection
## Jeff Cumming’s Categories of Behavior Subsyndromes Using the NPI

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<tr>
<td>Appetite/eating</td>
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<tr>
<td>abnormalities</td>
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Drugs of Choice by Subsyndrome

- **Apathy**
  - Cholinesterase Inhibitors
    - Donepezil (Aricept 5-10 mg/day)
    - Galantamine (Razadyne 16-24 mg/day)
    - Rivastigmine (Exelon 6-12 mg/day)
  - SSRI antidepressants
    - Mirtazapine (Remeron 15-45 mg/day)
    - Venlafaxine (Effexor 37.5 – 75 mg/day)
  - Psychostimulants
    - Dexamphetamine
    - Methyphenidate (Ritalin 5-10 mg/day)
Drugs of Choice by Subsyndrome

- **Hyperactivity** (Agitation, aggression)
  - **Mild**
    - Trazadone 25 mg TID (200-300 mg/day max)
    - Inderal 20-200 mg TID (watch contraindications)
  - **Moderate-Severe**
    - Depakote 500-2000 mg / day
      - monitor liver tests & blood levels
    - Tegretol 500 -800 mg / day
      - monitor blood count
      - many drug-drug interactions
    - SSRI antidepressants
Drugs of Choice by Subsyndrome

- **Hyperactivity** (continued)
  - **Severe**
    - Risperidone 0.25 - 0.5 mg/day
    - Olanzepine 2.5 - 5 mg / day
    - Quetiapine 25 mg BID
    - Estrogen 1.25 mg / day or Medroxyprogesterone 150 mg IM / month
  - sexual aggression
### Drugs of Choice by Subsyndrome

#### Affective-- Depression

- **Sertraline (Zoloft)**: 25-75 mg/day
- **Citalopram (Celexa)**: 10-20 mg/day
- **Escitalopram (Lexapro)**: 10 mg/day
- **Mirtazapine (Remeron)**: 15-45 mg/day
- **Venlafaxine (Effexor)**: 37.5 – 75 mg/day
- **Paroxetine (Paxil)**: 10-20 mg/day
- **Nefazadone (Serzone)**: 200-300 mg/day
- **Trazadone**: 75-150 mg/day
Drugs of Choice by Subsyndrome

- **Affective –Anxiety** (short-term use only; risks high with dementia patients)
  - Lorazepam 0.5 mg/day to BID (2-4 mg/day max)
  - Oxazepam 10 mg/day (45-60 mg/day max)
  - Buspirone 5 mg BID (60 mg/day max)
  - Nefazadone 200-300 mg / day
  - Clomipramine 25 mg BID-TID
  - Clonazepam 0.5 mg BID
Drugs of Choice by Subsyndrome

**Psychosis**

- Olanzapine 2.5 - 5 mg / day (10 mg/day max)
- Risperidone 0.25- 0.5 mg  day ( 2 mg/day max)
- Quetiapine 25 mg BID (100-300 mg/day max)
- Aripiprazole 15 mg/day (10-30 mg/day)
- Ziprazadone 20 mg BID
- Haldol 0.25 mg -0.5 mg BID-QID
- Mellaril 12.5 - 25 mg TID
A Few Final Points for Attention

- Relationship between psychosis & aggression
  - Psychosis a poor predictor for aggression
  - More likely due to serotonergic deficit
    - Relationship between depression & aggression

- First-line therapy for aggression is antidepressants

- Cholinergic system pivotal in behaviors
  - ACHE inhibitors well tolerated
    - Appropriate for apathy, motor restlessness & disinhibition
A Few Final Points for Attention

- ACHE inhibitors first-line therapy for psychotic & non-psychotic BPSD in Lewy Body Dementia patients

- Frontal lobe patients can have severe reactions to antipsychotic drugs
  - Little literature to support the use of these drugs in FTD

Conclusions

- Healthcare providers need to:
  - Understand behaviors of the different dementias
  - Understand which behaviors may respond to medications; which require non-drug management
  - Use non-drug management techniques FIRST
  - Look for medical illnesses as a cause for dementia behaviors
Conclusions

- Healthcare providers need to:
  - Use standardized tools to assess behavior
  - Use scientific evidence to guide prescribing of psychotherapeutic drugs
  - Document in medical records your thinking and plan
  - Defend your selection of specific medications based upon your medical assessment and knowledge of treatment goals
Questions?