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Psychiatry and Addictions Case Conference

UW Medicine | Psychiatry and Behavioral Sciences

GERIATRIC PSYCHIATRY #2 - TREATMENT

SPECIALIZED TREATMENT APPROACHES IN THE ELDERLY, INCLUDING PHARMACOTHERAPY AND PSYCHOTHERAPY

WHEN SHOULD I START DEMENTIA MEDS IN MY PATIENTS WITH DEMENTIA, AND OTHER INTERESTING QUESTIONS

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UW Medicine
UW SCHOOL OF MEDICINE

Integrated Care Training Program
UW Psychiatry & Behavioral Sciences

project ECHO

GENERAL DISCLOSURES

The University of Washington School of Medicine also gratefully acknowledges receipt of educational grant support for this activity from the Washington State Legislature through the Safety-Net Hospital Assessment, working to expand access to psychiatric services throughout Washington State.

SPEAKER DISCLOSURES

- ✓ Any conflicts of interest?

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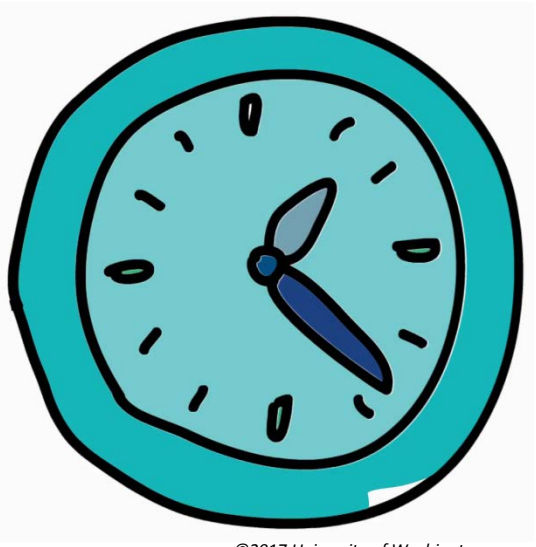
LEARNING OBJECTIVES

This talk with teach you to:

