Providence Alaska Project ECHO Dementia

Care Management: Behavioral and Psychological Symptoms of Dementia (BPSD)

Reza Hosseini Ghomi, MD, MSE | April 4, 2022

ECHO Clinics

HUB Team Members

Nancy Isenberg, MD, MPH	Kristoffer Rhoads, Ph.D
Jordan Lewis, Ph.D	Kimberly Jung
Ursula McVeigh, MD	Kyla Newland, PharmD

Care Management: Behavioral and Psychological Symptoms of Dementia (BPSD)

Monday, April 4, 2022 | 12:00-1:00 PM AKST

Virtual Conference

CME Credit

Accreditation with Commendation
Swedish Medical Center is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

AMA PRA Category 1 Credits™
Swedish Medical Center designates this live activity for a maximum of 1 *AMA PRA Category 1 Credit™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

For Nurses
American Nurses Credentialing Center (ANCC) accepts AMA PRA Category 1 Credit™ from organizations accredited by the ACCME

Course Disclosure Summary

Providence Alaska Project ECHO Dementia

Monday, April 4, 2022 | 12:00-1:00 PM AKST

The following planners and speakers have/had financial relationship(s) with ineligible companies whose primary business is producing, marketing, selling, re-selling, or distributing healthcare products used by or on patients: *P= Planner, S=Speaker*

Reza Hosseini Ghomi, MD MSE (S) – Chief Medical Officer: BrainCheck; Speaker: Biogen; Amber Rogers, RN MSN (P): Stocks – Abbvie; Laboratory Corporation; Linde; Abbott Labs; McKesson Corporation; Medtronic; Thermo Fisher Scientific; BioMarin Pharmaceutical; Boston Scientific Corp.; Johnson& Johnson. **All the relevant financial relationships listed for these individuals have been mitigated.**

The following planners and speakers have/had no financial relationship(s) with ineligible companies whose primary business is producing, marketing, selling, re-selling, or distributing healthcare products used by or on patients: *P= Planner, S=Speaker*

Nancy J. Isenberg, MD MPH (P, S); Kristoffer Rhoads, PhD (P, S); Gay Wellman, RN (S); Laurie Turay, BA Ed (P)

All planners and speakers attested that their content suggestions and/or presentation(s) will provide a balanced view of therapeutic options and will be entirely free of promotional bias.

All presentations given by a speaker who has/had relationship(s) with ineligible companies have been reviewed by a planner with no conflicts of interest to ensure that the content is evidence-based and unbiased.

SWEDISH MEDICAL CENTER

CME Evaluation & Claiming Credit

Providence Alaska Project ECHO Dementia

Monday, April 4, 2022 |12:00-1:00 PM AKST

In order to obtain your credits/certificate for this Swedish CME conference, you will need to complete the course evaluation *after each session* using the process below. **Do not start this process until the individual session has adjourned as it must be completed all at once.** **Note:** *you will have 30 days from the date of the session to complete the evaluation and receive credit.*

Visit: **https://www.swedish.org/cmeportal**

Sign in. Or **create a Swedish CME Profile,** if you do not have one, by clicking on **Access CME Portal**, click **Sign In**, click green **Create Account** button. Anyone can create a profile using the email and password of their choice.

Click **"Claim Credit with Code"**

Enter code **225497** to complete the evaluation and receive credit for this session. You will receive a new code for each session

On the credit claim page enter the actual number of hours that you are claiming commensurate with your actual attendance at the conference. The maximum number of hours for this session is one (1.0). For Physicians: The number of hours participated equals the number of *AMA PRA Category 1 Credits*™ claimed and awarded, with one hour of participation equaling 1 *AMA PRA Category 1 Credit*™. Physicians should claim only the credit commensurate with the extent of your participation in the activity and should claim credit in 15 minute or 0.25 credit increments

Your certificate will auto-populate after you submit your hours. Print, email, or save your certificate (you may need to have pop-ups enabled on your browser)

Past certificates or transcripts can be accessed at any time by returning to www.Swedish.org/cmeportal and logging into your Swedish CME portal account. Questions? Contact cme@swedish.org

