



*Welcomes You To*

## Pharmacological Management of Dementia-Related Behaviors

Presented by Brett Lu, MD, PhD  
Associate Professor of Psychiatry  
John A. Burns School of Medicine

September 5, 2017  
10:00 - 11:00 a.m.

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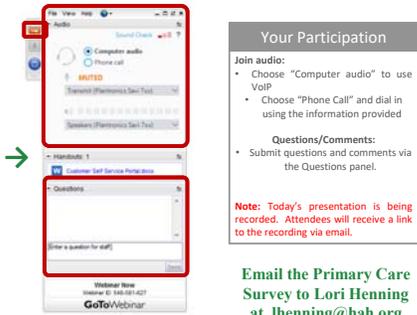
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**HADI** Hawai'i Alzheimer's Disease Initiative

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Pharmacological Management of Dementia-Related Behaviors

Outline

Dementia-related Behavioral Symptoms

Overview of Behavioral Approaches

Identifying Medical Risk Factors

Indications for Medication Treatment

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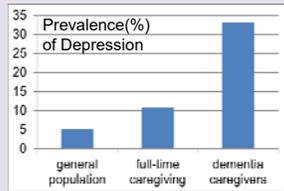
### Behavioral and Psychological Symptoms of Dementia (BPSD)

Present in 60-98% with dementia

Increased/premature institutionalization

Predicts higher mortality

Suffering for patients and caregiver



Adelman 2014; Covinsky 2003, NSDUH 2007

“Crisis in geriatric mental health” starting around 2011

Jeste 1999, Stoudemire, 1996; Streim, 1996, 2005

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### Behavioral and Psychological Symptoms of Dementia (BPSD)

**Psychosis**  
hallucinations/delusions  
25%

**Depression**  
20-40%

**Apathy**

**Altered circadian rhythms**  
disrupted sleep patterns

**Agitation**  
often persistent

**Anxiety**

Clear symptoms help to identify effective behavioral and pharmacological treatment

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### Psychosis in Dementia

Misidentification of caregivers/surroundings  
Paranoid delusions: lost items, accusations, poison  
Visual hallucinations: stalkers, stranger in the house

Increases with dementia progression (~25%)  
Increases risks for dangerous behavior, institutionalization, and mortality

Leonard 2006, Lopez 2013, Steinberg 2006

Schizophrenia: bizarre delusions, auditory hallucinations

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### Depression in Dementia

Prevalence: 20% in Alzheimer's, 20% - 40% in Vascular dementia, >50% in Parkinson's Disease dementia

Irritability, self-pity, rejection sensitivity, anhedonia (loss of interest), and psychomotor retardation

Associated with physical aggression, increased mortality rate, and accelerated dementia progression

Alexopoulos 1988, 2002; Kumar 2013, Leonard 2006

Suicides:

higher shortly after dementia diagnosis, male, psychiatry hx  
lower with advanced dementia and nursing home stay

Seyfried 2011

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### Geriatric Depression Scale (short form)

**Instructions:** Circle the answer that best describes how you felt over the past week.

#### Geriatric Depression Scale (Short Form)

Choose the best answer for how you felt over the past week.

- |   |        |
|---|--------|
| 1. Are you basically satisfied with your life?                                | yes/NO |
| 2. Have you dropped many of your activities and interests?                    | YES/no |
| 3. Do you feel that your life is empty?                                       | YES/no |
| 4. Do you often get bored?  | YES/no |
| 5. Are you in good spirits most of the time?                                  | yes/NO |
| 6. Are you afraid that something bad is going to happen to you?               | YES/no |
| 7. Do you feel happy most of the time?  | yes/NO |
| 8. Do you often feel helpless?  | YES/no |
| 9. Do you prefer to stay at home, rather than going out and doing new things? | YES/no |
| 10. Do you feel you have more problems with memory than most?                 | YES/no |
| 11. Do you think it is wonderful to be alive now?                             | yes/NO |
| 12. Do you feel pretty worthless the way you are now?                         | YES/no |
| 13. Do you feel full of energy?   | yes/NO |
| 14. Do you feel that your situation is hopeless?                              | YES/no |
| 15. Do you think that most people are better off than you are?                | YES/no |

**Scoring:** Score boldfaced answers (1 point for each of these answers).  
0-5 = normal; > 5 suggests depression.

Adapted, with permission, from Yesavage 1986

### Geriatric Depression Scale (GDS)

screen and track degree of depression

read to patients, yes or no answers

short version: 15 item depression >= 5 pts

not valid with moderate/severe dementia (MMSE <15)