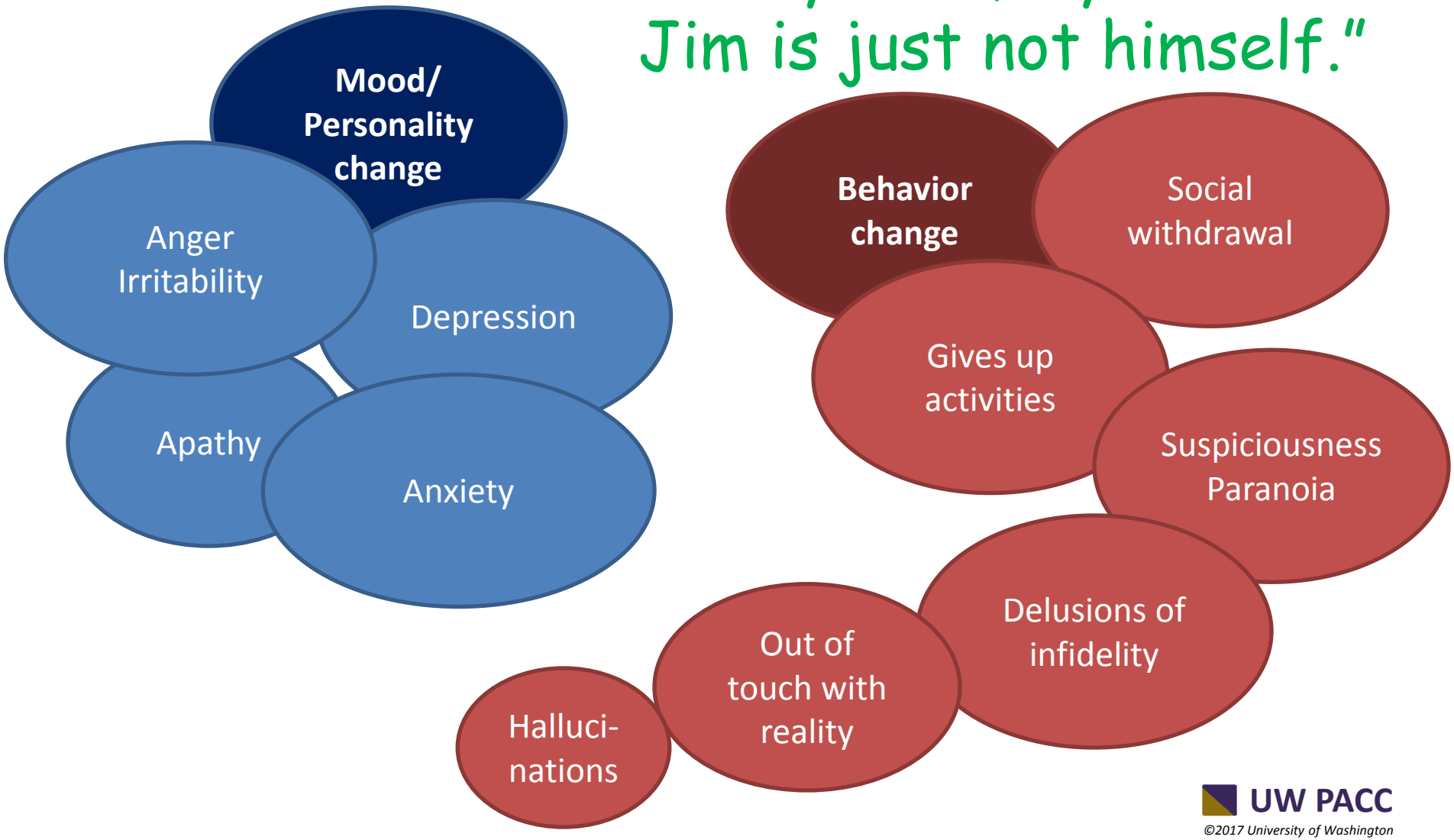
1. Recognize neuropsychiatric symptoms in dementia.
2. Design appropriate treatment plans for patients with neuropsychiatric symptoms in dementia, including both pharmacological and non-pharmacological interventions.

(30 minutes)



…A TYPICAL DAY AT THE (MY) OFFICE

"Jenny: Doc, my husband Jim is just not himself."



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ASSESSMENT :

- Inventory of neuropsychiatric symptoms (NPS) through report from patient, family, and a screener (NPI-Q)
- Depression screener (PHQ-9)
- Anxiety screener (GAD-7)
- Asses for intentional self-harm (suicidal ideation)
- Assess for intentional harm to others (driven by paranoia or delusions of infidelity)
- MOCA test
- Level of functional ability through report from patient, family, and screeners (FAQ, ADLs)
- Assess for potential harm to self or others due to confusion (driving, getting lost, leaving the stove on, trouble taking medications)
- Medical problems
- Medications
- Psychosocial circumstances (stressors and supports)
- Past psychiatric history

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HARBORVIEW MEMORY AND BRAIN WELLNESS CLINIC SCREENERS – PATIENT:

PATIENT FORM
Memory and Brain Wellness Clinic
PHQ-9, GAD-7 & Patient Concerns

Important: This form is to be filled out by the PATIENT. Please fill out both front and back. If the patient is unable to fill out this form, please leave it blank.

Over the last 2 weeks, how often have you been bothered by any of the following problems?		Not at all (0)	Several days (1)	More than half the days (2)	Nearly every day (3)
1	Little interest or pleasure in doing things	☐	☐	☐	☐
2	Feeling down, depressed, or hopeless	☐	☐	☐	☐
3	Trouble falling or staying asleep, or sleeping too much	☐	☐	☐	☐
4	Feeling tired or having little energy	☐	☐	☐	☐
5	Poor appetite or overeating	☐	☐	☐	☐
6	Feeling bad about yourself — or that you are a failure or have let yourself or your family down	☐	☐	☐	☐
7	Trouble concentrating on things, such as reading the newspaper or watching television	☐	☐	☐	☐
8	Moving or speaking so slowly that other people could have noticed. Or the opposite — being so fidgety or restless that you have been moving around a lot more than usual	☐	☐	☐	☐
9	Thoughts that you would be better off dead or of hurting yourself in some way	☐	☐	☐	☐

If you checked off any problems, how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?

