Enhancing Care through Non-Pharmacological Behavior Management

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Potential for conflict(s) of interest:

◦ Analgesic medications will be mentioned

◦ Standardized fee-based training programs in dementia care will be mentioned
Mitigating Potential Bias

Medication names will be generic
Learning Objectives

Deepen your understanding of non-pharmacological behaviour management approaches for aggression and agitation in residents with Alzheimer’s type dementia

Explore ways to maximize the engagement of the entire team in behaviour management to optimize quality of care

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Neuropsychiatric Symptoms (NPS)

Symptoms or disorders of perception, thought, affect or behaviour that are common in dementia

May be important for prognosis
- Increased morbidity and mortality
- Delusions predict faster decline
- Highly correlated with impaired activities of daily living

Also known as: Behavioural and Psychological Symptoms of Dementia (BPSD)
What are NPS?

Delusions
Hallucinations
Anxiety
Elevated mood
Apathy
Depression
Irritability
Sleep Changes

Agitation:
- Restlessness
- Requests for help or repetitive questioning
- Screaming or vocalizations
- Hitting, pushing, kicking
- Sexually disinhibited behavior

NPS are common (1)

60% of individuals LTC settings have dementia\(^1\)

Overall prevalence of NPS:
- Median prevalence of any NPS: 78%

Prevalence of NPS\(^2\):
- Psychosis: 15 – 30%
- Depression: 30 – 50%
- Physical agitation: 30%
- Aggression: 10 – 20%

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NPS are common (2)

92% had at least one symptom
~50% had 4 or more symptoms

General Principles To Managing NPS

Non-pharmacological treatments should be used first whenever available.

Even when NPS are caused by specific etiologies (pain, depression, psychosis) non-pharmacological interventions should be utilized with medications.

All non-pharmacological interventions work best when tailored to individual needs and background.

Family and caregivers are key collaborators and need to be involved in treatment planning.
Psychological Theories of NPS

Lowered Stress Threshold\(^1\)

Learning Theory\(^2\)

Unmet needs $\rightarrow$ Tailored interventions\(^3\)
- Verbal agitation – depression, loneliness
- Physically non-aggressive agitation - stimulation
- Physically aggressive agitation – avoiding discomfort

1. Hall, Arch Psych Nurs, 1987
Understanding Neuropsychiatric Symptoms

Kitwood’s Framework for Personhood in Dementia

\[ SD = P + B + H + NI + SP \]
- **SD** = manifestation of dementia
- **Personality** – previous coping strategies
- **Biography** – other challenges presented in life
- **Health** – sensory impairment
- **Neuropathological impairment** – location, type, severity
- **Social psychology** – environmental effects on sense of safety, value and personal being

Kitwood, Int J Geriatr Psychiatry, 1993
Response in NPS Trials
Factors associated with NPS

- Neurodegeneration associated with dementia
- Increased vulnerability to stressors
- Neuropsychiatric symptoms

Adapted from Kales et al. BMJ 2015; 350:bmj.h358
The Components of Managing NPS: DICE approach

Describe

Investigate possible causes

Create a treatment plan

Evaluate

At any stage consider:
- **Pharmacologic**
  - Based on sub-type
  - Other agents

Describe

What behavior did the patient exhibit?

How did the patient perceive what occurred?

How did the patient feel about it?

Is the patient’s safety at risk?
  ◦ Effect of \( \downarrow \)ADLs and \( \downarrow \)iADLs
  ◦ Physical aggression posing threats to others
  ◦ Smoking
  ◦ Suicidal ideation
  ◦ Trying to leave home

Describe

How much distress did the behavior generate for the caregiver?

Does the caregiver feel their safety is threatened by the behavior?

What about the behavior is distressing to the caregiver?

What did the caregiver do during and after the behavior occurred?

Describe

Who was there when behavior occurred (e.g. family members, unfamiliar people)?

