Nonpharmacological Management of Dementia

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Formal nomenclature for Dementia per DSM-5 is:

**Major/Minor Neurocognitive Disorders (with or without behaviors)**

- Alzheimer’s disease (Probable/possible)
- Frontotemporal lobar degeneration (Probable/possible)
- Lewy Body disease (Probable/possible)
- Vascular disease (CVA, PVD, PAD, cerebrovascular ds, etc)
- Traumatic brain injury (TBI)
- Substance/medication - induced (ETOH, methamphetamine, etc)
- HIV infection
- Parkinson's disease (Probable/possible)
- Huntington's disease
- Prion disease

**Other Causes**

- Due to another medical condition, i.e. multiple sclerosis, ALS, cerebral palsy, anoxia (code/surgery/etc. gone bad)
- Due to Multiple etiologies, i.e. mixed vascular/Alz, Alz/anoxia, etc. Unspecified neurocognitive disorder

Specify: With/without behavioral disturbance
Specify current severity:
mild, moderate, or severe
Incidence of Neurocognitive disorders

- 1 in 9 individuals over 65 years of age have dementia
- 1 person develops dementia every 67 seconds in the United States
- Incidence of dementia almost doubles with every 5 year increase in age of a cohort.
- Per 2013-2014 CDC/CMS data 50.4% of all SNF patients have dementia
- More recent data shows the percentage increasing to near 60%.
- 2013-2014 CDC/CMS data shows 48.3% of all SNF patients have depression
- Researchers examined data on more than 3.7 million admissions to 15,600 facilities nationwide from 2012 to 2014. Even after excluding dementia and Alzheimer's disease, which are common causes of nursing home admissions, people with behavioral health issues account for about half of all residents, researchers note in the American Journal of Geriatric Psychiatry, 2018. With behavioral health problems, patients were also more likely to be sent to one-star homes, the lowest quality facilities, the study also found.

Pharmacological Management

To give nonpharmacological treatment a better chance of success:

1. Cholinesterase inhibitors ( donepezil, rivastigmine, and galantamine) are effective for cognition in mild to moderate Alzheimer's disease (A)
2. Memantine for moderate to severe Alzheimer's disease (A) and combination therapy (cholinesterase inhibitors and memantine) may be beneficial (B). Drugs should not be stopped just because dementia severity increases (A).
3. Neither cholinesterase inhibitors nor memantine are effective in those with mild cognitive impairment (A).
4. Cholinesterase inhibitors are not effective in frontotemporal dementia and may cause agitation (A), though selective serotonin reuptake inhibitors may help behavioral (but not cognitive) features (B).
5. Cholinesterase inhibitors should be used for the treatment of people with Lewy body dementia (both Parkinson's disease dementia and dementia with Lewy bodies), and memantine may be helpful (A).
6. No drugs are clearly effective in vascular dementia, though cholinesterase inhibitors are beneficial in mixed dementia (B). Early evidence suggests multifactorial interventions may have potential to prevent or delay the onset of dementia (B).
7. Though the consensus statement focuses on medication, psychological interventions can be effective in addition to pharmacotherapy, both for cognitive and non-cognitive symptoms.
8. In MCI patients with a history of depression, long-term SSRI treatment (>4 years) was significantly associated with a delayed progression to Alzheimer's dementia by approximately 3 years, compared with short-term SSRl treatment, treatment with other antidepressants, or no treatment and compared with MCI patients without a history of depression.

What are “Behaviors?”
Or CMS v. Staff v. Healthcare Plans v. InterQual

Wandering…. Only Staff
Verbal Threats (if not Viable) Only Staff
Seldom
Packing to leave Only Staff
Refusing to eat
Refusing meds/care
Want to die

Common Behaviors
- Apathy, depression, anxiety and agitation were found to be the most frequent forms of BPSD.
- Delusions (distressing beliefs) Hallucination
- Hoarding
- Refusing care: eating, bathing, meds - ADLs
- Inappropriate screaming, crying out, disruptive sounds
- Leaving home, attempting to leave/exit seek
- Depression or dysphoria: Worrying. Shadowing (following care giver)
- Apathy or Indifference
- Disinhibition. - Socially inappropriate behavior - Sexually inappropriate behavior
- Irritability or lability
- Motor disturbance (repetitive activities without purpose): - Wandering. Rummaging Night-time behaviors: waking and getting up at night)

