Alternative Therapies for the Management of Agitation in Dementia

Rebecca Powell, MD

Piper Frithsen, M. Admin, RN

CASA DE LA LUZ

Objectives

- Outline the top behavioral difficulties for patients with Agitation and Dementia
- Discuss limitations of pharmacologic management
- Examine ways to individualize care for the Agitated patient
- Discuss integration of alternative non-pharmacologic therapies
- Review preliminary statistics
- Discussion regarding trends and future directions

The Agitated Person

- Why are we talking about this?
  - 80% of people with dementia have unwanted behaviors during their disease progression

- What does the agitated person look like?

Dementia Behaviors

- Aggression
- Restlessness
- Confusion
- Depression/apathy
- Hallucinations/delusions
- Suspicion
- Sleep issues
- “Sundowning”
- Repetition
- Wandering

Behavioral and Psychological Symptoms of Dementia

Patient Factors	Environmental Factors
Unmet needs (**M**)	Knowledge about condition (**M**)
Pain (**M**)	Caregiver distress (**M**)
Acute medical problems (**M**)	Over/understimulation(**M**)
Comorbidities (pm)	Lack of routines (**M**)
Dementia stage (u)	Caregiver quantity and quality (pm)
Brain changes (u)	Caregiver knowledge(**M**)
Neurotransmitter changes (pm)	Infrastructure of facility(u)
Genetic makeup (u)	Life event separation (u)
Personality (u)	Family dynamics (pm)
Life history (u)	

Tible, O. P., Riese, F., Savaskan, E., & Von Gunten, A. (2017). Best Practice in the Management of Behavioural and Psychological Symptoms of Dementia. *Therapeutic Advances in Neurological Disorders, 10*(8), 297-309. doi:10.1177/1756285617712979

Associated Causes for Unwanted Behaviors

- Physical discomfort – pain, fatigue, hungry or thirsty, anxiety
- Environmental factors – overstimulation (loud noise, busy environment, physical clutter, large crowds, unfamiliar people), time of day for interactions (what is best for the patient), bathing modesty, boredom
- Poor communication/caregiver burnout – complicated instructions, too many questions or statements at once, multiple directions

Pharmacologic Approach

- Antidepressants
  - Take a long time to work, growing area of research
- Antipsychotics – addresses acute psychosis
  - Increase risk of stroke[1]- 3.5% increase in of death[3]
- Antianxiety medications – used for sleep and anxiety
  - Increased fall risk, increases daytime sleepiness, can worsen memory, associated with increased risk of dementia development[2]
- Mood stabilizers
  - October 2018 Cochrane review finds risks of Valproate preparations may outweigh benefits[4]
- Sleep aids – improves day/night reversal
  - Some data of efficacy, limited

What does it cost?

- Average estimated local cost of commonly used generic medications in pill form per 30 tabs documented on www.goodrx.com
  - Haloperidol $31.96
  - Olanzapine $215.78
  - Risperidone $74.68
  - Quetiapine $123.79
  - Depakote $66.59
  - Lorazepam $24.03
  - Alprazolam $19.84
  - Citalopram $35.37
  - Paroxetine $37.32
  - Escitalopram $98.15
  - Aripiprazole $755.01
  - Lithium $7.25
  - Temazepam $38.25
  - Mirtazapine $52.42

If you take a typical regimen with citalopram, Risperdal twice a day, and Depakote three times per day, this gives an average cost of $384.50 per month

- Beyond the monetary cost, what is the intrinsic cost?

When medications fail…

CASA DE LA LUZ

“Further research should focus on methods for selecting appropriate and meaningful activities for people in different stages of dementia.”

