Dementia-related behaviors:

Where do they come from? Can we prevent them?



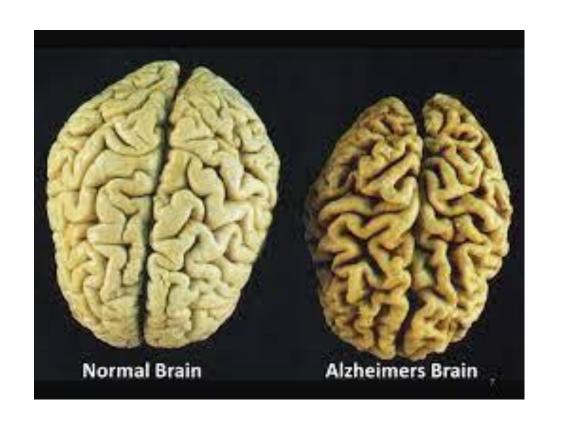
#### Disclosures – Soo Borson MD

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- Dr. Borson receives research and program funding from the National Institute on Aging, the
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  health care delivery for people living with Alzheimer's disease and related dementias.
- There are no conflicts of interest pertinent to this presentation.
- Material in this presentation reflects the individual views of the presenter.

#### Learning Objectives:

- Learn why behavior changes in dementia.
- Use a simple framework to help you understand what's happening.
- •Identify three ways to reduce the risk of behavioral crises.

It starts with the brain: the most complex known object in the universe -EO Wilson



#### Dementia = Brain Failure

- Neurons shrink and have trouble talking to each other
- Control processes weaken too much and too little activity
- Different dementia types affect the brain map differently

#### ...What was the person like before?

\_ Costa and McCrae, Saucier and Ostendorf

- Neurotic: irritable, insecure, emotionally reactive
- Extroverted: sociable, unrestrained, assertive, adventurous
- Open to new experiences: intellectual, imaginative, creative, perceptive
- Agreeable: warm, affectionate, gentle, generous, modest, humble
- Conscientious: orderly, decisive, consistent, reliable, industrious
  - the "Big 5" personality traits and some of their common manifestations

#### And unhealed life experiences

- Adverse Childhood Experiences (ACES)
- Psychological trauma at any age
- Long-term mental, emotional, and psychological disorders

These contribute to many chronic medical conditions.

They influence behavior in dementia – and may increase vulnerability to developing dementia through chronic stress biology.

# What are Adverse Childhood Experiences (ACEs)?

- Abuse mistreatment (physical, mental, political, emotional, sexual)
- Neglect starvation (physical, emotional, political, mental, relational)
- Witnessed aggression/violence at home, in the community, in war

#### Why talk about ACEs here?

 Often invisible but powerful causes of challenging behavior in dementia

#### And still more causes...

- Pain acute, chronic, or both
- Physical mobility limitations
- Inadequate sleep, food, fluids
- Acute infection, illness, injury
- Relationship factors
  - Caregiver communication e.g. 'elder speak' (baby talk with older adults)
  - Caregiver fatigue, negative emotions, unmet support needs, insufficient joy

#### **Meet Miriam**

- 83 years old when I met her, long-term resident of a skilled nursing community
  - Widowed in her 50's, mother of a middle-aged daughter no other family
  - Trained as a lawyer in Russia
  - Extensive history of trauma exposure
    - Young teenager in WW I
    - Young adult during Russian Revolution
    - Holocaust refugee WW II
  - Worked as refugee/immigrant advocate after arriving in US

#### The problem

- Screams racist epithets, pushes, fights nursing interventions – won't allow dressing changes, especially at night
- Daughter at wits' end
- Staff avoid her (bare essentials)
- "Most hated patient in the nursing home"