Patient factors
- Unmet needs (m)
- Pain (m)
- Acute medical problems (m)
- Comorbidities (pm)
- Type of dementia (c)
- Dementia stage (c)
- Brain changes (m)
- Neurotransmitter changes (pm)
- Genetic makeup (c)
- Personality (c)
- Life history (c)

Environmental factors
- Knowledge about condition (c)
- Caregiver distress (c)
- Over/Aroundstimulation (m)
- Lack of routine (m)
- Caregiving quality (pm)
- Caregiver's knowledge (m)
- Infrastructure of care facility (c)
- Life event / separation (c)
- Family dynamics (pm)

Behavioral and psychological symptoms of dementia
Symptom Clusters

- Apathy, depression, anxiety and agitation were found to be the most frequent forms of BPSD.
- BPSD tends to cluster together, usually into four clusters - that is, the affective, psychotic, hyperactive and apathetic clusters.
- Pre-existing personality and psychiatric illnesses Clinical experience suggests that longstanding personality patterns and characteristics may affect the development of behavioral and psychological symptoms of dementia—the loss of inhibitory control may accentuate premorbid personality traits. Lifelong psychiatric disorders (such as major depression, anxiety, bipolar disorder, and schizophrenia) and their management (for example, treatment with antidepressants, anxiolytics, mood stabilizers, and antipsychotics) may also affect the development of these symptoms.

Psychopharmacological Interventions v. Behavioral interventions

Meta-Analysis of Nonpharmacological Interventions for Neuropsychiatric Symptoms of Dementia, Sept 2012.

These effects are at least comparable to those of antipsychotics. From a report by Yury and Fisher (46) on behavioral and psychological symptoms of dementia treatment, a net effect size of 0.13 can be calculated from their findings of 0.19 (95% CI=0.05-0.34) for typical antipsychotics and 0.17 (95% CI=0.10-0.35) for placebo. Similarly, Schneider and colleagues (47) reported an effect size of 0.18 (z=3.14, p=0.0016) in favor of antipsychotics in the treatment of behavioral and psychological symptoms of dementia. Unlike with antipsychotics, however, caregiver interventions had no adverse effects on caregivers or persons with dementia. In the only study with negative effects, behavior deteriorated over time but to similar degrees in the intervention and control groups (26). Ayalon and colleagues (18) reported that nonpharmacological interventions that addressed behavioral issues and included caregivers were more likely to be efficacious for managing behavioral and psychological symptoms of dementia, but the authors stressed the need for confirmatory studies. The present review found strong signs of benefits for behavioral and psychological symptoms of dementia from high research-quality interventions that targeted these symptoms and included the family caregiver.
BEHAVIORS

1. Hoarding/taking items from others
2. Inappropriate screaming, crying (out), disruptive sounds
3. Delusions- lost objects, accusations,
4. False accusations, fabrications, misidentifies persons, places, objects or events (e.g. Capgras syndrome).
5. not sleeping at night
6. Depression or dysphoria Anxiety: –
   Worrying – Shadowing (following care giver)

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BEHAVIORS

1. disinhibition, sexually inappropriate behaviors
2. Irritability or lability Motor disturbance (repetitive activities without purpose): - Wandering - Rummaging - Night-time behaviors (waking and getting up at night)
3. Leaving home, attempting to leave/exiting
4. Refusing care: - eating - bathing - meds - ADLs
5. Falls (not necessarily a behavior)
6. Name calling (cursing staff and others)

BEHAVIORS

1. grab toys from other kids it's not to cause upset (1-2 y/o)
2. Temper tantrums, frustrated by their lack of words and ability to communicate. (18 mos - 3 y/o)
3. favourite words to say, 'Mine!' and 'No!'
4. Occas blur reality and fantasy. May tell lies, stories, or have imaginary friends/ (3 y/o)
5. Not sleeping at night (2-3 y/o)
6. Calling parent back at night, freq underfoot, anxious when can’t be located (2-3 y/o)

BEHAVIORS

1. Still developing understanding of social norms, sexual curiosity (3-4 y/o)
2. Do all sorts of things to avoid bedtime. favourite words to say 'Mine!' and 'No!' Will experiment with independence and control. May lead to tantrums.
3. See above and delusions
4. Building their sense of self and experimenting with independence, so might be stubborn, defiant and bossy. (3 y/o)
5. See above
6. Also above with increase in vocabulary and “potty mouth”
**Behavioral Management**

**Behavioral and psychological symptoms of dementia**

| Describe & measure | 1. Redirect (R)  
| 2. Change environment or area (R)  
| 3. Distract and offer some other object or food (R or P)  
| 4. Offer activity (R or P)  
| 5. Get patient's attention prior to touching/moving (P)  
| 6. Give meds early or call physician for meds (R or P)  
| 7. Check for UTI/Constipation/Impaction (R) |

**Analyze**

- Can you explain this behavior?  
- What else do you know about the patient?  
- Which etiopathogenetic factors?  
- Comorbidities?

