Geriatric Psychiatry: Deprescribing

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THIS IS AN ACTUAL CASE

- 69 y.o. CF referred to geropsychiatry clinic: "**cognitive impairment, depression, anxiety, and polypharmacy**".
- On interview: cognitively impaired and ataxic.
  - Progressive cognitive decline with disorientation, frequently getting lost while driving, car accident due to confusion, missing appointments, not knowing the date, and confusing names of family members.
  - Worsening gait with frequent falls resulting in lacerations and head trauma.
  - Family planning to "put her in a nursing home."

We looked at the meds

- Doxepin 150mg per day
- Alprazolam 0.25mg when needed, unclear frequency
- Oxybutynin 10mg daily
- Tylenol PM at night
- Zantac (ranitidine) 150mg twice daily
- Sertraline 100mg daily

+ 12 other non-CNS active meds

We changed the meds

- ~~Doxepin 150mg per day~~
- ~~Alprazolam 0.25mg when needed, unclear frequency~~
- ~~Oxybutynin 10mg daily~~
- ~~Tylenol PM at night~~
- ~~Zantac (ranitidine) 150mg twice daily~~
- Sertraline 100mg daily

+ 12 other non-CNS active meds

In one week, the patient was…

- Not cognitively impaired
- Not ataxic
- Not falling
- Not depressed
- Not anxious

It’s all related: the Geriatrics’ 5Ms underlie everything we do

Mobility

Mind

Medications

Multicomplexity

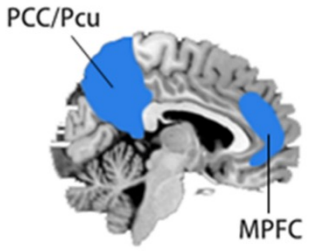
Matters Most

Tinetti et al, JAGS 2017

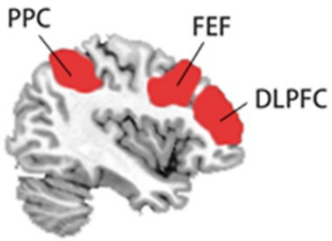
It's all related in the brain: same pathways underlie the outcomes that matter

Brain pathways to dysfunction:

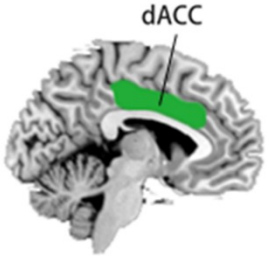
- Neurodegeneration
- Longstanding deficits
- Acute changes
- Medication adverse events



Default Mode Network



Central Executive Network

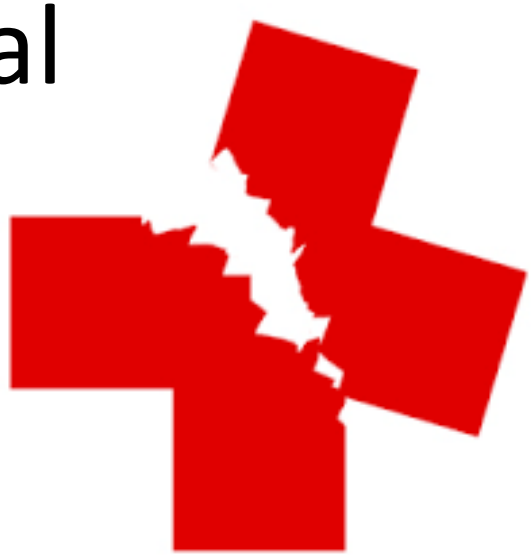


Salience Network

Outcomes that matter:

-Cognitive dysfunction
-Behavioral dysfunction
-Sleep dysfunction
-Delirium risk
-Poor quality of life
-Caregiver distress
-Loss of independence

The 5Ms vs. the 4 As: real-world geriatric mental health care (isn't good)