SWEDISH MEDICAL CENTER

Care Management: Behavioral and Psychological Symptoms of Dementia

Agenda April 4, 2022

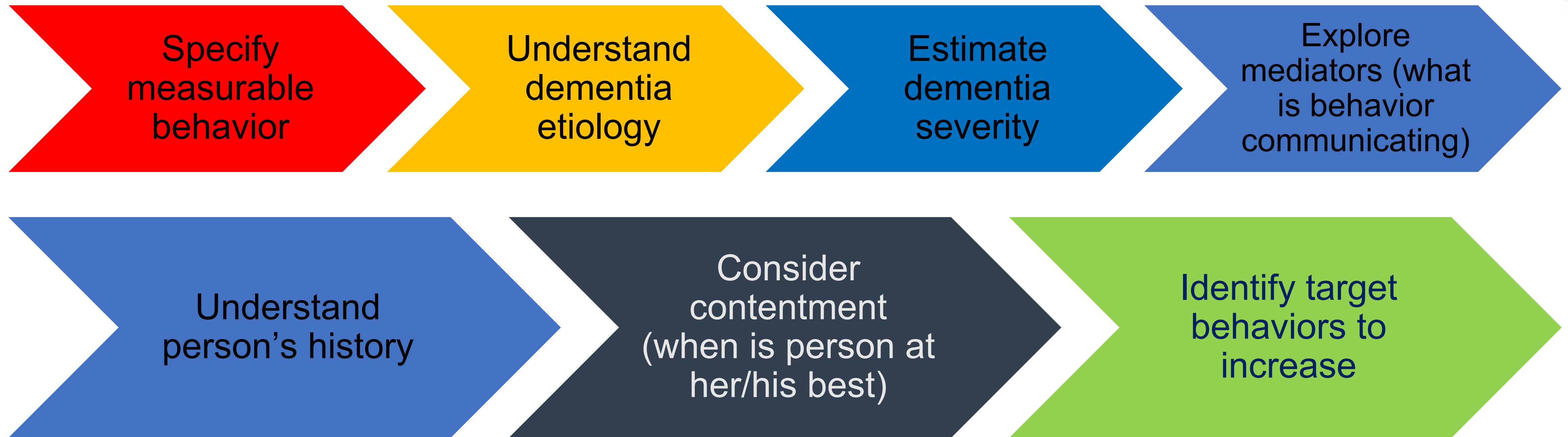
1. **Didactic Presentation: Behavioral and psychological symptoms of dementia**
2. **Case Presentation: Management of 84-year-old dementia patient living at home**
3. **Closing Notes/ Evaluation**

Learning Objectives

At the conclusion of this course, participants will be able to:

- Recognize common behavioral and psychological symptoms in patients with Alzheimer's Disease and related dementias (ADRD)
- Recognize the importance of determining what the behavior is communicating
- Evaluate strategies for managing behavioral issues in patients with ADRD

A Person-Centered Behavior Management Approach



Diagnosis and Behavioral Disturbance

Alzheimer's Disease

- Memory based syndromes (e.g. 'delusions')