Not difficult at all (0)	Somewhat difficult (1)	Very difficult (2)	Extremely difficult (3)
☐	☐	☐	☐

Over the last 2 weeks, how often have you been bothered by any of the following problems?		Not at all (0)	Several days (1)	More than half the days (2)	Nearly every day (3)
1	Feeling nervous, anxious or on edge	☐	☐	☐	☐
2	Not being able to stop or control worrying	☐	☐	☐	☐
3	Worrying too much about different things	☐	☐	☐	☐
4	Trouble relaxing	☐	☐	☐	☐
5	Being so restless that it is hard to sit still	☐	☐	☐	☐
6	Becoming easily annoyed or irritable	☐	☐	☐	☐
7	Feeling afraid as if something awful might happen	☐	☐	☐	☐

If you checked off any problems, how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?

Not difficult at all (0)	Somewhat difficult (1)	Very difficult (2)	Extremely difficult (3)
☐	☐	☐	☐

Among the things listed below, what describes your feelings today (check all that apply)?	
☐	I am concerned about my memory.
☐	I am concerned about my physical health.
☐	I am worried about my safety at home.
☐	This clinic visit was the idea of somebody else. I am not sure I need or want to be here today.
☐	At today's visit, I want to talk about (please fill in any additional concerns not listed above):

HMC MEMORY AND BRAIN WELLNESS CLINIC SCREENERS – CARE PARTNER 1:

CARE PARTNER FORM
Memory and Brain Wellness Clinic
NPI-Q & Care Partner Concerns

Important: This form is to be filled out by a CARE PARTNER (for example a family member or friend - *not the patient*). Please fill out both front and back.

Please answer the following questions based on recent behaviors. Circle **"Yes"** only if the **symptom(s) has been present in the last month**. Otherwise, circle "No". For each item marked **"Yes", please rate the SEVERITY** of the symptom as **mild, moderate, or severe**.	Symptom present?		Severity (if symptom present)		
	Yes (1)	No (0)	Mild (1)	Mod. (2)	Sev. (3)
Delusions: Does the patient have false beliefs, such as thinking that others are stealing from him or her or planning to harm him or her in some way?	☐	☐	☐	☐	☐
Hallucinations: Does the patient have hallucinations? Does he or she seem to hear or see things that are not there? Does he or she talk to people who are not there?	☐	☐	☐	☐	☐
Agitation or Aggression: Is the patient stubborn and resistive to help from others?	☐	☐	☐	☐	☐
Depression or Dysphoria: Does the patient seem sad or act as if she or she is in sad or low spirits? Does he or she cry?	☐	☐	☐	☐	☐
Anxiety: Does the patient become upset when separated from you? Does he or she have any other signs of nervousness or anxiety?	☐	☐	☐	☐	☐
Elation or Euphoria: Does the patient appear to feel too good or act excessively happy?	☐	☐	☐	☐	☐
Apathy or Indifference: Does the patient seem less interested in his or her usual activities or in the activities and plans of others?	☐	☐	☐	☐	☐
Disinhibition: Does the patient seem to act with "fewer filters"? For example, is he or she unusually frank with words? Does he or she get too close physically or acts embarrassingly?	☐	☐	☐	☐	☐
Irritability or Lability: Is the patient impatient and cranky? Does he or she have difficulty coping with delays or waiting for planned activities?	☐	☐	☐	☐	☐
Motor Disturbance: Does the patient engage in repetitive activities such as pacing around the house, handling items over and over, or doing other things repeatedly?	☐	☐	☐	☐	☐
Nighttime Behaviors: Does the patient awaken you during the night, rise too early in the morning, or take excessive naps during the day?	☐	☐	☐	☐	☐
Appetite and Eating: Has the patient lost or gained weight, or had a change in the type of food he or she likes?	☐	☐	☐	☐	☐