Personally tailored activities for improving psychosocial outcomes for people with dementia in long-term care. Cochrane Review, Feb 2018

The Need for Agitation Programs

- No established agitation program in the area- Casa's group founded in August 2017

- What can we incorporate for our patients experiencing agitation and possibly minimize the use of potentially harmful medications?
- Started with more traditional methods of nonpharmacologic interventions and then it took off from there

Agitation Consult Team (ACT)

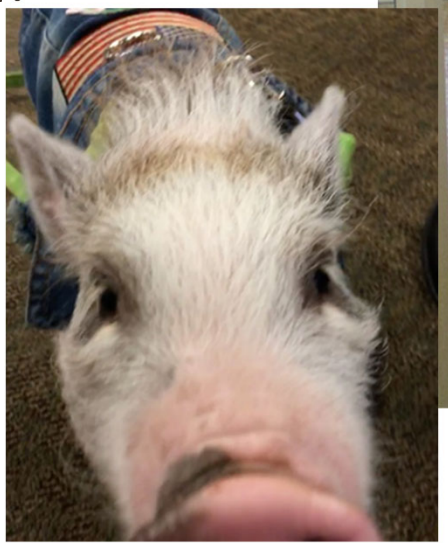
- Interdisciplinary team consisting of a social worker, chaplain, volunteers, NP, RN, LNA, music therapist
- Gathers information and makes recommendations
- Re-evaluates weekly

Identify the Needs of the Agitated Person

- What is their story?
  - Ask family, friends, other caregivers
- Helpful information to have/learn
  - Significant health issues- sensitive to cold?
  - Family history- resemblance of caregiver to loved one?
  - Childhood trauma- modesty?
  - Meaningful life events- Career path?
  - Preferences- Art? Music? Books?

Animal Assisted Therapy

- The Benefits
  - Improves mood and social interaction
  - Improves nutrition
  - Provides calming effect
  - Benefits to family
- Types
  - Dogs, cats, birds, fish, pigs, horses



Music Therapy

“"(Music therapy) can make the difference between withdrawal and awareness, between isolation and interaction, between chronic pain and comfort -- between demoralization and dignity."

-Barbara Crowe

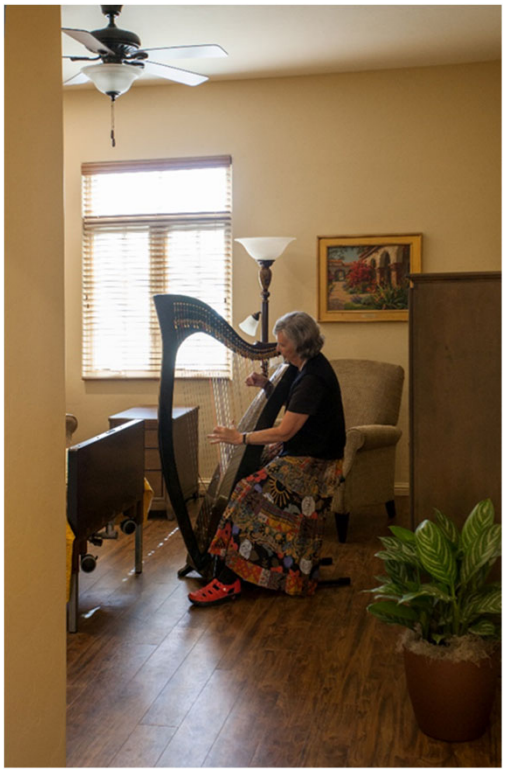
Former president of the National Association for Music Therapy

Using Volunteers to Help with Unwanted Behaviors

- Being quietly present
- Caregiver Relief
- Consistency
  - Same people
  - Same day of the week
  - Same time of day

Non-traditional Techniques

- Shower Poncho and kit
- Pat mat
- Cheer Bear
- Weighted blanket
- Activity apron/blanket
- SADD light therapy
- Patient specific initiatives



What does it cost?

- Average cost of nonpharmacologic interventions $19.68
- May underestimate true cost secondary to core costs such as staff, reusable items (art supplies), donated materials (towels for shower ponchos)
- Currently funded through the Casa de la Luz foundation

Do Our Interventions Work?