**Treat**

- Does it need medical factors?  
- Examine unmodifiable factors to caregivers.  
- Support caregivers.  
- Reduce agitation/behavior triggering factors.  
- Apply non-pharmacological interventions.  
- Provide specific pain treatment.  
- Consider pharmacological treatment.

**Evaluate**

- Feasibility?  
- If feasible?  
- Quality of life?  
- Caregiver stress?  
- Understanding consequences or side effects?

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**Interventions/Management**

- Standard recommendations and charted  
  1. Redirect (R)  
  2. Change environment or area (R)  
  3. Distract and offer some other object or food (R or P)  
  4. Offer activity (R or P)  
  5. Get patient's attention prior to touching/moving (P)  
  6. Give meds early or call physician for meds (R or P)  
  7. Check for UTI/Constipation/Impaction (R)

- Few specifics, generalized, not always patient centered

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**Interventions and Theory**

- Three psychosocial theoretical models -  
  1. "Unmet needs" model - Frequently not apparent to observer or caregiver -  
  2. Behavioral/learning model - ABC model = Antecedents Behavior Consequences  
  3. Environmental vulnerability/reduced stress-threshold model - Lower threshold at which stimuli affects behavior - Not mutually exclusive
Interventions and Theory

Five step approach
1. Identify the target symptoms -
2. Determine when symptoms are likely to occur -
3. Determine precipitants of symptoms -
4. Plan interventions to reduce the precipitants -
5. Consider alternative approaches if first approach fails

Interventions and Theory

Specific interventions
- Sensory interventions
  - Music, massage touch, white noise, pet therapy, sensory stimulation
- Social contact
- One-on-one interaction, therapy
- Differential reinforcement, cognitive, stimulus control
- Staff training
- Activities
  - Structured activities, exercise, outdoor walks, physical activities, pet visits, stimulated presence and videos

Stress is common for people with dementia
- 60% to 98% of people with dementia experience some BPSD
- 33% of community dwelling people with dementia will have clinically significant BPSD
- 80% of people residing in care environments will have clinically significant BPSD

Environmental vulnerability/reduced stress-threshold model
- Lower threshold at which stimuli affects behavior
Interventions and Theory

- Specific interventions
  - Environmental interventions
    - Wandering areas, natural or enhanced environments, reduced-stimulation environments
  - Medical/nursing care interventions
    - Light or sleep therapy, pain management, hearing aids, removal of restraints
  - Caregiver education
  - Combination therapy + Individualized and group treatments

- Sensory intervention
  - Music, massage touch, white noise, pet therapy, sensory stimulation
- Social contact
  - One-on-one interaction, pet visits, stimulated presence and videos
- Behavior therapy
  - Differential reinforcement, cognitive, stimulus control
- Staff training
- Activities
  - Structured activities, exercise, outdoor walks, physical activities

- "Unmet needs"
  - Hunger, thirst, boredom, sleepy
  - Environmental precipitant
    - Time change, new caregivers, new roommate
  - Stress in patient-caregiver relationship
    - Inexperience, domineering, or impairment by medical or psychiatric disturbances
Interventions and Theory

- Divided into 4 main subtypes...behaviors
  1. Physically aggressive behaviors • Hitting, kicking, biting
  2. Physically nonaggressive behaviors • Pacing, inappropriately handling objects, wandering
  3. Verbally nonaggressive agitation • Constant repetition of sentences or requests
  4. Verbal aggression • Cursing, screaming
  
  Only truly urgent event is #1

Other behaviors

- Activity problems
  - Purposeless activities
  - Wandering - Inappropriate activities
- Paranoia and delusions
  - Suspicion - "People are stealing my things"
- Anxiety and phobias
- Aggression - Verbal more than physical
- Depression and hallucinations

Specific Management Techniques

1. Always check for Physical conditions...UTI, constipation, impaction, pneumonia, URI, etc. (PARTICULARLY IN VERY REGRESSED PATIENTS)
2. Consider trial of pain mgmt. if patient has hx of chr pain, arthritis, DJD, pos bblx, etc. (Partic in very Regressed Pts)
3. Know/learn patient's history and background to best understand their behaviors and how they will best communicate, also be aware of their mental capacity/MMSE.