Do you have any concerns about the following (please check all that apply)	
☐	Falls
☐	Driving safety
☐	Wandering away and getting lost
☐	Unsafe behaviors around the house (e.g. leaving the stove on, or using power tools in an unsafe way)
☐	Forgetting to take medication, or taking too much
☐	Ability to manage money
☐	Substance use (e.g. drinking)
☐	Feeling unsafe or in danger as a care partner
☐	Recent physical changes (e.g. trouble swallowing, tremors, new onset weakness) – please describe below
☐	Other concerns – please describe below, if any

Overall, how stressful is your situation as a care partner at this time?

0 = **Not** stressful at all	1 = **Minimal** (slightly stressful, not a problem to cope with)	2 = **Mild** (not very stressful, generally easy to cope with)	3 = **Moderate** (fairly stressful, not always easy to cope with)	4 = **Severe** (very stressful, difficult to cope with)	5 = **Extreme or Very Severe** (extremely stressful, unable to cope with)
☐	☐	☐	☐	☐	☐

Informant: ☐ Spouse ☐ Child ☐ Other (specify) _____

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HMC MEMORY AND BRAIN WELLNESS CLINIC SCREENERS – CARE PARTNER 2:

CARE PARTNER FORM
Memory and Brain Wellness Clinic
FAQ & ADLs

Important: This form is to be filled out by a CARE PARTNER (for example a family member or friend - *not the patient*). Please fill out both front and back.

	In the past 4 weeks, did the patient have any difficulty or need help with:	Can do without any problems (0)	Has difficulty, but does by self (1)	Can do with help (2)	Fully dependent on others (3)	NEVER did this in his/her life (-)
1	Writing checks, paying bills, or balancing a checkbook	☐	☐	☐	☐	☐
2	Assembling tax records, business affairs, or other papers	☐	☐	☐	☐	☐
3	Shopping alone for clothes, household necessities, or groceries	☐	☐	☐	☐	☐
4	Playing a game of skill or working on a hobby	☐	☐	☐	☐	☐
5	Heating water, making a cup of coffee, or turning off the stove	☐	☐	☐	☐	☐
6	Preparing a balanced meal	☐	☐	☐	☐	☐
7	Keeping track of current events	☐	☐	☐	☐	☐
8	Paying attention to, understanding, or discussing a TV program, book, or magazine	☐	☐	☐	☐	☐
9	Remembering appointments, family occasions, holidays, or medications	☐	☐	☐	☐	☐
10	Traveling out of the neighborhood, driving, or arranging to take public transportation	☐	☐	☐	☐	☐

	Is the patient able to do the following:	Performs action independently: Yes (1)	No (0)
1	**Bathing (sponge bath, tub bath, or shower)** – receives either no assistance or assistance in bathing only one part of the body	☐	☐
2	**Clothing** – gets clothes and dresses without any assistance except for tying shoes	☐	☐
3	**Toileting** – Goes to toilet room, uses toilet, arranges clothes, and returns without any assistance (may use cane or walker for support and may use bedpan/urinal at night)	☐	☐
4	**Transferring** – moves in and out of bed and chair without assistance (may use cane or walker)	☐	☐
5	**Continence** – controls bowel and bladder completely by self (without occasional "accidents")	☐	☐
6	**Feeding** – feeds self without assistance (except for help with cutting meat or buttering bread)	☐	☐

Informant: ☐ Spouse ☐ Child ☐ Other (specify) _____

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JIM (76-YEAR OLD MALE):