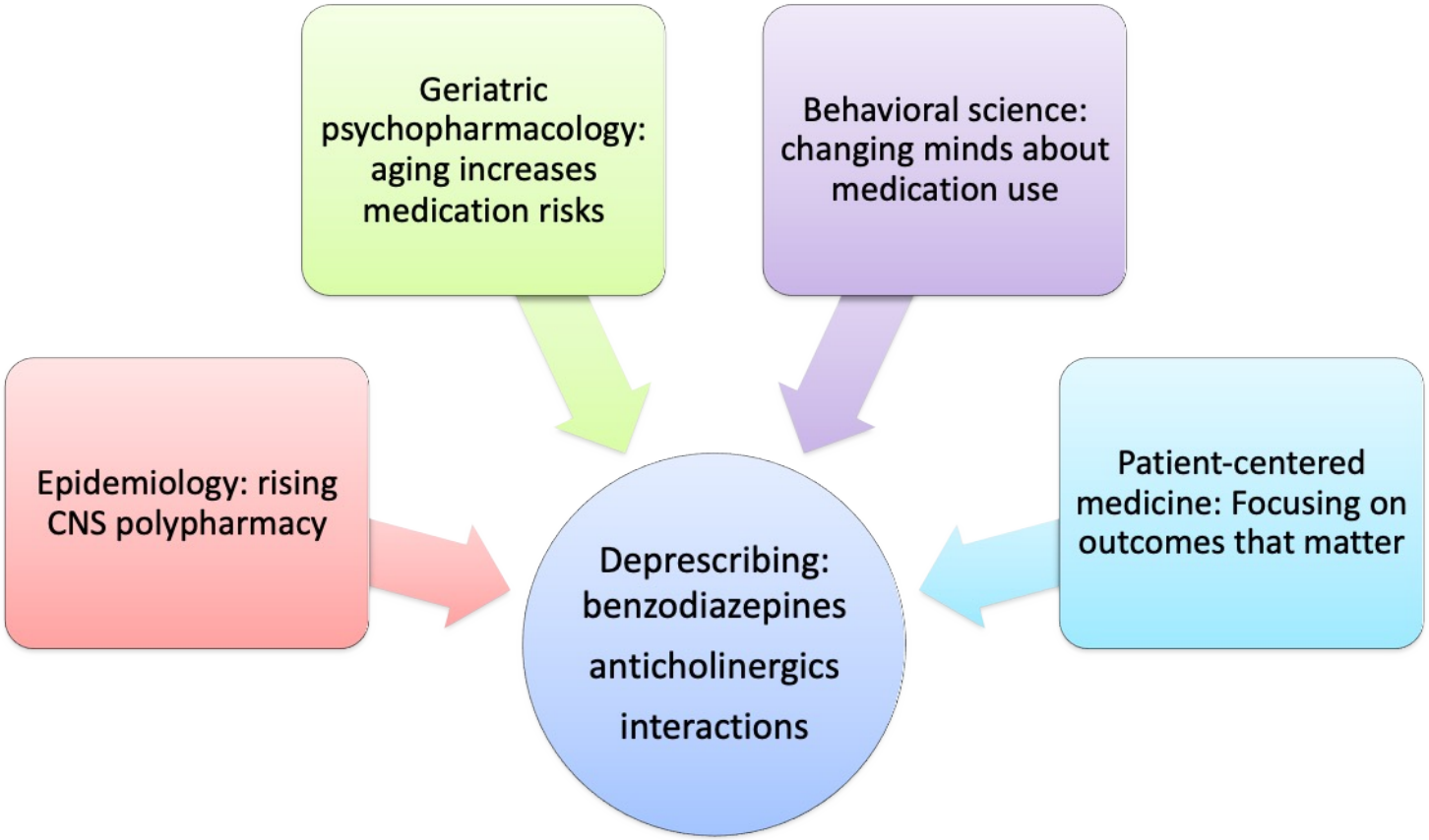
- Inaccurate **assessment**
- Low **adequacy** of treatment
- Little use of psychosocial **approaches**
- **Alarming** rates of inappropriate meds

What is ***deprescribing***?