What we're aiming for

# "No-Crisi s" Care



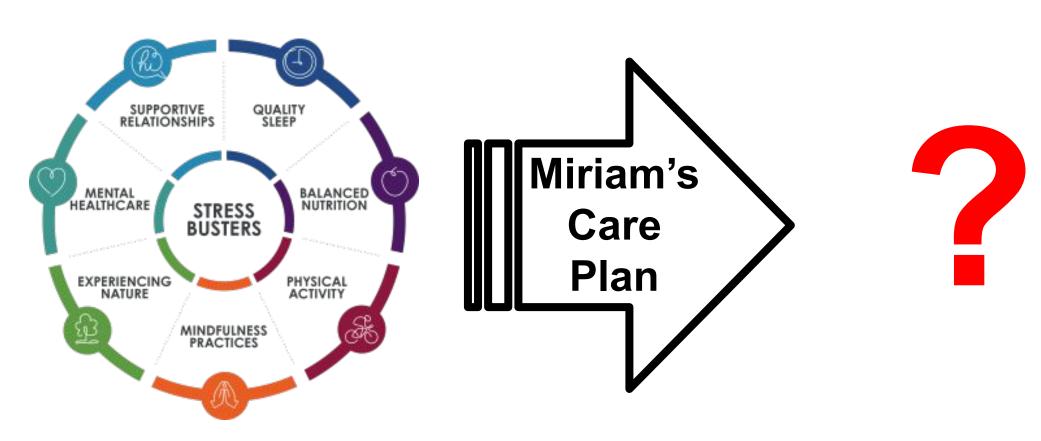
- Assess systematically –
   see what's obvious, search for what isn't
- Accept what can't be changed
- Look for what can change
- Consider roles mine, yours, others'

#### Miriam's Difficulties – One by One



- Cognition: moderate dementia mainly vascular + some Alzheimer/?Lewy body
- Emotional/behavioral status: PTSD unmasked by dementia + painful leg ulcers (how?), chronic anxiety, depressed mood
- General medical and functional status: severe generalized ischemic vascular disease; bedbound; immobilized by strokes; intense pain with leg dressing changes
- Care partners: Daughter and NH staff stressed, frustrated, angry, afraid
- Health related social needs: chronic loneliness; no financial strain
- Health care framework: strict nursing assignments and schedules, management and nurse leaders at end of rope, willing to try anything

### Behavioral Mitigation + Problem Prevention: Stress Management for Everyone is the Key



https://www.acesaware.org/

#### Thank you – keep talking!

#### NYUBOLDCenter@nyulangone.org

http://bolddementiadetection.org/resources

#### Medication Management of BPSD

Jamie Starks, MD 6/4/22



#### Disclosures

- No relevant financial or non-financial relationships to disclose
- Off-label use of medications will be briefly discussed (because there are no FDA-approved medications for BPSD\*)

#### Learning Objectives

#### Attendees will be able to:

- List risks associated with medications used for behavioral and psychiatric symptoms of dementia (BPSD)
- Describe the role of medications for treatment of BPSD
- Identify indications for pharmacologic interventions for BPSD

#### Case

- 88 y/o retired high school shop teacher with Alzheimer's disease dementia and multiple recent admissions for behavioral concerns
  - 8/14-8/17:
    - Admitted from home due to disruptive behaviors in the neighborhood and "failure to thrive"
    - Discharged back home with family to provide 24/7 supervision
  - 8/17-8/23:
    - Readmitted a 3 hours later after getting into an altercation with a neighbor
    - Discharged to memory care ALF
  - 9/5:
    - Readmitted from ALF due to aggressive behaviors towards staff

