Amanda Adams-Fryatt RN MN
Nurse Practitioner
WRHA

Disruptive Vocalizing
Objectives

- Discuss the prevalence of BPSD
- Discuss the etiology of Disruptive Vocalizing
- Discuss memory and communication
- Discuss the Needs-Based Models
- Discuss the use of antipsychotic medications
- Discuss and describe interventions
Behavioural and Psychological Symptoms of Dementia

Collection of behavioural disturbances which include physical and verbal aggression, wandering, delusions, psychosis, hallucinations, depression, sleep disturbances and vocally disruptive behaviours

70-90% of people with dementia experience these changes

Difficult and challenging to manage

Most common reason for the decision to institutionalize the dementia sufferer

All caregivers, including nursing home staff, feel helpless in the treatment of these behaviours
Disruptive Vocalizations

- Any vocalization that is “inappropriate” to the setting
- Screaming, curses, moaning, repeating phrases
- Mostly described by caregivers as “Agitation”
- 10-30% people with dementia are affected
- Occurs in all stages of the disease
- Multifactorial causes:
  - Physical/Emotional/Personality
  - Environmental
  - Communication factors
- Presence of these behaviours worsens cognition
Cohen-Mansfield et al. (1992) studied 408 agitated residents and found these behaviours could be grouped into 3 different syndromes:

- **Aggressive Behaviours**
  - Hitting, Scratching, Biting

- **Physically Nonaggressive Behaviours**
  - Pacing, Restlessness, Disrobing

- **Verbally Agitated Behaviours**
  - Screaming, Repetitive phrases, Moaning
Screaming (Overvocalizing)

Study found:

- 78% people who screamed displayed at least one other verbally agitated behaviour
- They were more severely cognitively impaired
- Likely related to: disease, pain, depression and a call for help
- Re-evaluation of the notion that the screaming behaviour was “Inappropriate”
The memory impairments that are prominent in dementia advance to deficits in communication. Changes the way people suffering from dementia are able to communicate with the world around them. Frontal lobe pathology in dementia decreases working memory by:

- Reducing capacity
- Limiting attention
- Disturbing search and retrieval functions

Language comprehension and the use of words in communication relies on the integrity of these functions.
Memory and Communication

- Less ability to find or recall words (anomia)
- Word substitution causes misunderstanding
- Comprehension of the spoken word worsens
- Severe dementia leads to incoherent speech

- The urge/drive to communicate never goes away

- All vocalizing behaviour has a meaning
Overvocalizing and Needs

- Overvocalizing as **communication** or **expression of a need**.
- Cohen-Mansfield used Maslow’s Hierarchy of Needs to demonstrate that once basic needs were met (meals, thirst, toileting), higher needs for socialization were also needing to be met.
- All people with cognitive impairment have higher order needs such as for social contact and sensory stimulation.
- There are changes in ability to express and resolve these needs and the environment often does not provide for these needs.
- Kitwood (1997) proposed a similar needs theory.
Overvocalizing and Needs

- **Self-Actualization**
  - Pursue talent, creativity, fulfillment

- **Self-Esteem**
  - Achievement, Mastery, Recognition

- **Belonging**
  - Friends, Family, Community

- **Safety**
  - Security, Shelter

- **Physiological**
  - Food, Water, Warmth
Algase et al., (1996) hypothesized that agitated behaviours were an expression of a need or the pursuit of a goal. These researchers believed that this behaviour may appear to be inappropriate to the caregiver, but are actually meaningful when you take into consideration the cognitively impaired person’s inability to communicate through the spoken word.

Imbalance between lifelong habits and personality, current physical and mental states and an unsupporting environment.

The behaviour can aim to:

- Meet the need, such as boredom
- Communicate the need, such as frustration from uncontrolled pain
- May represent the outcome of having an unmet need.
Need-Driven Dementia-Compromised Behaviour

Stable BACKGROUND FACTORS
- Neurological
- Cognitive
- Health
- Psychosocial

Fluctuating PROXIMAL FACTORS
- Physical environment
- Social environment

NEED-DRIVEN BEHAVIOUR
- Overvocalizing
- Algase et al. (1996)
Need-Driven Dementia-Compromised Behaviour

- Background factors that contribute to overvocalizing include more stable issues such as neurological impairment, cognitive and health status and psychosocial factors.
- Proximal factors are the fluctuating aspects of the physical and social environment or the changing status of the person with dementia.
- Proximal factors are most likely to precipitate unwanted behaviours.
Kovach et al. (2005) expanded the model and demonstrated the consequences to the resident when the need goes unmet. They hypothesize that the overvocalizing behaviour is a distractor to the real problem. Caregiver treats the behaviour instead of the underlying problem, which initiates a ‘cascading’ effect that negatively affects the cognitively impaired person.
Need-Driven Dementia-Compromised Behaviour