- Neuropsychiatric symptoms: Jim is mildly depressed (PHQ-9 of 9), but not really anxious. He gets easily frustrated and occasionally has angry verbal outbursts at his wife. He thinks his neighbor has taken some of his tools, and is not returning them. He is not suicidal, and has no intention to harm anybody else, not even the neighbor who keeps taking his tools.
- MOCA: 21/30. Visuospatial/executive: He lost one point on the mini-trails, and one point on the cube drawing. Language: he made a mistake on one of the two sentence repetitions, and could only come up with 10 (instead of a minimum of 11) words starting with the letter F in one minute. He could not recall any of five words after a delay, and his recall was not improved by cueing.
- Day-to day functioning: Jim has given up working in his woodworking shop, and no longer reads as much as he used to. He is as active as before in his church. He often asks his wife multiple times what they have planned for the day. He has not done anything dangerous or risky. He is still driving, and has not had any accidents. He is completely independent in his self-care and administers his own medications.
- Medical problems: hypertension, hyperlipidemia
- Medications: HCTZ, atorvastatin, no anticholinergics or psychotropic meds
- Psychosocial circumstances : former math teacher, wife, 3 kids, supportive family, a close friend recently died
- Past psychiatric history: none
- Jim's wife thinks he is not doing well due to depression.

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WHAT IS JIM'S DIAGNOSIS?

- Mild or major neurocognitive disorder (dementia) – most likely due to a combination of Alzheimer's disease and cerebrovascular disease.
- The diagnosis of mild vs. major neurocognitive disorder hinges on whether Jim has impairment in complex activities of daily living such as taking medications independently.
- Possible major depression.

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WHAT DO WE WANT TO KNOW ?

1. What causes Jim's **depression, anger, and psychosis**? Is this a primary psychiatric disorder or are his symptoms due to his neurocognitive disorder (probably AD and CVD)?
2. Does Jim need a further **workup**?
3. Does Jim need **medication(s)**?
4. Does Jim need any other **behavioral interventions**?
5. What is Jim's **prognosis**?

COMMON NEUROPSYCHIATRIC SYMPTOMS IN ALZHEIMER'S DISEASE:

- Apathy (17-84%)
- Depression (8-74%)
- Anxiety (7-69%)
- Aggression (11-46%)
- Delusions (3-54%; delusions of theft most common; others are paranoia, delusions of infidelity, phantom border or imposter delusions)
- Hallucinations (1-39%; usually visual, less common auditory, rarely tactile or olfactory)

Frequencies by Wang et al., Current Neuropharmacology, 2016, 14, 307-313

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ANSWER – 1

What causes Jim's depression, anger, and psychosis? Is this a primary psychiatric disorder or are his symptoms due to his neurocognitive disorder (probably AD and CVD)?

Jim's depression and psychotic symptoms are probably etiologically related to his neurocognitive disorder. That expands the range of his treatment options to the following:

- Antidepressants
- Antipsychotics
- Memory medications: cholinesterase inhibitors or memantine

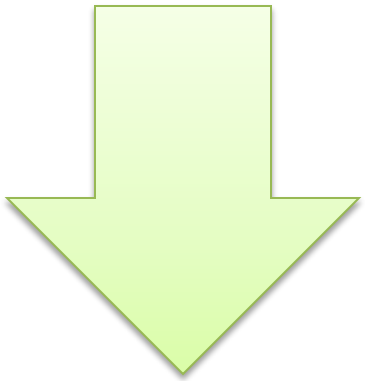
MEMORY MEDICATIONS IN AD/VAD

Major neurocognitive d/0

- **Cholinesterase inhibitors** (e.g. donepezil, rivastigmin) can lead to mild improvement in cognition and NPS.
- **Memantine** is indicated for moderate to severe dementia; it can improve cognition and NPS.

Mild neurocognitive d/0

- Cholinesterase inhibitors are ineffective
- Memantine is not indicated.



Does Jim have mild or major neurocognitive disorder?

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ANSWER – 2

Does Jim need a further workup?

No

- You practice in rural Alaska. The nearest MRI scanner is miles away; neuro-psychological testing is even further.
- The family is strapped for money.
- Jim refuses a further workup.

Option to start cholinesterase inhibitors empirically – stop if they are ineffective, and revisit this option later in the disease course.