#### Psychotropic Meds on Admission:

- Olanzapine (antipsychotic)
- Melatonin

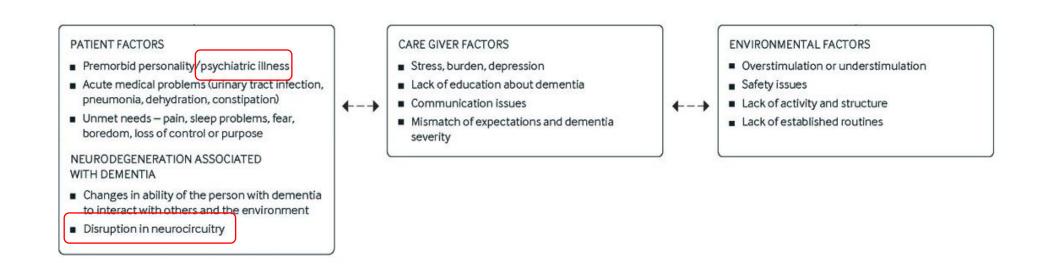
#### Case

- Behaviors:
  - Irritability, labile mood, intermittent tearfulness
  - Verbal and physical aggression towards staff
  - Exit-seeking
  - Paranoid delusions
  - Anxious perseveration
- Over the next 4 months, behaviors worsened despite multiple medication trials:
  - Escitalopram (antidepressant)
  - Valproate (mood stabilizer)
  - Risperidone (antipsychotic)
  - Haloperidol (antipsychotic)
  - Lorazepam (benzodiazepine)
  - Trazodone (antidepressant/anxiolytic)



#### Causes of BPSD

- Can be categorized into factors relating to:
  - 1. Patient
  - 2. Caregiver
  - Environment



#### BPSD Causes: Patient Factors

- Neurocircuitry disruption
  - Regional neurodegeneration
  - Neurochemical alterations associated with neurodegeneration
    - Dopamine 

      Delusions/hallucinations
    - Serotonin 

      Depression, anxiety
  - Sleep/wake disruption
- Psychiatric comorbidities
  - Increased incidence in neurodegenerative disorders
  - Symptoms may be atypical

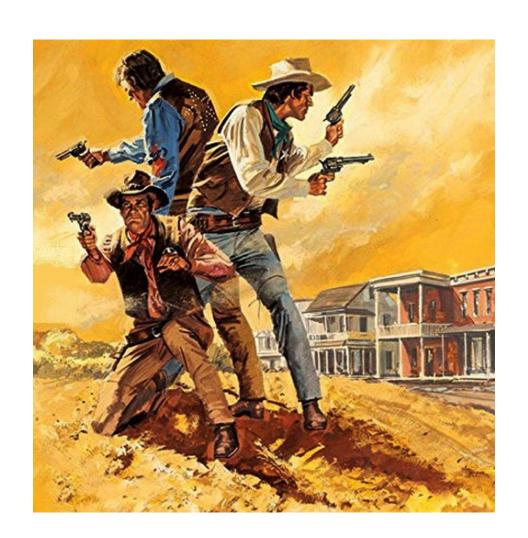
#### Medications for BPSD

• Expectation:



#### Medications for BPSD

• Reality:



#### BPSD Management is Challenging!

- Complex causes
- Lots of guidelines about what NOT to do, not as much about what TO do
  - No FDA-approved medications
- Lack of good evidence to guide treatment



#### Non-Pharmacologic vs Pharmacologic Treatments

- Most guidelines & experts recommend non-pharmacologic treatments as first-line interventions
  - At least as effective than medications
  - Behavioral meds have significant risks & adverse side effects
- Challenges to non-pharmacologic interventions:
  - Often more time-consuming and more work to implement
  - Lack of provider education/training
    - Methods are often counterintuitive and contrary to traditional nursing training
  - Perceived lack of efficacy
  - Results often less immediate

- No FDA-approved medications for BPSD
- 2020 Annals of Internal Medicine systematic review & meta-analysis by Howard Fink, et al:

"Current data do not provide clear guidance on whether any prescription drugs improve BPSD out-comes in patients with clinical Alzheimer's type dementia, let alone whether benefits outweigh harms, overall or in any patient sub-groups."