When did the behavior occur (time of day) and what relationship did this have to other events (e.g. occurring while bathing or at dinner)?

Where did the behavior occur (e.g. home, daycare, restaurant)?

What happened before and after the behavior occurred in the environment?

Non-Pharmacologic Treatment of NPS

Investigate Possible causes of NPS

Create Treatment Plan

Evaluate

Caregiver
Patient
Environment

Adapted from Kales et al. BMJ 2015; 350:bmj.h358
INVESTIGATE POSSIBLE CAUSES

Unmet **needs**: Hunger, thirst, sleep cycle disruptions

Acute **medical** problems
- **Delirium**
- **Drugs**: changes, dosage, polypharmacy, interactions
- **Disease**
  - **Infections**, especially UTI, upper respiratory tract
  - **Pain** (falls, fractures, ulcers, constipation)
  - **Psychiatric**: PHx and response to Rx? FHx?

**Sensory** deficits (hearing, sight)

CREATE TREATMENT PLAN

**Respond to physical problems**

Provide for unmet needs
- Sleep hygiene measures
- Deal with hunger, thirst

Treat acute medical problems
- Train caregivers to identify these problems

**Correct sensory deficits**
- Encourage use of glasses, hearing aids
- Have eyesight and hearing assessed

Delirium is Common and Often Unrecognized

- Risks for lack of recognition
  - Hypoactive delirium
  - Advanced age
  - Vision impairment
  - Dementia

Relative risk of hospital mortality: 2-20 x

Why is Delirium missed?

Hard to see if you aren't looking for it
Confusion Assessment Method

- Acute onset and fluctuating course
- Inattention
- Disorganized thinking
- Altered level of consciousness

Just these two? Subsyndromal
Watch and repeat testing regularly

Pain in Dementia

Pain is common and undertreated in older adults
- 50 – 80% of individuals in LTC have pain

Assessment of pain in individuals with advanced dementia particularly challenging
- Pain can present as agitation
- Language and communication difficulties
- Recall of pain and changes over time

1. Fox, CMAJ, 1999
Analgesia to Treat NPS

**CMAI items showing improvement**
- Restlessness
- Pacing
- Requests for attention
- Repetitious sentences
- Complaining
- Negativism
- Cursing, verbal aggression

No effect on cognition or ADLs

9/175 (5%) treatment group withdrew due to adverse events

*Acetaminophen, morphine, pregabalin or buprenorphine patch*  
Husebo et al. AJGP 2014: 22: 708-17
Improvement with analgesia* in LTC patients

Improvements in patients with mood cluster on NPI-NH

- Depression
- Apathy
- Night-time behaviours
- Appetite and Eating disorders

*Paracetamol, morphine, pregabalin or buprenorphine patch
Mental Health Consultation

Referral to geriatric mental health providers for NPS are effective in reducing NPS\textsuperscript{1,2}

Evaluations focus on:

- Assessing for treatable causes of behavioural changes including pain and delirium
- Patient-centred non-pharmacological interventions for NPS
- Working with staff and physicians to optimize care and environment

INVESTIGATE POSSIBLE CAUSES

High level of stress, burden, depression, poor health status, lack of support

Lack of education about dementia and behaviors

Communications too complex, emotional tone is harsh

Mismatch of expectations and dementia severity
  ◦ under or over estimation of capability

CREATE TREATMENT PLAN

Work collaboratively with caregiver/other team members to institute non-pharmacologic interventions:
  ◦ Caregiver education; Hands-on training with reinforcement
  ◦ Enhancing communications: Calm voice, simple, limited choices, no open ended questions
  ◦ Simplifying tasks

Training Caregivers and Staff

Some staff and caregiver training approaches are effective in reducing NPS\textsuperscript{1-3}

Most training programs involve psychoeducation about dementia symptoms

- Communication strategies to avoid confrontation
- Strategies for redirection and distraction

Often incorporate \textit{personalized} pleasant events into interactions

Caring for Aged Dementia Care Resident Study (CADRES)\(^1\)

