Managing Dementia-Related Behavioral Symptoms

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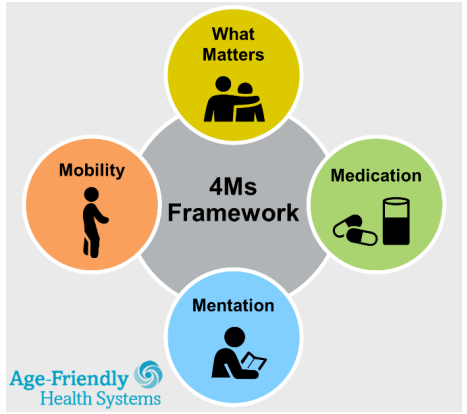
Common Behavioral and Psychological Symptoms of Dementia

- Delusions/Paranoid thoughts
- Hallucinations
- Agitation/Aggression
- Irritability/Mood Lability
- Disinhibition/Inappropriate behavior
- Anxiety
- Apathy/Indifference
- Depression
- Nighttime Behaviors
- Changes in Appetite/Eating
- Repetitive Behaviors & Questions
- Refusal to Bathe, Groom or Take Medications
- Wandering



Kaufer DI, et al. Validation of the NPI-Q, a brief clinical form of the Neuropsychiatric Inventory. J Neuropsychiatr Clin Neurosciences 2000.

Treatment of Behavioral Symptoms:
Looking for an unmet need

- Medical issue?
  - Pain
  - Constipation or urinary retention
  - Nausea
  - Shortness of breath
  - Lack of sleep
  - Infection
  - Delirium
  - Anxiety or restlessness
- New medication or change in dose?
- Related to specific activity?
  - Bathing
  - Taking medications
  - Others?
- Related to a specific person?
- Social or environmental stressor?
  - Time of day?
  - Change in caregiver
  - New living arrangement
  - Death of spouse/friend

Behavioral Interventions

- Treat identified acute causes
- Environmental modification
- Consistent, predictable routines
- Minimizing insufficient or excessive sensory or social stimulation
- Appropriate activities for level of cognitive impairment
- Realistic expectations
- Frequent reassurance, calm responses
- Addressing hearing loss
- Clear communication
- Simplifying instructions and tasks
- Distraction or redirection when behavioral symptoms occur
- Regular physical activity
- Massage, aromatherapy
- Music therapy
- Support reminiscence
- Humor
- Communication skills training
- **Behavioral interventions BEFORE medications**

Livingston G, et al. Non-pharmacological interventions for agitation in dementia: systematic review of randomised controlled trials. Br J Psychiatry 2014; 205:436.

Interventions to Improve Sleep

- Avoid/reduce caffeine
- Exercise/regular activity
- Regular bed/wake times; consider # of realistic hours person will sleep
- Sunlight/bright light exposure
- Limiting fluids before bed
- Prevent nighttime awakenings
- Avoid naps
- Avoid sedative-hypnotic medications→ increases risk of falls, delirium
- Melatonin, especially if sleep cycle reversal or acting out dreams

What are some effective approaches to managing dementia-related behavioral symptoms?

What are some **less** effective approaches to managing dementia-related behavioral symptoms?

How might you improve the approach to dementia-related behavioral symptoms in your nursing home?

UCLA ADC Program
Caregiver Training Videos

- Caregiver Education
  - ACES Webinars
  - Caregiver Training Videos
    - Aggressive Language and Behaviors
    - Agitation and Anxiety
    - Depression and Apathy
    - Hallucinations
    - Home Safety
    - Refusal to Bathe
    - Refusal to Take Medications
    - Repetitive Behaviors
    - Repetitive Phone Calls
    - Repetitive Questions
    - Sexually Inappropriate Behaviors
    - Sleep Disturbances
    - Sundowning
    - Wandering
    - Common Challenges: Alcohol Abuse
    - Common Challenges: Driving
    - Common Challenges: Lack of Eating
    - Common Challenges: Paranoid Thoughts

TAKE ACTION WORKSHEET:

Use this worksheet to record steps taken to minimize the occurrence of key behaviors.