Lewy Body Dementia

- Hallucinations or sleep/wake syndromes

Vascular Dementia

- Initiation and multitasking, affect regulation

Frontotemporal Dementias

- Disinhibition or impulse control syndromes

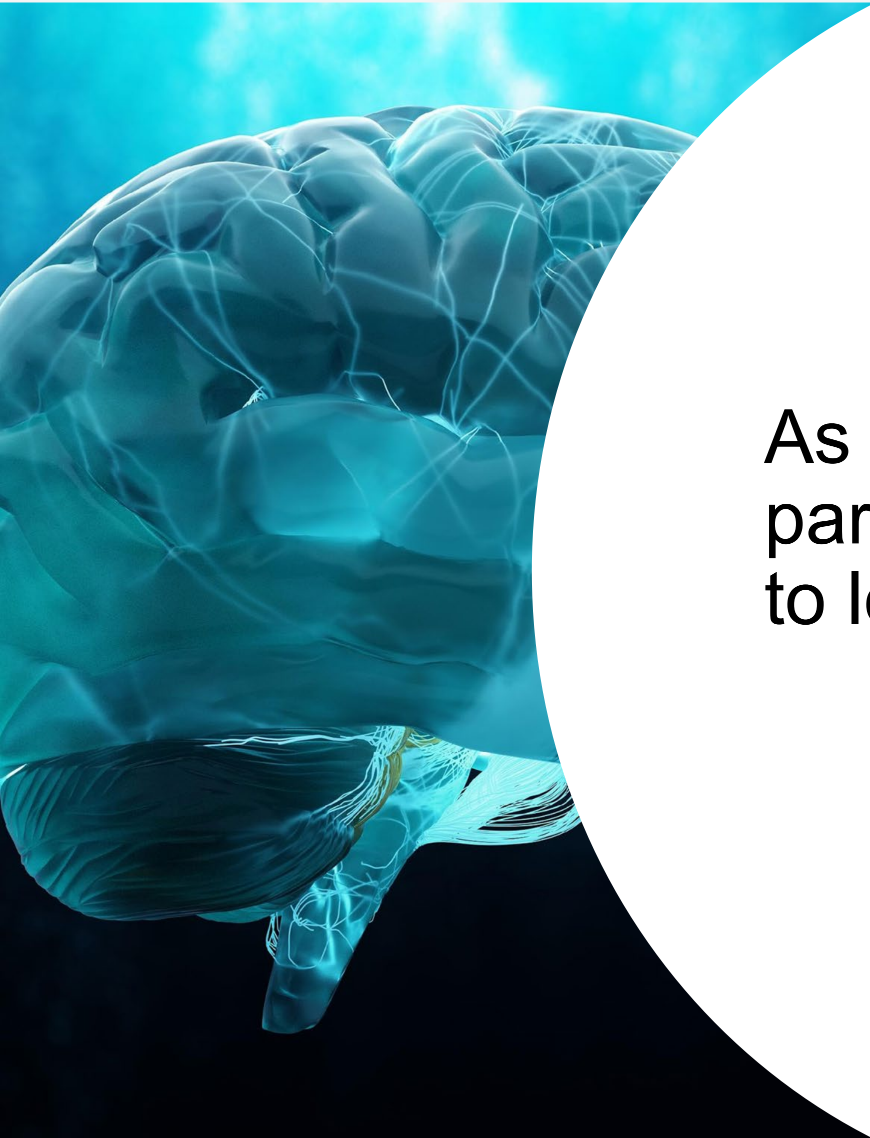
Depression

- Anxiety-based syndromes

Alcohol, Wernicke-Korsakoffs

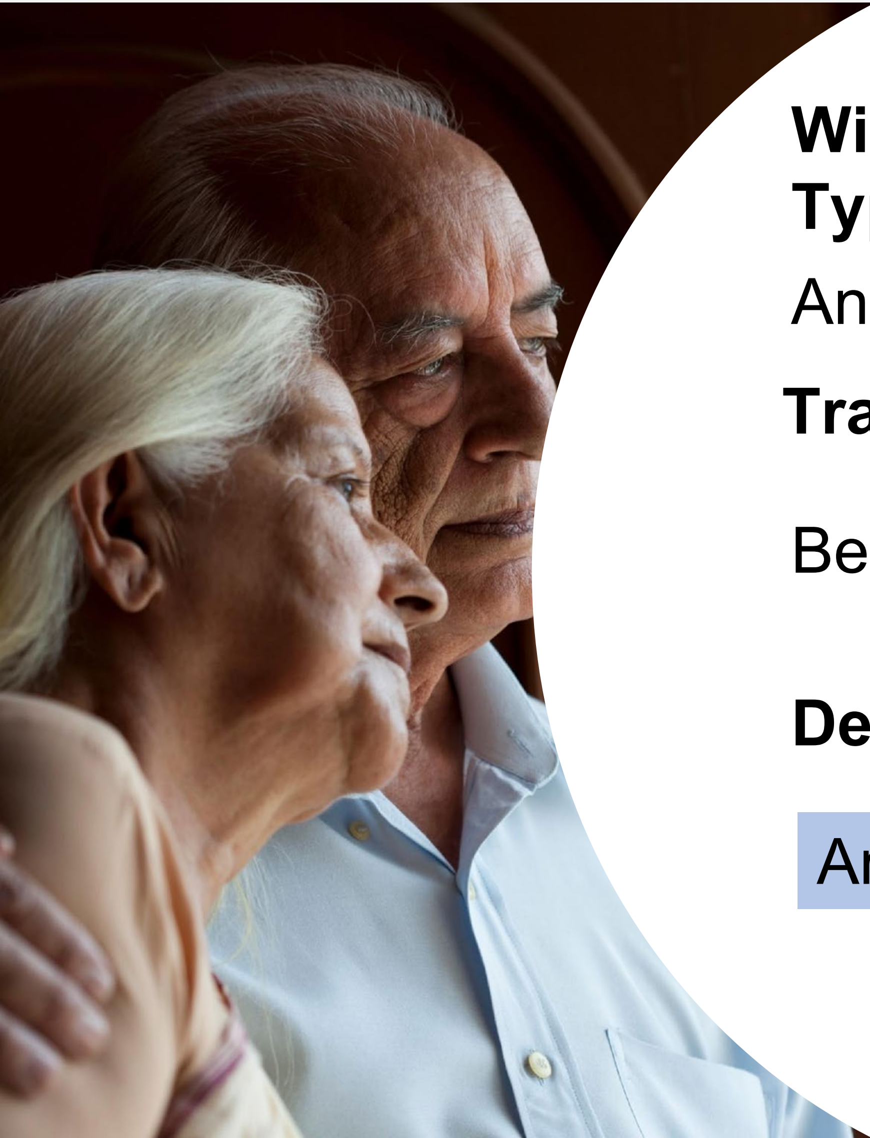
- Confabulation

All Dementias Converge



As all degenerative dementias worsen, most parts of the brain become involved, so they begin to look more alike.

ABCs of Behavior



Wild Type

Antecedent → Behavior → Consequence

Traditional Behavior Management (requires memory!)

Behavior ← Consequence

Dementia Behavior Management

Antecedent → Behavior

Behavior is Communication

As language skills decline, overt behavior will fill the void.