(proximal factor)  Thirst $\rightarrow$

Results in a need:  Fluids $\rightarrow$

Results in behaviour:  Vocalizing

If need not met, results in Constipation and Abdominal Pain $\rightarrow$

Results in secondary behaviour: aggression

Kovach et al. (2005)
Possible worsening of situation/event
Use of antipsychotic medication
Iatrogenesis
Results in changes (worsening) in physical, affective and functional status
Key is to try to anticipate or prevent situation from occurring
Outcome of Unmet Needs

Hierarchy Model of Needs in Dementia

- Self-actualisation
  - Being use-meaningful, freedom, spirituality
- Esteem needs
  - Self-esteem/self-image, responsibility, privacy
- Belongingness and love needs
  - Affect, attachment, social contact, enjoyment activities
- Safety needs
  - Security, financial situation
- Biological and physiological needs
  - Basic life needs, physical and mental health

Consequences of unmet needs in dementia

- Unmet goals of patients or caregivers
- Behavioural symptoms
  - Increased caregiver burden
  - Decreased HRQoL
  - Institutionalization

Scholzel-Dorenbos, C. et al. (2010)
Antipsychotic Medications

- Respiridone, Quetiapine, Olanzapine, Haldol
- FDA and Health Canada warnings about severe adverse effects associated with use
- Mortality rate 1.7 times higher with use of antipsychotics over placebo
  - Prolonged QT on EKG resulting in sudden cardiac death
  - Decreased ability to swallow $\rightarrow$ Aspiration $\rightarrow$ Pneumonia
  - Risk for DVT and Pulmonary Embolism
  - Cerebrovascular events
  - Falls and fractured hips

Gill et al. (2007)
What is the Meaning? Detective Work!

Pain:
- Arthritis
- UTI/Pneumonia/Cellulitis
- Heartburn/Angina
- Constipation/Abdominal Pain
- Pain of Immobility
- Shingles
- Gout
- Ingrown Toenail/Fingernail
- Toothache
- Earache
- Backache
- Headache/Migraines
- Cancer Pain
- Pressure Ulcers/Wound Pain
- Need for Repositioning
- Pedal Edema

Observe behaviours:
- facial grimacing
- posture
- rubbing or holding limbs
- gestures

- Treat pain judiciously
- Relieve constipation
- Treat underlying medical issue
## What is the Meaning? Detective Work!

<table>
<thead>
<tr>
<th>Fatigue:</th>
<th>Increase daytime activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Sleep disturbance</td>
<td>• Promote a normal sleep pattern</td>
</tr>
<tr>
<td>• Difficulty falling asleep</td>
<td>• Avoid caffeine drinks at night</td>
</tr>
<tr>
<td>• Frequently awake at night</td>
<td>• Consolidate night time care activities</td>
</tr>
<tr>
<td>• Sitting up too long in wheelchair</td>
<td>• Daytime rest period</td>
</tr>
<tr>
<td></td>
<td>• Sleep medication a last resort</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Physical Needs:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Food</td>
<td>• Cookie, sandwich, meal</td>
</tr>
<tr>
<td>• A drink</td>
<td>• Juice, water</td>
</tr>
<tr>
<td>• A blanket or sweater</td>
<td>• Move wheelchair away from drafts</td>
</tr>
<tr>
<td>• Remove a blanket or sweater</td>
<td>• Limit air conditioning</td>
</tr>
<tr>
<td>• Repositioning</td>
<td>• Fan if too warm</td>
</tr>
<tr>
<td>• Toileting</td>
<td>• Frequent toileting (q2h), especially if receiving a diuretic or laxative or after meals</td>
</tr>
</tbody>
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### Mental/Emotional/Psychosocial:
- Anxiety
- Depression
- Too many people—overstimulation
- Loneliness/Boredom—understimulation
- Busy and demanding unit
- Unfamiliar environment
- Unfamiliar faces/staff
- Too much noise
- Sensory deficits
- Loss of control—frustration
- Feeling of being lost
- Need for human contact

### Treat anxiety/depression
- Consider a move to a quieter unit
- More involvement in activities
- Activities appropriate to cognition level
- Monitor noise level on unit:
  - vacuum
  - radio/televisions
  - alarms
  - telephones
- Eye examinations
- Hearing evaluations
- Purposeful conversation with resident
- Alternative therapies such as pet therapy
Take Home Tips

- Memory impairment of dementia includes the inability to remember words and understand them.
- Overvocalizing should be considered communication.
- Caregivers should attend to the need not the behaviour.
- Antipsychotics are always a last resort.
References


References