Yesavage 1986

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### Agitation/Disinhibition in Dementia

Impulsive and inappropriate behaviors  
Often persist or worsen during dementia progression

Examples:

Crying, verbal/physical aggression (often self-directed), sexual indiscretion, intrusive wandering, impulse buying

### Apathy in Dementia

Indifference, lack of motivation, no poor mood/irritability  
Up to 70% of dementia, increase with severity

Landes 2001

Antidepressant in apathy w/o depression may worsen apathy

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**Anxiety in Dementia**

repeatedly asking questions on a forthcoming event:  
Godot syndrome  
fear of being left alone  
pacing/fidgeting

**Circadian Rhythm Disturbances in Dementia**

increased sleep latency (more time to fall asleep), awakenings  
decreased slow wave sleep, daytime sleepiness  
Sundowning

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**Outline**

Dementia-related Behavioral Symptoms

**Overview of Behavioral Approaches**

Identifying Medical Risk Factors

Indications for Medication Treatment

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**General Approaches for Dementia-related Behavior**

Social contacts/Basic care:

- Speak slowly and calmly
- Simple and positive commands, Use gestures
- Gentle touch
- Approach patient from front
- Concealed exits

Recreation (routines):

- exercise, games, singing

Sensory stimulation:

- music, white noise, plants,
- animals, massage,
- aromatherapy



Ballard 2009, Beier 2007, Gardner 1993, Kong 2009, Rowe 1999

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**Specific symptoms-based approaches**

Paranoia/Hallucinations  
 Avoid confrontation, validate their experiences  
 Re-assurance and distraction  
 Anticipate safety issues (conceal harmful objects)

Anxiety/Fear  
 Place patient at a busy/high-traffic area  
 Scheduled events/individualized tasks/checks

Sleep  
 Wake up same time of the day  
 Keep occupied/awake in the day  
 Hallway/bathroom lights

Depression/Cognitive Decline  
 Physical and mental activities  
 Community resources  
 Day programs




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**Medical Risk Factors for Behavioral Symptoms**

Look for medical illness/physical discomfort  
 -acute changes (within a few days):  
 confusion, paranoia, slurred speech, sedation,  
 urinary changes  
 -pain  
 -constipation

Leonard 2006

Look for medication-side effects  
 -increased sedation, agitation, confusion, poor appetite  
 after medication change

**Avoid adding behavioral medications only to  
 "mask" symptoms of treatable/reversible causes**

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### Outline

- Dementia-related Behavioral Symptoms
- Overview of Behavioral Approaches
- Identifying Medical Risk Factors
- Indications for Medication Treatment**

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### Medications for Dementia-related Behavior

Indications:  
Poor quality of life  
Physical aggression, Distressing levels of psychosis/depression

Goals:  
Maintain quality of life  
Prevent institutionalization/emergency services

Avoid over-treatment:  
"He keeps wanting to get out of bed, can you give him a medication?"  
"My mother is eating less and doing less..."

Avoid under-treatment:  
"Of course anyone (me) would not want to live if demented, why fight it?"  
"Why meds? Staff/caregivers can and should deal with the worst behavior."

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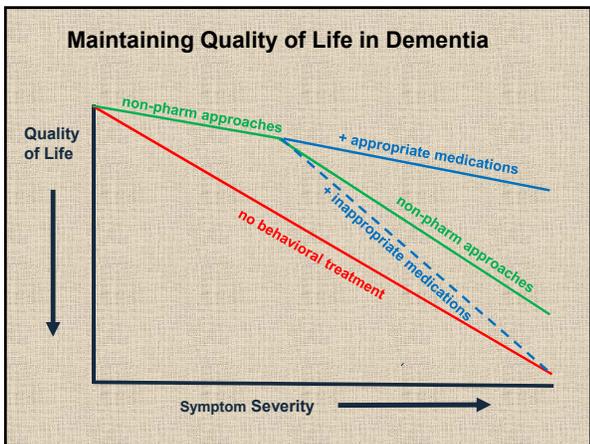
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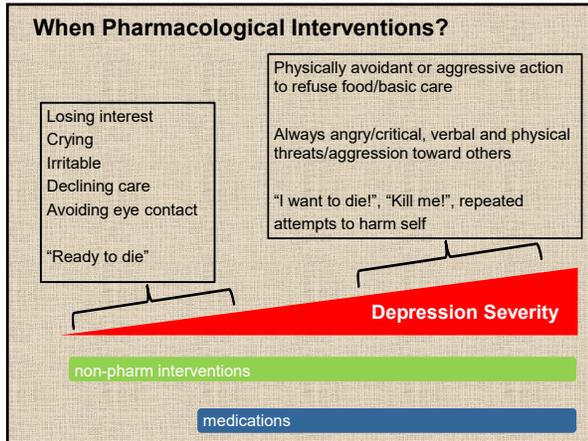
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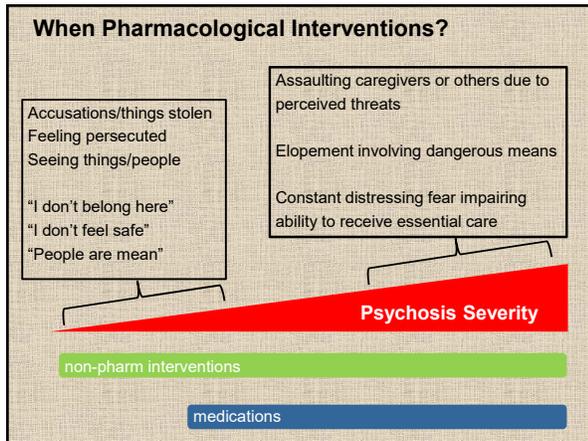
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### Medications for Dementia-related Behavior