RCT of two models of person-centred care (PCC) compared to usual care
- PCC and
- Dementia Care Mapping

15 LTC facilities in Australia, N=298

Evaluated at 4, 8 months
- PCC showed reduction in NPI score
- Quality of life was not significantly impacted by either PCC or DC

Chenoweth et al, Lancet Neurol, 2009; 8(17-25)
INVESTIGATE POSSIBLE CAUSES

Difficulty processing and responding to stimuli depending on disease stage and stimuli

**Overstimulation** or **understimulation**
- Clutter
- Lack of appropriate visual cues

**Safety** risk
- Too hot or too cold
- Lack of adaptive equipment (grab bars in bathroom)
- Poor lighting

Lack of **activity, routines**

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CREATE TREATMENT PLAN

**Work collaboratively with caregiver/other team members to institute non-pharmacologic interventions:**

- Increase Sensory Stimulation:
  - Snoezelen, Music
- Reduce stimulation: clutter, colours, sounds (TV, radio, voices), exits, number of visitors
- Address Safety risks
  - Removal of restraints; restraints often worsen behaviour
- Structured meaningful and pleasant activities and exercise
- Interaction with people or animals

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Evaluate

IF IMPLEMENTED PROPERLY AND BEHAVIOUR CONTINUES

Problem solve with key informant
Revise recommendations
Refer to specialists or other team members

IF NOT IMPLEMENTED PROPERLY OR NOT IMPLEMENTED AT ALL

Determine reason(s) with key informant
Revise recommendations accordingly
Refer to specialists or other team members depending on the reason strategy was not implemented or implemented ineffectively (eg, caregiver too depressed to implement strategy)

Limitations

Many interventions have only been evaluated in small studies, methodological quality is limited

May required prolonged and sustained implementation for effects to be realized

Cost effectiveness is unclear but tending towards beneficial

The Royal’s Outreach Service to LTC

Geriatric psychiatrist and outreach nurse team

On-site assessments, recommendations and support

Service 29 Long Term Care Homes (LTCH) in Ottawa

Case-based learning/ formal teaching program
The Royal’s Outreach Service to LTC

Admissions/100 LTC Beds

Fiscal year

Wiens, Ward, Rivard IPA ASM Montreal 2009
Antipsychotic reduction project

Pilot Project to Reduce Antipsychotic Medication Use in Long Term Care

No worsening of behaviour
Strategy for change at one LTC home

- Team
- Personal
- Environment
Team engagement

At the beginning of the project staff:

- Great concern for safety
  - Their own and
  - That of the residents
- Said they did not have enough staff to implement alternative interventions and were reluctant to participate
- Reported feeling overwhelmed at the thought of attending huddle meetings
- Were skeptical that there would be improvement in responsive behaviours and that this was a nice idea but....
Develop a plan to encourage sustainability and communicate the importance of the improvement innovation

- Planning/brainstorming session with all stakeholders to facilitate implementation
- Kick Off Party for all staff and families
  - Videos
  - FAQ’s and communication boards
  - Outreach nurse educators available all 3 shifts
**MOTIVATION**

Connect to values
- Storyboard

Link to training
- Individualization is considered a particularly important feature of nursing care by nurses, patients and their families

**ABILITY**

Provide training opportunities
- P.I.E.C.E.S. Program
- Gentle Persuasive Approaches in Dementia Care (GPA)
- DementiAbility Methods: The Montessori Way training

Formal education for all staff to
- Support culture change
- Person-centered approach

Coaching and mentoring

Adapted from Influencer, Grenny *et al* 2013
All About Me

Guides a caregiver, to concentrate on what the person can still do rather than what is no longer possible;

Person’s usual habits, daily routines, likes and dislikes are considered
I am a 88 year old widow. My husband John died 7 years ago. I was born in Crooked River, Saskatchewan. My name is Mary. I have 4 children. The oldest, Russell and my dog Ronnie, visit every day. Des, George and Ernest live out of the city. I worked very hard all my life. I completed grade 3 and worked as a hairdresser, waitress and in last job as a commissioner.