Yes

- Memory labs (complete metabolic panel, CBC, B12, folate, TSH, HIV, syphilis) – will be low yield in Jim's case.
- Brain MRI – useful for confirming the diagnosis in many patients, and as a didactic tool for families. But: *a negative scan does not rule out AD.*
- PET scan – helpful but expensive.
- Amyloid scan – very expensive, *most helpful to rule out AD* in complex cases.
- Neuropsychological testing – most useful to make a distinction of mild vs. major neurocognitive disorder.

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ANSWER – 3

Does Jim need medication(s)?

Antidepressants

- Effective in treating symptoms of depression, even if the underlying etiology is neurodegenerative
- Jim's depression may drive his anger and psychosis, hence effective antidepressant treatment may address all 3 of his NPS.

Antipsychotics

- Less effective in treating fixed delusions.
- Increase mortality in patients with dementia.
- Can cause sedation, emotional blunting, movement disorder – falls.

(more on antipsychotics later)

ANSWER – 3

Which antidepressant – is Jim sexually active ?

No

SSRIs = first line drugs for antidepressant treatment. Prevalence of sexual side effects (loss of libido and/or anorgasmia) increases strongly with age. Can cause QT prolongation (especially citalopram). Usually well tolerated except for sexual side effects or emotional blunting (younger patients).

Yes

- **Bupropion** (150 mg SR in the morning for 2 weeks, then increase to target dose of 300 mg ER q AM) – can increase anxiety.
- **Mirtazapine** (start with 7.5 mg in the evening and increase to usual target dose of 15-30 mg qhs) – can cause strong sedation.

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SSRI'S

My Favorites

- Escitalopram (5 mg qhs for 2 weeks, then increase to 10 mg, usual target 10-20 mg) – mildly sedating
- Sertraline (50 mg qam for 2 weeks, then increase to 75 mg, usual target 50-200 mg) – mildly activating
- Fluoxetine (20 mg qam to start, usual target 20-60 mg) – activating

Things to watch out for

- May take up to 12 weeks to take effect (but as little as 3 days is also possible)
- Hyponatremia: check sodium every 6 months
- Can precipitate mania
- Rare: increased confusion
- Very rare: extrapyramidal symptoms

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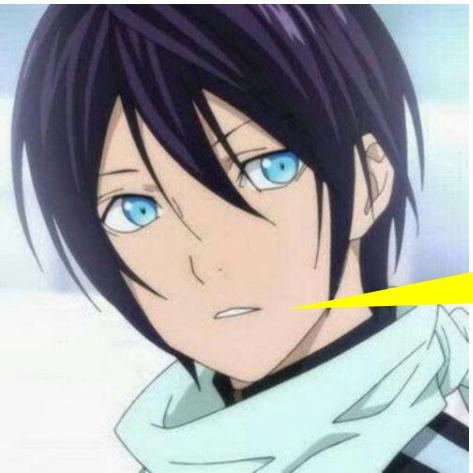
SSRI'S NOT WORKING – WHAT NOW ?

- After 2 failed trials of SSRIs, try an SNRI. My favorite is duloxetine (start at 30 mg per day, after 2 weeks increase to 60 mg, the target) – duloxetine is also effective against chronic pain.
- Consider lamotrigine (slow up-taper to 200 mg qhs), or lithium carbonate (300 mg qhs for a while, followed by titration to low therapeutic plasma levels).

…BACK TO JIM:

- 3 months later: neuropsychological testing suggests major neurocognitive disorder, MRI suggests AD + CVD. You started him on escitalopram (currently taking 10 mg), and his mood is better. He is still thinking the neighbor is stealing from him, but he is less angry about it, and in general less frustrated.
- Med changes: you start him on donepezil (5 mg daily with food for 4 weeks, increase to 10 mg after 4 weeks if well tolerated), and keep the option of increasing escitalopram to 20 mg in your back pocket.



4. Does Jim need any other **behavioral interventions**?
5. What is Jim's **prognosis**?

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BEHAVIORAL INTERVENTIONS FOR NPS
(HIGH FUNCTIONING PATIENTS)

Depression

- **Behavioral activation:** regular *activities driven by schedule rather than internal mood state*, starting with the shortest, least stressful tolerable activity.
- **Scheduled pleasant events:** make an inventory of desired pleasant events, then *schedule and realize them with the help of a care partner*.