| Test                                | Change in Agitation<br>or Aggression* |  | Likelihood of Improved Agitation<br>or Aggression† |   | Change in Psychosis‡  |  | Likelihood of Improved<br>Psychosis§ |  |
|-------------------------------------|---------------------------------------|--|--|---|-----------------------|--|--------------------------------------|--|
|                                     | Trials<br>(Patients)                  | Direction (SOE)<br>Median SMD<br>(Range of Medians)¶ | Trials<br>(Patients)                               | Direction (SOE)<br>Median ARD<br>(Range of Medians) | Trials<br>(Patients)  | Direction (SOE)<br>Median SMD<br>(Range of Medians)¶ | Trials<br>(Patients)                 | Direction (SOE)<br>Median ARD<br>(Range of Medians |
| Prescription drugs<br>vs. placebo** |                                       |  |  |   |                       |  |                                      |  |
| Antipsychotics                      | 3 trials<br>(n = 283)                 | Insufficient<br>0.00 (-0.59 to 0.26)                 | 1 trial<br>(n = 40)                                | Insufficient<br>25% (NA)                            | 1 trial<br>(n = 181)  | Insufficient<br>-0.30 (NA)                           | 2 trials<br>(n = 218)                | Insufficient<br>30% (18% to 30%)                   |
| Antidepressants                     | 3 trials<br>(n = 508)                 | Insufficient<br>-0.33 (-0.06 to -0.67)               | 1 trial<br>(n = 186)                               | Insufficient<br>18% (NA)                            | 2 trials<br>(n = 160) | Insufficient<br>0.04 (-0.05 to 0.12)                 | 1 trial<br>(n = 186)                 | Insufficient<br>16% (NA)                           |
| Cholinesterase<br>inhibitors        | 1 trial<br>(n = 221)                  | No difference (low)<br>0.00 (NA)                     | 1 trial<br>(n = 221)                               | No difference (low)<br>-1% (NA)                     | NR                    | NR   | NR                                   | NR   |
| Antiseizure drugs                   | 1 trial<br>(n = 128)                  | Insufficient<br>-0.16 (-0.12 to -0.21)               | NR   | NR  | NR                    | NR   | NR                                   | NR   |
| Supplements vs.<br>placebo          |                                       |  |  |   |                       |  |                                      |  |
| Yokukansan                          | 1 trial<br>(n = 145)                  | Insufficient††                                       | NR   | NR  | 1 trial<br>(n = 145)  | Insufficient††                                       | NR                                   | NR   |

Fink HA, Linskens EJ, MacDonald R, et al. Benefits and harms of prescription drugs and supplements for treatment of clinical Alzheimer-type dementia. A systematic review and meta-analysis. Ann Intern Med. 2020.

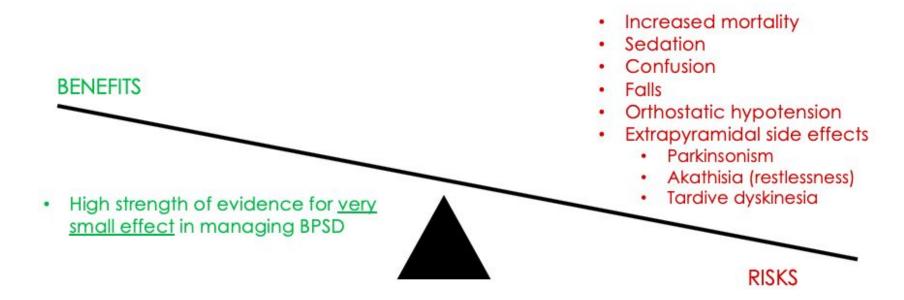
#### Antipsychotics

- Undesirable benefit/risk ratio
  - FDA Black Box Warning

#### WARNING: INCREASED MORTALITY IN ELDERLY PATIENTS WITH DEMENTIA-RELATED PSYCHOSIS

See full prescribing information for complete boxed warning.

Elderly patients with dementia-related psychosis treated with
antipsychotic drugs are at an increased risk of death. RISPERDAL\* is
not approved for use in patients with dementia-related psychosis. (5.1)



 Long-term care standards require gradual dose reductions of antipsychotics and sedative/hypnotics (e.g. benzodiazepines)

Reus, V.I.; 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, 173, 543–546.