I have Alzheimer’s Dementia; my brain is broken. My short and long term memory is severely impaired and I am often vocally repetitive and can become quite disruptive and anxious when I feel no one is answering my questions.

**Activity:**
- I love to spend time with my dog, talk about my dog and look at his pictures.
- I love to help with baking.
- Walking and swimming are one of my favorite exercises.
- I love manicures, pedicures and jewelry.

**My ability to understand your requests decline if I get frustrated. I may be verbally responsive.**

**Triggers:**
- Testing my short term memory: I will get more upset, suspicious and frustrated
- Pain: I have a bad arthritis
- Not responding to me in timely fashion. I often get anxious when I need to use the bathroom and look from room to room to locate it
- Do not try to help me without giving me several cues: tell me, show me and ask me for help

**My usual routine:**
1. I am usually up early – before 05:00 am
2. I need plenty of reassurance first thing in the morning + pain medication
3. I like to sit at the corner table in the dining room. This allows me to leave at any time when necessary and visit with Russ and dog Ronnie
4. I like to take a nap after Russ leaves
5. After my nap, I like to sit in the activity room until dinner
6. I like to go to bed around 20:00 hours. I enjoy listening to the CBC on radio when I am falling asleep

**What works?**
1. Ask me for help instead of telling me what to do
2. Tell me that Russ is on his way in
MOTIVATION

Support from peers
- PSW Behavioural Support Champion working with team

Support from chain of command
- Involved all staff at LTC from caregivers to support staff to Administration

Once the project got underway, staff began to
- Provided positive feedback
- Expressed pride in their accomplishments

ABILITY

“Huddle” process to brainstorm meaning of behaviours and identify possible triggers and solutions.

Once the project got underway, staff began to
- Brainstorm on own
- Report to the team successful outcomes.

Adapted from Influencer, Grenny et al 2013
MOTIVATION

Positive reinforcement
Create, communicate and evaluate the new care plan through weekly “huddles”, staff meetings.

ABILITY

Continuous feedback of results
Regular posting of:
- Antipsychotic reduction and discontinuation results
- Use of restraints
- ABS (Aggressive Behaviour Score)

Event to present progress results and effective interventions halfway through the project

Adapted from Influencer, Grenny et al 2013
Strategy for change at one LTC home

Lessons leaned

• Expect the unexpected. The most reluctant staff may become your best champion.

• Don’t expect major changes in responsive behaviours. No change in behaviour once the antipsychotic medication was discontinued showed the lack of benefit of the medication in the first place.

• The Dementia Observation System (DOS) tool provided concrete evidence of behaviour changes.

• Staff less likely to request pharmacological interventions as the first line of intervention

• Staff are more empowered to try non-pharmacological strategies.
Strategy for change at one LTC home

Preparing for Spread

• 5 LTCHs identified as next sites for reduction in antipsychotics

• Visit sites and share pilot results at collaborative meeting with LTCH stakeholders (Management, health care staff and families)

• Identify LTCH in-house lead.

• Education sessions provided by Geriatric Psychiatry Outreach Team in collaboration with in-house educators. Provide kits including tools, forms, processes etc.

• Local poster presentations and national webinar to present results
STI and STA OP! Intervention

Behavioural change identification!

0: Basic Needs Assessment

1: Pain and physical needs assessment

2: Affective needs assessment

3: Trial non-pharmacological comfort interventions

4: Trial analgesics

5: Trial psychotropic drugs or consultation

* If behaviour continues, proceed to the next step

TARGET and if behaviour continues, proceed to: STEP 1

TARGET and if behaviour continues, proceed to: STEP 2

TARGET and if behaviour continues, proceed to: STEP 3

If behaviour continues, REPEAT STA OP!