BEHAVIOR	RESPONSE AND REMOVAL OF TRIGGERS
HALLUCINATIONS	□ See the room through the person's eyes. □ Identify and remove triggers such as open curtains, shadows and mirrors. □ Use a night light in the bedroom. □ Remain calm and reassuring. Do not yell or scold. □ Help person into bed and provide reassurance. □ Other ideas:
REFUSAL TO BATHE	□ Be flexible with bath time. □ Use terms such as "spa" if the word "bath" causes anxiety. □ Create soothing environment in the bathroom (e.g. soothing music). □ Install hand rails and use a shower chair for safety. □ Limit bathing to twice a week with sponge baths in between. □ Let the person with dementia know what you are about to do. □ Use towel to provide privacy. □ Install a hand-held shower head for control of aim of water stream. □ Other ideas:

http://dementia.uclahealth.org/caregiver-education-videos

This stuff is hard. Supporting staff

- Promote self-care
  - Relaxation techniques
    - breathing exercises, visualization, muscle relaxation, music
  - Stress management
  - Exercise, adequate sleep, healthy diet
  - Take care of your own medical care
- Improving skills
  - Online Resources for staff education
    - http://www.alz.org (Alzheimer's Association)
    - www.OKDCN.org (Oklahoma Dementia Care Network)

How might you improve staff support at your nursing home?

Other Interventions —Prevention?

- **Treat hearing loss**
- **Avoid medications that may impair cognition**
  - sleeping pills, sedatives, anticholinergic drugs
- Positive social interactions, treat depression
- Avoid brain trauma (falls)
- Avoid alcohol
- Control vascular risk factors
  - High blood pressure, hyperlipidemia, diabetes, smoking, inactivity
- Cognitive stimulation/life-long learning

Medications for Dementia

- There is no cure for dementia.
- Medications for cognitive symptoms provide modest, temporary benefit for some.
- No medications are FDA approved for management of behavioral symptoms.
- Side effects are common.

Acetylcholinesterase inhibitors

- Donepezil/Aricept; Rivastigmine/Exelon; Galantamine
- Work by increasing neurotransmitter acetylcholine in neuronal synapse
- Modest improvement in cognition and function; many patients do not benefit especially in advanced disease
- **Side effects are common and increase with higher dose**
    - GI upset (nausea, anorexia, weight loss, diarrhea, incontinence)
    - Bradycardia and syncope→falls
    - Vivid dreams/nightmares→nighttime behaviors
- Consider discontinuation if no benefit after 3 months

Wang J, et al. Pharmacological treatment of neuropsychiatric symptoms in Alzheimer's disease: a systematic review and meta-analysis. J Neurol Neurosurg Psychiatry 2015; 86:101; Birks J. Cholinesterase inhibitors for Alzheimer's disease. Cochrane Database Syst Rev. 2006

Memantine/Namenda

- Approved for moderate to severe Alzheimer's disease
- Thought to decrease excito-toxicity driven neurodegeneration
- Modest effect on cognition
- Synergistic effect with AchE Inhibitors
- No effect on behavioral symptoms
- Generally well tolerated, but can increase agitation, worsen hallucinations/delusions in some patients

McShane R, et al. Memantine for dementia. Cochrane Database Syst Rev 2006; :CD003154.

Aducanumab—It's complicated.

- Monoclonal antibody directed against amyloid beta (protein that accumulates in brain in Alzheimer's)
- Controversial FDA approval; Medicare coverage for clinical trial use only
- Data is limited—consistent reduction in amyloid plaques on imaging but only small improvement in cognition in only 1 of 2 trials
- Risk of brain edema and microhemorrhage may outweigh benefit (seen in 40% in trial)
- For mild cognitive impairment/early dementia only on cognitive testing
- Requires amyloid-postitive PET scan or cerebral spine fluid findings of AD
- Studies excluded patients with uncontrolled blood pressure, stroke, cardiovascular disease, anticoagulant use, vascular dementia
- May need genetic testing; those with *APOE* ε4 gene have greater risk of brain bleeding/edema
- Infusion every 4wks, when to stop is not clear, requires monitoring with brain MRI