General

- **Relieve boredom** (consider Senior Center or Dementia – Friendly activities)
- Increase **exercise**
- (Consider **Mindfulness)**

Unlikely to be helpful:

- Arguing about delusions
- Diet changes
- Brain training games

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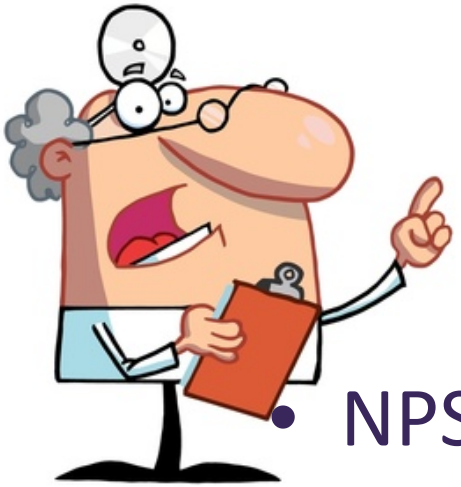

NPS – PROGNOSIS

- NPS may emerge before the onset of cognitive symptoms.
- The presence of NPS predicts more rapid cognitive decline.
- NPS are the biggest determinant of caregiver burden.
- NPS are most prominent in the mid-stage of Alzheimer's disease (moderately severe dementia).

MEET ELLEN :

86-year old woman. You know her well. She has moderate stage AD and resides in an adult family home.

The nurse in the adult family home calls you. Ellen is agitated. She is up most of the night, demanding to go home. She wanders into other people's room without permission, and has pushed her walker hard at another resident on two occasions. She refuses to take a bath, and has struck one of her care givers who tried to shower her. If Ellen keeps on like that, the adult family home will no longer be able to take care of her.

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ELLEN'S OFFICE VISIT:

- Ellen is alert, but only partially oriented. She tells you that the other residents in the adult family home are "bothering" her. She is afraid of one elderly male who she says is following her around.
- In addition to donepezil (10 mg per day) and memantine (10 mg twice a day) Ellen is also on sertraline 200 mg per day (which you previously started her on and then increased, probably more out of therapeutic desperation than anything else). Her medications may have helped a little, but nobody is really sure about that.
- Ellen's labs and UA are normal. She is afebrile. Ornery and cognitively impaired, but healthy.
- You need to do something, preferably fast, before her adult family home kicks her out.

INVENTORY OF ELLEN'S "AGITATION"

- Sleep disturbance
- Aggression
- Possible paranoid ideation (a resident "bothering" her; possibly assaults other residents because she feels threatened)

She probably wanders into other people's room out of confusion (not a separate NPS, although it would show up as "nighttime behaviors" or "motor disturbance" on the NPI-Q). She probably asks to go home because she is disoriented to place.

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MEDICATIONS FOR "AGITATION" – ANTIPSYCHOTICS IN GENERAL

- Antipsychotics lead to an increased mortality risk in dementia patients – discuss with the family before initiating treatment.
- For atypical antipsychotics the odds ratio of death is about 1.5 (higher for 'typical' agents like haloperidol).
- Mortality increases with duration of treatment.
- The excess mortality of atypical antipsychotics appear to be (at least to some extent) due to cardiovascular or cerebrovascular events.

Nonetheless: Antipsychotics are my first choice if paranoia or hallucinations are distressing to the patient an/or seem to be the drivers of "agitation" (provided the family consents).