MMSE 25-30 mild cognitive impairment
20-24 early/mild dementia
19-10 moderate dementia
>10 severe dementia
Specific Management Techniques

1. Very Regressed/withdrawn patients with language/communication issues
   Treat as a 0-18 mo old child... require anticipating their needs, they will get frustrated and cry/vocalize when uncomfortable and needs aren't met, they cannot communicate their needs: food, toilet, changing, being moved, need for stimulation or need to decrease stimulation, temperature issues, etc.
   They need to feel safe and know someone is available, soothing talk.

2. Refusing care: eating - bathing - meds - ADLs
   Treat as a 2-3 y/o, wants autonomy. Don't grab or push patient, make sure they understand request, if they do and cont to refuse return to it later.
   Do not argue with or threaten patient. Don't ask or make yes/no requests. Meet the need for autonomy with choices "Do you want to take your bath now or wait until after you eat?" "Do you want your meds in apple sauce or pudding?", etc.
   If necessary bribe with a treat or something special for them. Try to develop a routine and schedule for unpleasant activities, followed by something enjoyable.
   Finger foods, sippy cups. Toilet training (bowel/bladder) - staff c/o smearing feces, urinating in trash cans, cooling systems, etc. Anticipate times they may need to use bathroom.

Specific Management Techniques

1. Hoarding/taking items from others
2. Inappropriate screaming, crying (out), disruptive sounds
3. Delusions - lost objects, accusations,
4. False accusations, fabrications, misidentifies persons, places, objects or events

All of these are behaviors of a 2 to 3 y/o child/toddler, they remain very self centered, have magical thinking, tend to be oppositional, get frustrated when they can't get their way or communicate and may have meltdowns.
Their attention span is short, try to distract them, don't try to take things physically away from them, the more they resist or say no, the more set they get in their ways. Just wait, they will change to the next item that catches their eye or fancy, find something similar, try to keep activities and items/toys to manipulate to slow these behaviors.

They have attachment to the word "no" and will use it frequently. Explain misperceptions when necessary, but many of their false beliefs cause no harm and don't need to be corrected. Try to establish routines and allow them to "help" with tasks when possible to assist their need for control and autonomy. This is a group that may carry a baby doll. Pick your fights carefully.

Specific Management Techniques

Circadian Rhythm Issues

- Won't stay asleep/gets up early, other sleep issues
- Sundowning/often includes trying to leave home, facility, etc.

Children 1-5 yrs old have various sleep issues, don't want to go to bed, fearful at night, bad dreams/nightmares, fears/phobias, abandonment issues.
Need bedtime rituals, reg bed times, night lights for some, calm time prior to bed, decrease stimulants from dinner on including caffeine. Some hs meds interfere with sleep, cause nightmares, etc. Limit daytime naps, partic in late afternoon/evening. Realistic bed time, only need 8-9 hrs of sleep/night (go to bed at 7p, up at 3-4a). There are "morning people", and "evening/night people", respect it.
Specific Management Techniques

Misc issues:
1. Falls...not a psy issue, need for autonomy, restless, wanderer. Try to anticipate, keep active, move place to place. Consider Merrywalker.
2. Sexually inappropriate...not all physical contact or even sex is prohibited. Usually takes two to Tango. May just want touching, caressing, companionship, need attention.
3. Stripping...Get jump suits, etc to decrease this ability, also helps with #2. Remove audience, may be toileting issues.
4. Wandering...2,3,4 all need time out areas, decrease stimulation or different stimulation (comfort or novel).

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Don’ts:
- Argue
- Threaten
- Ask yes/no questions
- Over react/panic
- Yell/become emotional/cold
- Expect pts to recall instructions/directions
- Grab/push/shove
- Take name calling, cursing, etc personally

Do
- Offer alternatives
- Praise good behavior
- Be flexible
- Lower expectations
- Speak with simple sentences/short phrases
- Make sure pts w/ decrease vision and/or hearing are aware of you before touching
- Use memory props, signs, items
- Music/stop TV

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By Dan Green

Retirement Home

Back got money so it’s mine!

Grand finds out the new guy has a car, a valid drivers license and a refillable Viagra prescription.