Our evaluation is beginning…

- Review severity of agitation through the Pittsburg Agitation scale
  - Verbal behavior- not disruptive to yelling and screaming
  - Moving around- normal to intense, disruptive movements that can't be calmed down by asking
  - Being aggressive- normal behavior to threats to physical aggression toward one's self or others
  - Resisting care- no problem to avoiding care to striking out at caregivers

Pittsburgh Agitation Scale (PAS)

Rosen, J., Burgio, L., Killar, M., Cain, M., Allison, M., et al. (1994). The Pittsburgh Agitation Scale. *American Journal of Geriatric Psychiatry*, 2, 52-59

Circle only the highest intensity score for each behavior group that you observed during this rating period. Use the anchor points as a guide to choose a suitable level of severity. (Not all descriptors need be present. Choose the more severe level when in doubt.) TOTAL Score_____

Behavior groups	Intensity during rating period
Aberrant Vocalization (repetitive requests or complaints, nonverbal vocalizations, e.g., moaning, screaming)	0. Not present 1. Low volume, not disruptive in milieu, including crying 2. Louder than conversational, mildly disruptive, redirectable 3. Loud, disruptive, difficult to redirect 4. Extremely loud screaming or yelling, highly disruptive, unable to redirect
Motor Agitation (pacing, wandering, moving in chair, picking at objects, disrobing, banging on chair, taking others' possessions. Rate "intrusiveness" by normal social standards, not by effect on other patients in milieu. If "intrusive" or "disruptive" due to noise, rate under "Vocalization.")	0. Not present 1. Pacing or moving about in chair at normal rate (appears to be seeking comfort, looking for spouse, purposeless movements) 2. Increased rate of movements, mildly intrusive, easily redirectable 3. Rapid movements, moderately intrusive or disruptive, difficult to redirect 4. Intense movements extremely intrusive or disruptive, not redirectable verbally
Aggressiveness (score '0' if aggressive only when resisting care)	0. Not present 1. Verbal threats 2. Threatening gestures; no attempt to strike 3. Physical toward property 4. Physical toward self or others
Resisting Care (circle associated activity) Washing / Dressing / Eating / Meds Other: _____	0. Not present 1. Procrastination or avoidance 2. Verbal gesture of refusal 3. Pushing away to avoid task 4. Striking out at caregiver

When Do We Measure?

- Baseline- The behavior that triggers the referral
- Pretest- Immediately before each intervention
- Posttest- Immediately after the interventions

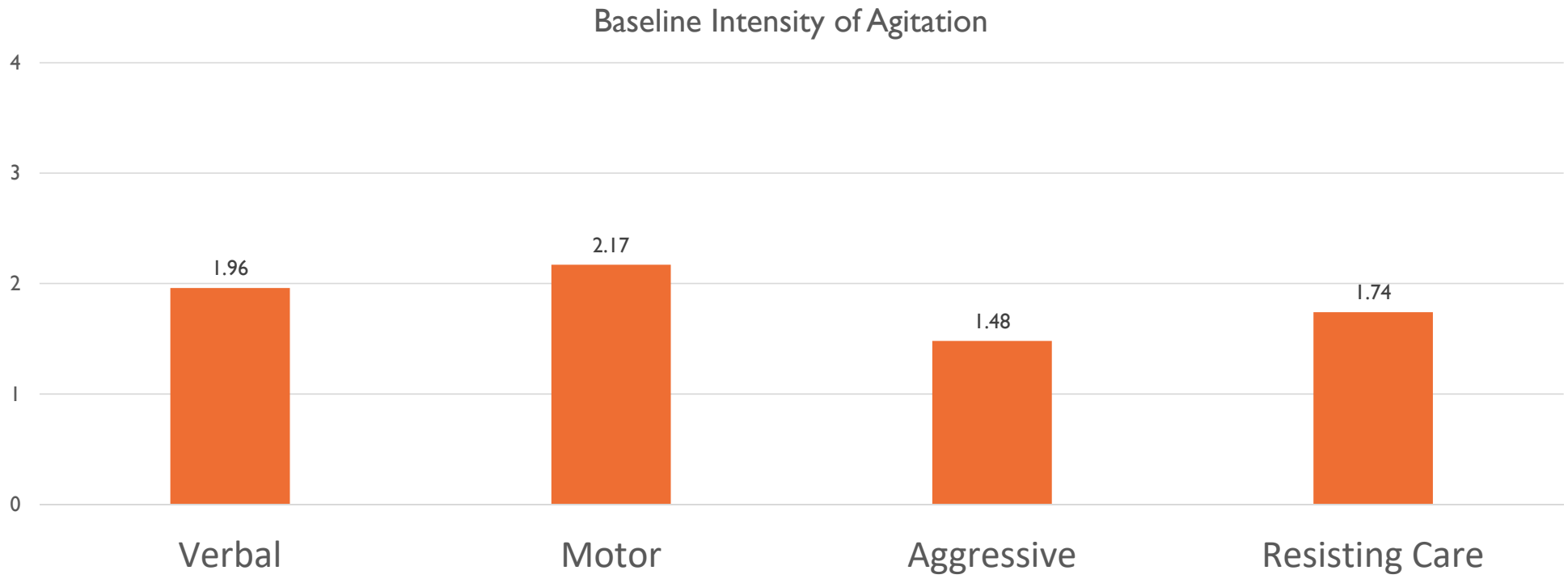
Who Have We Measured?