- "the process of withdrawal of an inappropriate medication, supervised by a health care professional with the goal of managing polypharmacy and improving outcomes"
  - *Not* withholding of care

Woodward et al, J Pharm Pract Res, 2003

Deprescribing: a science-informed practice



Ng et al, “Deprescribing Benzodiazepines in Older Patients: Impact of Interventions Targeting Physicians, Pharmacists, and Patients”, Drugs & Aging, 2018

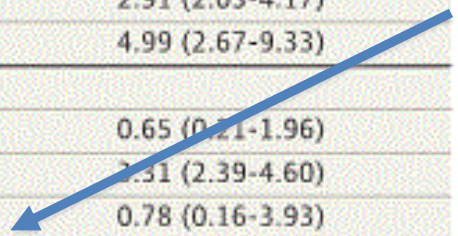
How-to summary in: Lenze, “Psychotropic drugs and falls in older adults”, Psychiatric Times 2018

Why is deprescribing important in mental and cognitive health?

- Patients we see are on a lot of medications.
- Many of these meds affect the brain:
  - Psychotropic (psychiatric) drugs we prescribe
  - Psychotropics others prescribe
  - Non-psychotropic medications that enter the brain
  - Over the counter medications that enter the brain

Table 1. Central Nervous System Polypharmacy at Office-Based Physician Visits by Older Adults Overall and by Demographic and Clinical Subpopulation, 2004-2013[a]

Characteristic	CNS Polypharmacy Visits per 100 Visits[b]			AOR (95% CI)[c]
	2004-2006	2007-2010	2011-2013	
Overall (n = 97 910)	0.6	1.0	1.4	3.12 (2.28-4.28)
Demographic Characteristics				
Age, y				
65-74	0.8	1.0	1.4	2.40 (1.59-3.63)
75-84	0.5	0.8	1.5	4.28 (2.44-7.51)
≥85	0.4	1.1	1.5	4.15 (2.04-8.43)
Sex				
Male	0.4	0.7	1.1	3.10 (1.73-5.57)
Female	0.8	1.1	1.7	3.15 (2.25-4.40)
Race/ethnicity				
Non-Hispanic white	0.6	1.0	1.5	3.23 (2.33-4.46)
Non-Hispanic African American	0.5	0.7	0.9	1.74 (0.51-5.99)
Hispanic	0.7	1.0	1.7	3.28 (0.93-11.59)
Dual eligible				
Yes	0.8	0.5	0.7	0.46 (0.03-6.63)
No	0.6	1.0	1.5	3.21 (2.37-4.34)
Geography				
Urban	0.6	0.9	1.4	2.91 (2.03-4.17)
Rural	0.7	1.0	2.2	4.99 (2.67-9.33)
Clinical Characteristics[d]				
Anxiety	8.9	4.4	5.4	0.65 (0.21-1.96)
No anxiety	0.6	0.9	1.4	3.31 (2.39-4.60)
Insomnia	7.6	3.9	5.3	0.78 (0.16-3.93)
No insomnia	0.6	0.9	1.4	3.18 (2.31-4.37)
Depression	6.7	6.7	10.4	1.31 (0.66-2.60)
No depression	0.5	0.8	1.3	3.24 (2.28-4.60)
Dementia	1.2	2.2	2.4	2.14 (0.55-8.27)
No dementia	0.6	0.9	1.4	3.11 (2.26-4.29)



CNS medication polypharmacy: 3+ concurrent psychotropic meds

Seen in >10% of older adults with depression diagnosis!

Maust et al, JAMA Internal Medicine, 2017

Brain-toxic medicines in older adults cause falls, cognitive impairment, and delirium…

Which can be catastrophic

Easy to start…hard to stop (?)