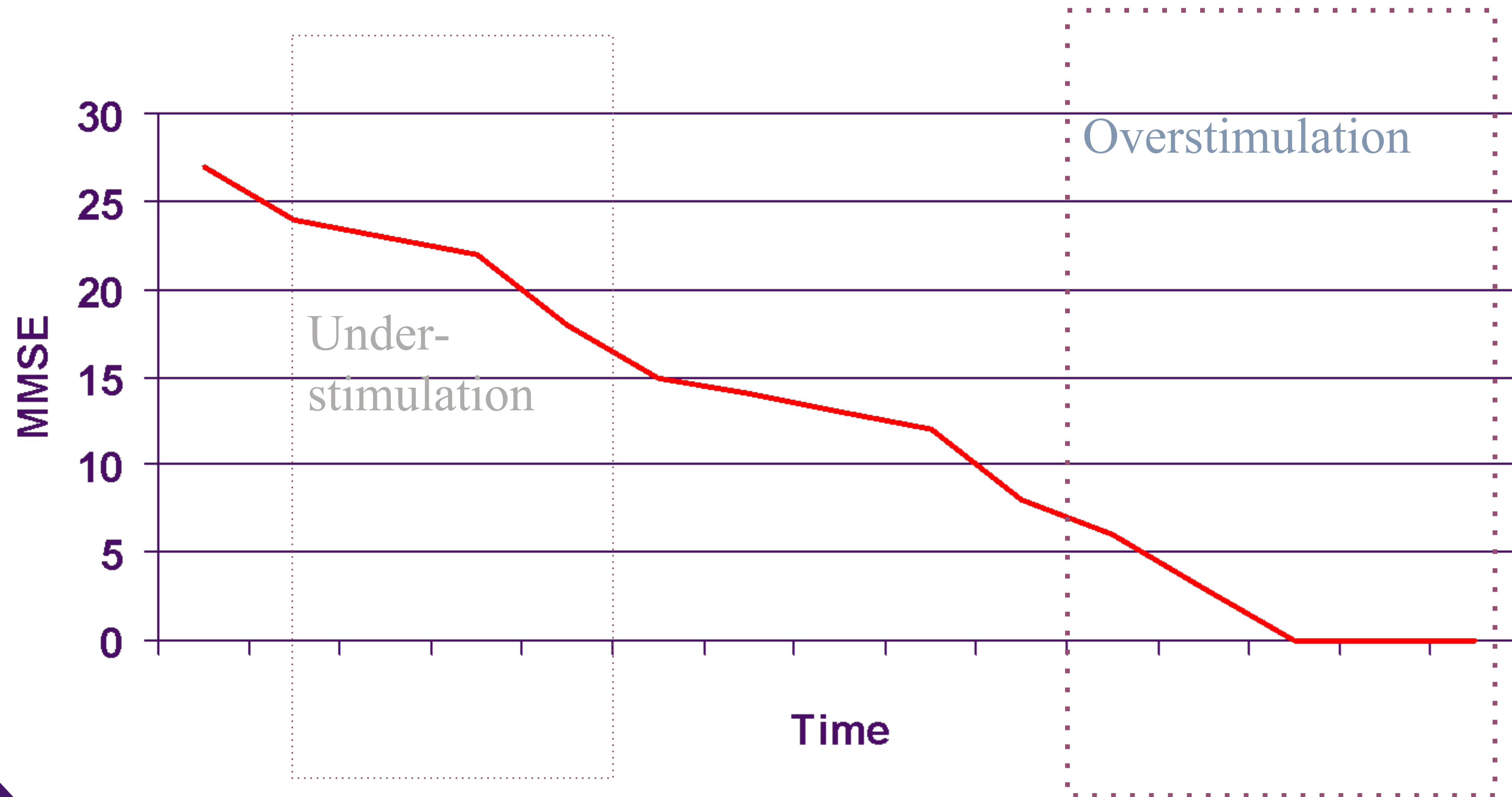
This implies that:

- Behavior is not random
- Behavior is adaptive for that person
- Behavior is goal directed

What is behavior communicating?

- Pain
- Boredom
- Overstimulation
- Understimulation
- Depression
- Apprehension
- Habit

Course of Decline



Mediators of Challenging Behaviors in Dementia

- Physical health factors
- Psychological health factors
- Environment, task, approach
- Social history

Cannot Create a Behavior Vacuum

- Behaviors compete in real time
- Ask when the person is at their best
- Increasing frequency of desired behaviors may reduce the frequency of undesired behaviors

Non-Pharmaceutical Approaches

Environmental modifications: Structured routines, visual cues, reduce overstimulation (noise, clutter), optimize safety
(Gitlin LN et al. JAMA. 2012;308(19):20-9)

Pleasant activities with or without social interaction (≥ 10 min/day) 5 RCT: all showed benefit for agitation; those with social interaction had greater effect Treating Behavioral and Psychological Symptoms in AD and Dementia Workshop (2013) AAGP Annual Meeting, Los Angeles; Abraha 2017 BMJ Open 7;e012759

Exercise: May reduce depressive symptoms and improve sleep; 7 RCT (mean n=134): 2/5 showed decreased depression but no benefit total NP symptoms or QOL. Improved gait. Williams CL, Tappem RM. Aging Ment Health. 2008;12(1):72-80; Treating Behavioral and Psychological Symptoms in AD and Dementia Workshop (2013) AAGP Annual Meeting, Los Angeles; Abraha 2017 BMJ Open 7;e012759

Non-Pharmaceutical Approaches

Music therapy: reduction in anxiety, depression, agitation, and aggression. Personalized music: 10 RCT or studies with control group. 4/7 studies showed benefit for agitation but not as much as pleasant activities with social interactions; additional benefits anxiety, total NP symptoms and QOL

Guetin S et al. Dement Geriatr Cogn Disord. 2009;28(1):36-46, 128. Abraha I, Rimland JM, Trotta FM, et al. BMJ Open. 2017;7(3):e012759. Treating Behavioral and Psychological Symptoms in AD and Dementia Workshop (2013) AAGP Annual Meeting, Los Angeles; Abraha 2017 BMJ Open 7;e012759

Cognitive stimulation therapy: aims to stabilize and improve cognitive impairment, also found to reduce apathy, depression, and overall severity of NPS Niu YX, Clin Rehabil. 2010;24(12):1102-11.