No "FDA-approved" medication for behavior in dementia

Identify surrogates able to make informed consent

Use medications with **highest benefit to risk ratio**, based on available evidence and patient's specific profile

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**Medications for Dementia-related Behavior**

No "FDA-approved" medication for behavior in dementia  
 Identify surrogates able to make informed consent  
 Use medications with **highest benefit to risk ratio**

Antidepressants (higher benefit, lower risk):  
 as effective as antipsychotics, less serious side effects

Antipsychotics (higher benefit, higher risk)  
 can also help, more sedation/serious side effects

Dementia medications (lower benefit, lower risk)  
 smaller improvement in behavior, less serious side effects

Benzodiazepines (lower benefit, higher risk)  
 confusion, physical dependence

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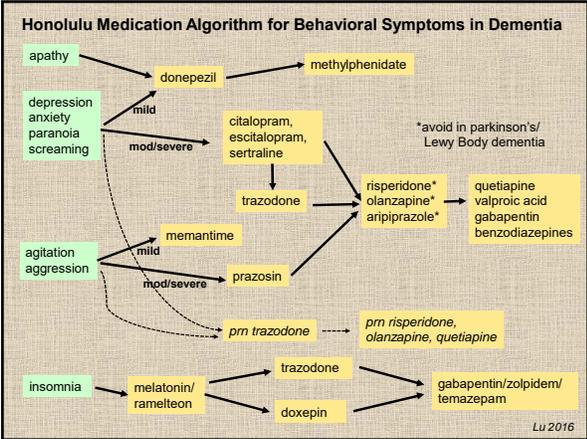
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**Monitoring Medications for Dementia Behavior**

Effective?  
 -start with low dose, to ensure tolerability  
 -may need up to 2-6 weeks for improvement  
 -if behavior persist during this time,  
 -not necessarily due to "medications not working"

Side Effects?  
 Clear changes from baseline (often fluctuating)

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**Medication-specific Side Effects**

Antidepressants (citalopram, escitalopram, sertraline, trazodone, mirtazepine):  
nausea, diarrhea, insomnia; sedation/falls, confusion (low sodium)

Antipsychotics (haloperidol, risperidone, olanzapine, quetiapine, aripiprazole):  
tremor, stiffness; sedation/falls, risk of stroke and irregular heart rate

Benzodiazepines (lorazepam, alprazolam, diazepam, temazepam):  
sedation/falls, confusion; disinhibition, physical dependence

Mood stabilizers (valproic acid):  
sedation, tremor, stomach upset, rash, edema

Dementia medications (donepezil):  
weight loss, poor appetite, diarrhea

Prazosin:  
low blood pressure

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**Responsible Medication Use: Better Long-term Outcomes**

When used for disruptive behaviors (psychosis, aggression, agitation), antipsychotics use in dementia not associated with greater nursing home admission or mortality  
*Lopez 2013*

“Judicious use of pharmacological interventions, including antipsychotics, is appropriate, necessary, and ethically justified...”  
*Desai 2012*

Rather, it is the debilitating levels of depression, psychosis, aggression that accelerate cognitive/physical decline, poorer quality life, and premature institutionalization

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**Questions?**  
 Type your questions into the Questions tab of your Control Panel.

**Brett Lu, MD, PhD**  
 Associate Professor of Psychiatry  
 JABSOM



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 thank you for attending today's webinar:

**Pharmacological Management of  
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