The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

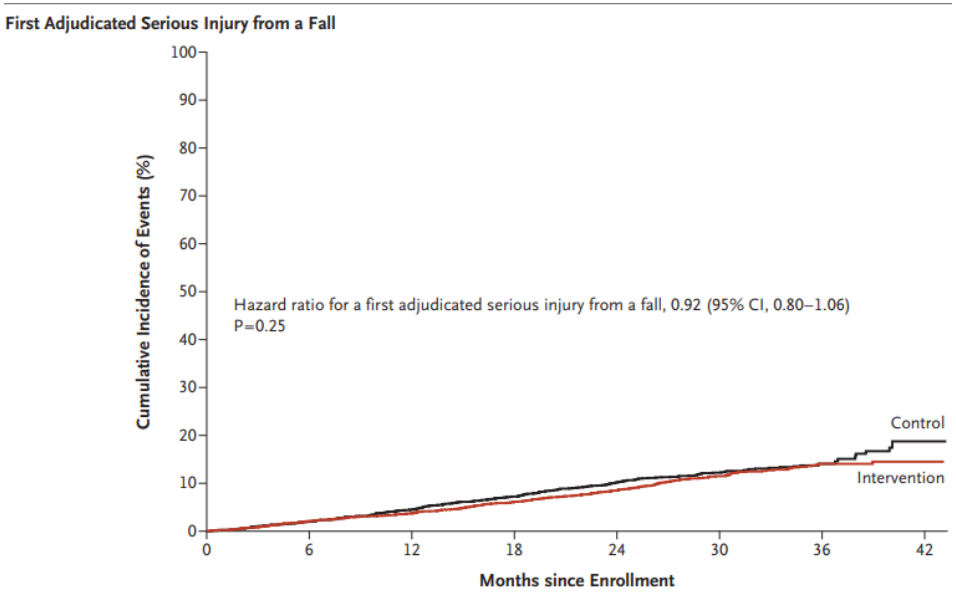
A Randomized Trial of a Multifactorial Strategy to Prevent Serious Fall Injuries

S. Bhasin, T.M. Gill, D.B. Reuben, N.K. Latham, D.A. Ganz, E.J. Greene, J. Dziura, S. Basaria, J.H. Gurwitz, P.C. Dykes, S. McMahon, T.W. Storer, P. Gazarian, M.E. Miller, T.G. Travison, D. Esserman, M.B. Carnie, L. Goehring, M. Fagan, S.L. Greenspan, N. Alexander, J. Wiggins, F. Ko, A.L. Siu, E. Volpi, A.W. Wu, J. Rich, S.C. Waring, R.B. Wallace, C. Casteel, N.M. Resnick, J. Magaziner, P. Charpentier, C. Lu, K. Araujo, H. Rajeevan, C. Meng, H. Allore, B.F. Brawley, R. Eder, J.M. McGloin, E.A. Skokos, P.W. Duncan, D. Baker, C. Boult, R. Correa-de-Araujo, and P. Peduzzi, for the STRIDE Trial Investigators*

ABSTRACT

BACKGROUND

Injuries from falls are major contributors to complications and death in older adults. Despite evidence from efficacy trials that many falls can be prevented, rates of falls resulting in injury have not declined.



"…the participant-centered intervention used motivational interviewing that encouraged participants to choose recommendations they were willing to address; consequently, some potentially valuable recommendations were not implemented. For example**, only 29% of the participants who were taking a medication identified as a risk factor agreed to address this**…"

Tip 1: Make a list

- All brain-toxic meds
  - Benzos and other CNS depressants
  - Strong centrally-acting anticholinergics/antihistamines
  - Including OTC
    - Eric's ask: "Do you take any over the counter medications?... Like for sleep for example?... Or allergies?... For example, Tylenol PM?... Or Benadryl?"

Brain-toxic over the counter meds

Tip 2: Make a plan

- First category: Strong centrally-acting anticholinergics and antihistamines
- Easy: stop them now, no need to taper.
- Some may be helpful (tricyclics) or perceived by patient as helpful (overactive bladder meds).
  - Switch to less-harmful med.

Tip 2: The message matters

You told me you are really concerned about your memory.

Yep

The good news is that we can definitely help you with your memory…today.

Ok!

You take Tylenol PM. It causes memory impairment and confusion.

Wow!

All you have to do is stop it. I guarantee your memory will get better.

Great!

Tip 3: Make a plan (benzo edition)

- Second category: benzodiazepines
- Harder.
  - Need to taper, to avoid withdrawal or rebound
  - Might unmask underlying anxiety or depression
    - (Ok. Then treat it.)
  - Habit-forming = patients <u>like</u> them.

Tip 4 (benzo edition): The message <u>really</u> matters

You are taking clonazepam.

Hmm…

The problem is this medication causes older adults to fall and have **hip fractures.**

Yikes!

It also causes memory impairment – like **Alzheimer's Disease**.

Eek!

Fortunately, if we reduce and stop it, you won't have this risks anymore.

Whew!

Simple principles make the difference!

- Measurement-based care.
- Algorithms, dose-optimization.
- Use psychosocial approaches.
- **Deprescribe or avoid bad medicines.**

Any Questions?