Reminiscence:

12 RCT, 7/8 studies showed benefit for depression, (no consistent findings on agitation, QOL) Treating Behavioral and Psychological Symptoms in AD and Dementia Workshop (2013) AAGP Annual Meeting, Los Angeles; Abraha 2017 BMJ Open 7;e012759

Non-Pharmaceutical Approaches

Bright light therapy (RTC)
Morning and evening bright light vs. typical indoor light
Active group showed greater agitation/aggression compared to baseline.

Indoor daylight exposure
2 hours of socialization in perimeter room with daylight exposure (8-10 AM) in 4 LTC versus control (socialization in interior room)
Lower depression in the daylight exposure group.

Dowling et al. Wes J Nurs Res 2007; 29:961-75
Konis et at al. Clin Interv Aging 2018; 13:1071-1077

Non-Pharmaceutical Approaches

Group engagement in persons with dementia : addresses need for social contact and alleviate boredom:
Reading, singing, baking, creative story-telling, brain games, active games, exercise, holiday discussion- each group session was conducted twice in randomized order.

Montessori Programming for Dementia (MPD)
Use of Montessori materials adapted for use in dementia:
Designed to promote new learning and positive forms of engagement either constructive (verbal or physical interaction) or passive (watching) . Advanced dementia patients showed more engagement and pleasure using this program

Across studies: games, singing, catching a ball, kneading dough or baking had salutary effects on mood, positive engagement and increased confidence.

Ziesel et al, 2016 AJ Alz Dis Other Disorder 31(6):502-7;
Cohen-Mansfield et al. 2017 Psych Res 2017; 251:237-242
Camp 2010 Nonpharmacol Ther Dement. 1(2):163-174

Medications

- **Antidepressants:**
  - **Citalopram:** CitAD (double-blind RCT (n= 186)
    - randomized to a psychosocial intervention +/- Citalopram titrated to 30 mg
    - **significant reduction in agitation, total NPI score, and reduction of caregiver distress**.
    - citalopram- associated with QTc prolongation and 1 point decline on MMSE, more respiratory tract infections and falls
    - current recommended maximum daily dose: 20 mg

Medications

- **Antipsychotics:**
  - **Risperidone,** moderate evidence for efficacy, large evidence base. Superior to placebo for treatment of agitation and psychosis in meta-analysis; 1-2 mg/day
  - **Aripiprazole,** moderate evidence for efficacy but few studies. Reduction in agitation and psychosis; small effect size; 2-15 mg /day (10 mg optimal)
  - **Olanzapine,** weak evidence for efficacy, large evidence base. Meta-analysis of numerous large studies DID NOT show significant reduction in agitation or psychosis; 2.5-10 mg /day
  - **Quetiapine,** weak evidence for use, no significant reduction in agitation or psychosis in three meta-analyses. 50-200 mg/day. Lower risk of mortality
  - **Haloperidol,** effective in reducing aggression, but highest risk rate for mortality

Medications

- **Anticonvulsants**
  - Carbamazepine: 2 small RTC for agitation and aggression in AD over 6 weeks showed possible benefit.
  - Valproate: has not been effective in individual studies or meta-analysis
- **Cholinesterase Inhibitors**
  - have not been effective for agitation over 12 weeks but may have effects on depression, apathy and anxiety.
- **NMDA receptor antagonist**
  - may be associated with limited benefit for neuropsychiatric symptoms over 3-6 months (but not for acute agitation) based on meta-analyses and pooled data.