For a review see: Aftab and Shah, Psychiatric Clinics of North America (40) 2017: 449-462

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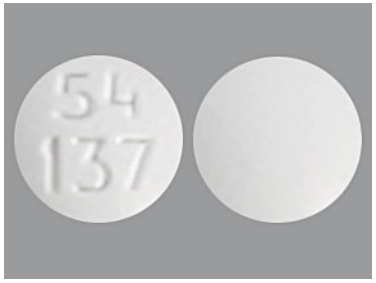
ANTIPSYCHOTICS – QUETIAPINE

- **Pros:** (1) Mortality is increased to a lesser extent than with other atypical antipsychotics. (2) Very **sedating**, can be used as a sleeper. (3) Low risk of extrapyramidal side effects.
- **Cons:** Less effective in clinical studies than risperidone or olanzapine (in my opinion due to under-dosing).
- **How to use:** start with **25 mg at night**, increase up to a total dose of about 100 - 200 mg per day in divided doses if needed and tolerated without too much sedation. My usual max dose in older patients is 200 mg (a quarter of the max for younger people).
- **Use as a prn?** Care home staff loves having a prn on hand, because the tend to live in fear of an uncontrollable situation. I prefer to try scheduled dosing first. If problems persist, I will agree to a prn (25 mg), and check in the medication record how often it is used – usually not that much, since having it on hand may be all the therapeutic benefit for the staff that is needed. If a prn is regularly given, increase the regularly scheduled dose until either the patient is too sedated, or the medication does not appear to work (you decide this somewhere between 100 and 200 mg daily dose). In the latter case, switch – see next slide.
- **Monitoring:** check an EKG before and after dose increases due to the risk of QT prolongation. Labs (fasting lipids and glucose before treatment start and every 3-6 months) are recommended.



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ANTIPSYCHOTICS – RISPERIDONE

- **Pros:** (1) Demonstrated efficacy in clinical studies of dementia patients. (2) Less sedating than quetiapine. (3) Higher antipsychotic potency.
- **Cons:** Higher risk of extrapyramidal side effects.
- **How to use:** start with **0.5 mg at night**, increase as needed up to a total dose of about 2 mg per day (typical dose in younger patients is 1-4 mg per day).
- **Use as a prn?** No
- **Monitoring:** check an EKG before and after dose increases due to the risk of QT prolongation. Labs (fasting lipids and glucose before treatment start and every 3-6 months) are recommended.

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OTHER OPTIONS FOR AGITATION

1. If neither quetiapine nor risperidone work, I would not bother with a third antipsychotic (unless you are dealing with a patient with a primary psychiatric disorder like schizophrenia who happens to also have dementia). Olanzapine and aripiprazole have also been shown to be mildly effective in dementia patients.
2. Try **prazosin**, starting at 1 mg in the evening, and increasing by 1 mg every 3-4 days – up to about 8 mg per day in divided doses. Check blood pressures.
3. Use **benzodiazepines** with caution (lorazepam), as they may increase confusion and falls. Nonetheless, sometimes benzodiazepines are the only thing that works.
4. Anticonvulsants are probably of no benefit, unless used against seizures or as mood stabilizers (bipolar spectrum disorders).

Prazosin: Wang et al., Am J Geriatr Psychiatry. 2009 Sep; 17(9): 744–751.

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BEHAVIORAL INTERVENTIONS FOR NPS
(LOW FUNCTIONING PATIENTS - 1)

- Behavioral activation
- Scheduled pleasant events
- Redirection and distraction – avoid arguing or reasoning

CARE PARTNER INVOLVEMENT

- **Education about cognitive impairment**
- **Psychological assessment of the care partner and referral to psychiatric care as needed**
- **Referral to community support http://www.alz.org/, http://www.theaftd.org/**
- **Teaching care partners about realistic expectations, good communication, problem solving, and pleasant events**

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BEHAVIORAL INTERVENTIONS FOR NPS
(LOW FUNCTIONING PATIENTS - 2)

- Companion animal
- Gardening, nature exposure
- Aromatherapy
- Music
- Massage/touch/acupressure
- Bright light
- Dance/exercise

(and others, reviewed in Abraha et al, BMJ Open 2017, 7)

Bottom line:

- Individual studies often show benefit, meta-analyses tend not to.
- Intervention needs to be tailored to the patient's personality and preferences.
- Nothing works for everybody, but something may work for somebody.
- Give care partners suggestions, and invite them to experiment.

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QUESTIONS ?

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