- Men and women, ages 65-102
- 47% have been diagnosed with Alzheimer's disease
- In the early stages of evaluation, data for 29 clients varying for baseline, pretest and posttest

What Did We Do?

- On average, clients had 2.2 interventions
  - Change in medications (44%)
  - Music therapy (33%)
  - Light therapy, weighted blanket, contact comfort (e.g., cheer bear), shower poncho (22%)
  - Play therapy, pet therapy, aroma therapy, volunteer visits (11%)
  - Personalized interventions just one patient each

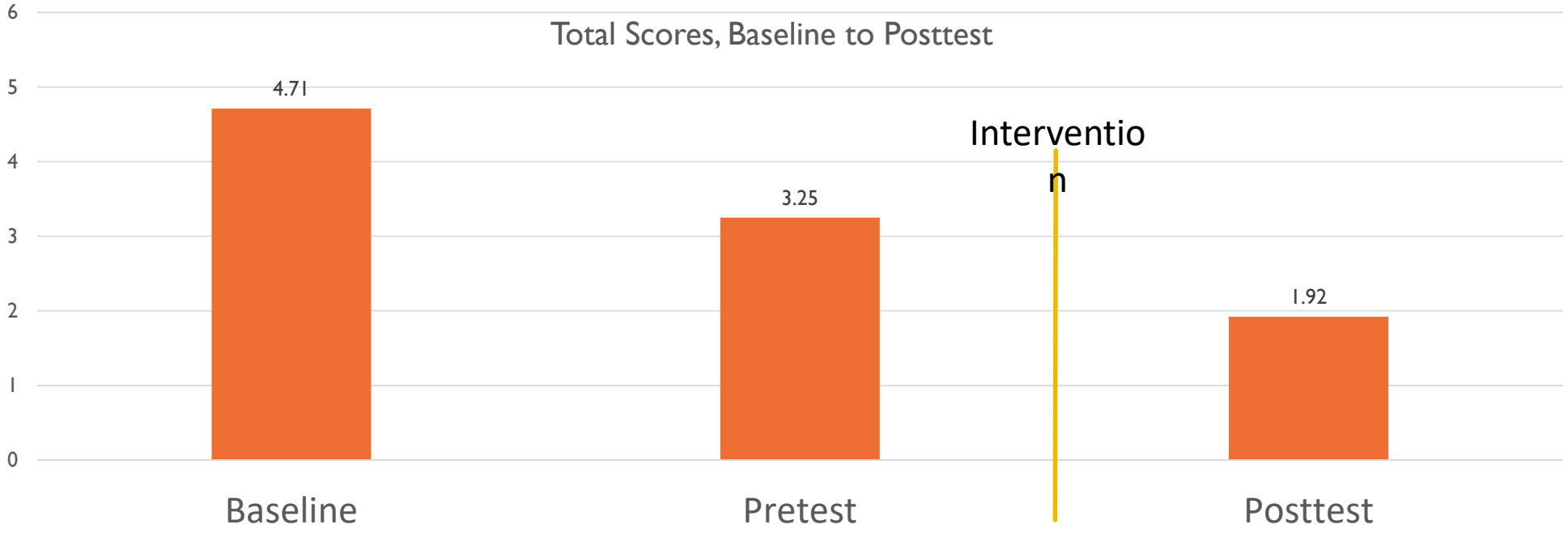
What Was Their Behavior Like at Baseline? (n=24)



Does Preliminary Data Suggest it Made a Difference?