As reviewed in Corbett et al.(2012) Curr Treatment Options in Neurology 14:113-125
Cochrane Database Syst Rev. 2009 Jul 8;(3):CD003945. doi: 10.1002/14651858. Cumming 2015 JAMA 314(12):1242-1254

Antidepressant Trial Data

Antidepressant trials for the treatment of neuropsychiatric symptoms of AD dementia (past 10 years)

	Medication	Placebo	Outcome	Measures	Mean Age	Mean MMSE	Duration Setting	N Primary results
Finkel 2004 (n=245)	Sertaline (added to Donepezil)	Yes	Behavioral symptoms	NPI, CGI-I, CGI-S	---	18.25	12 week outpt	No difference any outcome
Rosenberg 2010 (n=131)	Sertraline	Yes	Depression	mADCS-CGIC CSDD	77.3	20.0	12 week outpt	No difference any outcome
Banerjee 2011 (n=326)	Mirtazapine or Sertraline	Yes	Depression	CSDD	79	18	13 week outpt	No active vs placebo
Barak 2011 (n=40)	**Escitalopram vs Risperidone**	**No**	**Psychosis Agitation**	**NPI**	**78**	**14**	**6 week inpt**	**Significant Improvement from baselineline in both outcomes for both meds**
Porteinsson 2014 (n=186)	**Citalopram**	**Yes**	**Agitation**	**NBRS-A mADCS-CCGIC**	**78**	**15.7**	**9 weeks**	**Significant improvement vs placebo in both outcomes**
Camargos 2014 (n=36)	**Trazodone**	**Yes**	**Sleep**	**NTST**	**81**	**11.2**	**outpt**	**Significant improvement vs. placebo**

Adapted from McClam 2015 Harvard Rev Psych 377-393

Questions

Case Presentation

Case Study for Providence Alaska Project ECHO Dementia

Presented by Gay Wellman, RN
Education Specialist
Alzheimer's Resource of Alaska

Case Study

- 84-year-old professional married man with dementia – probably early middle-stage or Emerald Gem stage – increasing confusion
- Began showing signs of cognitive decline about three years ago
- Two years ago, the wife became the trigger; the wife regularly attends a partner support group since November 2020
- Husband can appear fine for others, articulate, educated, pleasant
- Wife reports lots of challenges trying to get help from VA, doctors, lawyers and other service agencies

Progressive Concerns

- Sharing sensitive financial information with strangers
- No longer able to understand financial matters
- Not taking needed medications
- Increasing frustration when he can’t manage his computer
- Becoming belligerent, throwing things whenever frustrated – now showing these behaviors when others present

More Concerns

- Can’t plan or execute any plans
- Increasing hording and clutter in home
- Leaving things burning on the stove/oven
- Lost his ability to stay safe – refusing to wear mask
- Struggling with finding words.
- Repeating, circular conversations with friends

Newest Issues

- Sister and niece threatening to file for guardianship from Florida
- Have told wife to get a divorce
- Told him about the wife's previous effort to obtain guardianship; telling him that the wife is "out to bleed him dry"
- Stormed out of doctor's office when doctor suggested he should get a driving test
- Car accident a week ago

What's Been Done

- Wife started guardianship paperwork last summer but dropped it – leery of trying to find a lawyer
- Wife had crisis intervention team (CIT) officer visit the home in January in case she had to call 911
- Wife continues to try to get collaboration of what she's experiencing
- Now has attention of bank manager and doctor
- Considering applying for conservatorship; gave wife names of lawyers
- I filed adult protective services (APS) report and left the report with the doctor

Thank you!

This material was prepared by Mountain-Pacific Quality Health, a Medicare Quality Innovation Network-Quality Improvement Organization (QIN-QIO), under contract with the Centers for Medicare & Medicaid Services (CMS), an agency of the U.S. Department of Health and Human Services (HHS). Views expressed in this material do not necessarily reflect the official views or policy of CMS or HHS, and any reference to a specific product or entity herein does not constitute endorsement of that product or entity by CMS or HHS. 12SOW-MPQHF-AS-NH-04/22-124