Medications for Behavioral Symptoms

- No meds are FDA-approved for behavioral symptoms
- **No meds have shown consistent benefit in clinical studies and all have potential harms**
- Shared-decision making with family
  - Quality of life goals, risk/benefit considerations
- Target to symptom
  - Depression/anxiety →anti-depressant
  - Hostility/paranoia/delusions →anti-psychotic
- Lowest effective dose to reduce side effects
- Evaluate effect in 2-4 weeks
- Consider taper once stable with monitoring

Atypical Antipsychotics

- Reserve use for severe, debilitating symptoms or safety risks
- Most commonly used: risperidone, olanzapine, quetiapine
- FDA Black box warning (increased risk of CV events, mortality)
  - ~1 to 3.5% absolute increased risk of death
- Side effects: sedation, orthostasis, falls/fractures, long QT, metabolic syndrome, Parkinson's symptoms
- Falls risk assessment when start/continue (2017 FDA warning)
- Attempt taper within 3-4 months (American Psychiatric Assoc)

Reus VI, et al. The American Psychiatric Association Practice Guideline on the Use of Antipsychotics to Treat Agitation or Psychosis in Patients With Dementia. Am J Psychiatry 2016.

Citalopram for Agitation

- Randomized controlled trial of 186 patients with Alzheimer's Disease and frequent/severe agitation
- Citalopram 30mg daily modestly reduced agitation and associated caregiver distress compared to placebo
- Associated with prolonged QT (dose-dependent)→risk of fatal cardiac arrythmia
- Too few patients treated with 20mg to assess efficacy of lower dose
- Other SSRIS?
  - Limited evidence for treatment of neuropsychiatric symptoms of dementia other than depression

Porsteinsson AP, et al. Effect of citalopram on agitation in Alzheimer disease: the CitAD randomized clinical trial. JAMA 2014; 311:682.
Sink KM, et al. Pharmacological treatment of neuropsychiatric symptoms of dementia: a review of the evidence. JAMA 2005; 293:596.

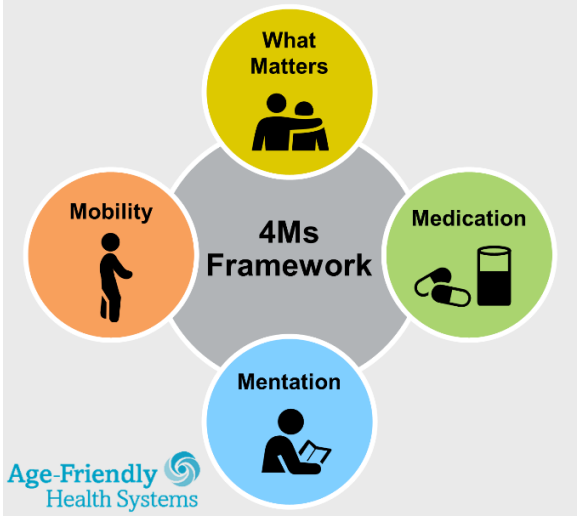
Dextromethorphan/Quinidine

- Single RCT of 220 patients with Alzheimer's Disease and agitation
- Modest reduction in agitation score (1.6 points on 12 point scale)
- Increased falls (8.6% vs. 3.9%, NNH=21)
- High cost
- Approved for use in pseudobulbar affect
- Should you consider Dextromethorphan/Quinidine for off-label use for patients with dementia agitation?
  - Evidence of effectiveness is very modest and risk for harm

Cummings JL, et al. Effect of Dextromethorphan-Quinidine on Agitation in Patients With Alzheimer Disease Dementia: A Randomized Clinical Trial. JAMA 2015; 314:1242.

In Summary

- Medications to treat symptoms and complications of dementia are still limited
- Management of behavioral symptoms and staff education and support are essential



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