- Only 7 clients with complete information to date
- To increase our ability to show changes given the relatively small sample size, verbal, motor, aggression and resistance to care scores together were added together, as is recommended for the scoring of our measuring instrument

Data



Even with this small sample, repeated measures analysis of variance is statistically significant—$F(2,12)=5.54$ ($p<.025$)

We have to be careful in interpreting this data

- Some drop in agitation, baseline to pretest, may be due to:
  - The calming effect of just having someone show up to do something
  - Caregiver relief
  - Traditional management initiated at the time of the referral, but before the nontraditional management techniques were implemented.
- Not every intervention works for everyone
- Small sample size prohibits ability to tease out specific interventions
- Large variance between how often the PAS pre/post assessment was required: from 1 to 6 interventions
- Every patient is distinctly different- some had very high scores in one of the four areas and zeros everywhere else- which also may change perspective as more data comes available
- Missing data

Future Directions

- As more data is available, we hope to be able to tease out which interventions are most effective on what subset of unwanted behaviors
- Every patient is different- trends are beginning to emerge but are too new to have significant data yet
- Casa de la Luz has a heart to serve the community, we enjoy sharing what we learn to help individuals across our community

Conclusion

- Who is your patient
- What is important to them
- Developing plan of care to reflect individual needs
- Find items that the patient may respond to for comfort, relaxation or engagement
- Focusing on caregiver respite will add to the overall care and experience

Conclusion

- Changing your perspective on care
- No medications are safe and effective for management of unwanted behaviors
- Targeting the underlying cause of the behavior is the most effective way to manage
- This topic is not specific to hospice or palliative care, we are happy to discuss with your organization

- **And MOST IMPORTANTLY, self care.**

References

1. Shin, Ju-Young et al. “Risk of ischemic stroke associated with the use of antipsychotic drugs in elderly patients: a retrospective cohort study in Korea” PloS one vol. 10,3 e0119931. 19 Mar. 2015, doi:10.1371/journal.pone.01199312.
2. Tannenbaum, Cara. “Inappropriate benzodiazepine use in elderly patients and its reduction” Journal of psychiatry & neuroscience : JPN vol. 40,3 (2015): E27-8.
3. Maust, Donovan T et al. “Antipsychotics, other psychotropics, and the risk of death in patients with dementia: number needed to harm” JAMpsychiatry vol. 72,5 (2015): 438-45.
4. Baillon SF, Narayana U, Luxenberg JS, Clifton AV. Valproate preparations for agitation in dementia. Cochrane Database of Systematic Reviews 2018, Issue 10. Art. No.: CD003945. DOI: 10.1002/14651858.CD003945.pub4
5. https://www.cambridge.org/core/journals/international-psychogeriatrics/article/div-classtitlepittsburgh-agitation-scalediv/90FDE4277BD438D75A8D994CFE7B8CFB
6. Tible, O. P., Riese, F., Savaskan, E., & Von Gunten, A. (2017). Best Practice in the Management of Behavioural and Psychological Symptoms of Dementia. *Therapeutic Advances in Neurological Disorders, 10*(8), 297-309. doi:10.1177/1756285617712979

Questions?

Piper Frithsen, M.Admin, RN – PiperF@casahospice.com

Visit Bonnie Wagner, Volunteer Manager and ACT Member, at the Casa table

If you're interested in hearing more about our Alternative Therapies to Agitation, or would like us to come speak to a group –
please contact us at 520.544.9890.