- Can also make behaviors WORSE!
  - Akathisia (antipsychotics)
  - Paradoxical agitation (benzodiazepines)
  - Confusion, delirium
  - Sedation 

    disruption of sleep/wake cycle



- So are antipsychotics or other medications EVER indicated?
  - Palliation of psychological distress
    - Concept of "total pain"
  - Safety of patient/others
  - Meds should never be used for staff convenience!
- Certain neuropsychiatric symptoms are more likely to respond to medications
  - Psychosis (antipsychotics)
  - Depression (antidepressants)
  - Cholinesterase inhibitors often very effective for neuropsychiatric symptoms in Lewy body disease
  - Sleep-wake dysregulation

- Trial & error often necessary
- Honest conversations with caregivers/POAs about risks/benefits are essential

#### Case Conclusion

#### Case

- Medication trials:
  - 1. Olanzapine (antipsychotic)
  - 2. Added escitalopram (antidepressant)
  - 3. Olanzapine risperidone (antipsychotic)
  - 4. Added valproate (mood stabilizer)
  - 5. Lorazepam (benzodiazepine) 

    oversedation
  - 6. Trazodone (antidepressant) 

    paradoxical agitation
  - 7. Risperidone 

    haloperidol (antipsychotic)

#### Case

He got better!



#### Key Points

- Non-pharmacologic interventions are first-line for BPSD
  - Medications often have limited efficacy
  - Most medications for BPSD have risks and significant potential for side effects (including worsening of behaviors!) informed consent is essential
- Medications should target specific neuropsychiatric symptoms
  - Trial & error often necessary
- Goal of medication treatments should be palliation of distress and/or patient/staff safety (NEVER for staff convenience!)

# Community Health Workers' Perspectives

Strategies for successfully managing dementiarelated behavioral issues Caregiving for People with Memory Loss

# What is a Community Health Worker? (CHW)

- Commonly called CHWs
- Trained, front-line public health professionals
- Community connections (language, culture, life experiences)
- Bridges care gap (health/social services) and community
- Creates access to health/community services and resources
- Provides culturally appropriate health education, information and outreach in various settings (homes, clinics, hospitals, care centers, etc.)
- Advocates for inclusive and equitable healthcare for all

#### Importance of Caregivers

Caregiving is Crucial :

Promote overall happiness

Mental well-being

#### **CHW Strategies for Caregivers**

- Recognize behaviors as a form of communication
- Major challenges:
  - ☐ Behaviors and personality changes
  - ☐ Agitation/irritability
  - ☐ Sleep (wakefulness/sleep disruption)
  - □ Wandering
  - ☐ Eating (too much/too little)
  - ☐ Fearfulness/crying spells

#### **Triggers: What's Driving the Behavior?**

- Assess the situation/behavior patterns
- Identify the causes: in the moment/progressive symptoms
- Environmental (unfamiliar surroundings, music, TV, voices, smells)
- Personal needs (hungry, thirsty, pain, bored)
- Disease progression-induced symptoms (wakefulness/sleep disruption)
- Historical driver/influencers (trauma, other chronic conditions)

#### **Behavior Management Tips**

#### Person-centered approach

- Meet the person where they are. Be in the moment.
- Personal preference: Utilize the person's likes to re-direct or to get the person's attention.
- Communication: Ask simple, answerable questions, use clear statements and calm voice.
- Listen with all your senses (eyes, ears and heart).
- Stress management (quietness, crafts, music, dancing, coffee, TV shows)
- When the going gets tough: Distract and re-direct!

#### **Other Considerations**

- Biological effects on memory loss (pre-disposition)
- Co-morbidities (chronic health conditions, substance use disorders)
- Lack of understanding of the brain, diseases and disorders
- Historical: lack of trust, economic factors
- Cultural considerations (brain health, aging and/or cognitive conditions)
- Lifestyle behaviors (diet, exercise, sleep hygiene, etc.)

## Caregiver Burnout Prevention Self-Care

- Don't forget to take care of yourself!
- Build a team(s) and delegate
  - ☐ Family and friends
  - ☐ Professional providers
  - ☐ Community-based organization (CBOs)
- When enlisting community support/care sharing, consider
  - ☐ Cultural norms
  - ☐ Biases/stigmas
  - ☐ Economic factors

#### **Key Take-Aways**

- Caregiving is a huge responsibility
- Individualize the style of care
- Be supportive and encouraging
- Be aware of environmental factors (calm/familiar environment)
- Encourage regular routines
- Prioritize self-awareness and care (take breaks, socialize with friends, keep up with hobbies)
- Connect with others: Attend caregiver support group

#### Thank you!

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- Community Health Worker
  - Juniper program, Trellis
    - MN CHW Alliance





