Are you ready for the Golden Years?
Intro to Geriatric Psychopharmacology

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Aged 65 and over will increase substantially between 2010 and 2030, reaching 72 million in 2030, compared to 35 million in 2000

Life span at birth:

i. 1900 – 47.3 years
ii. 1950 – 68.4 years
iii. 2012 – 78.2 years
iv. 2050 – 84.5 years?

- Caucasian life span > African American (5 years for men, 3.4 years for women)
  - "The Hispanic Paradox" – Latinos have lower mortality than Caucasians
- Adults with <12 years of education have life spans in the 1950s and 1960s
- Whites with 13+ years of education compared to African-Americans with <12 years of education can live 16+ years longer

Who's going to take care of them?

- Roughly 1k geropsychiatrists (2.6%) of psychiatric workforce or 1:72,000
- Psychiatrist workforce has shrunk (2003) 37,968 to (2013) 37,889. By 2025 the projected shortage of psychiatrists will be between 6,000-15,000.
- Currently **55% of all US counties have no psychiatrists** – 77% have severe shortages
- Psychiatric reimbursement does not cover the cost of inpatient geropsych-- in many cases leading to units closing
- **40% of psychiatrists have stopped taking insurance and some or all of their practice is cash only** (National Council for Behavioral Health, 2017)
- **60% of psychiatrists are 55 or older**, 27% are 65 or older (Merritt Hawkins, 2017)
- Starting in roughly 10 years, about **half of the current Masters or Doctorally-prepared psych RNs will begin to retire**
- **Currently adding about 1,500 new Psych NPs a year**

How prevalent is psychiatric disorder in the elderly?

- Wave 2 of the NESARC, conducted by the National Institute on Alcohol Abuse and Alcoholism - 2004/2005
- Total sample =34,653.
  - Compared young-old (55-64; N+5,135)
  - middle-old (65-74; N+3,634)
  - old-old (75-84; N+2,673)
  - oldest-old (85+; N+870) age groups
- LIMITATION: this is community-dwelling adults and does not cover institutionalized adults

- In the total sample (including 55-64)
  - "Any past-year mood disorder was 6.8%, the most prevalent of which was major depression (5.6%)"
  - "Any past-year anxiety disorder (11.4%), the most prevalent of which was specific phobia (5.8%). Any past-year substance use disorder among older adults was 3.8%."
  - "A total of 14.5% of older adults met criteria for at least one personality disorder, the most prevalent of which was obsessive-compulsive personality disorder (6.5%)"

How prevalent?

65-74 (n=5,135)

Any mood disorder – 5.68%

Any anxiety disorder- 9.45%

Any substance use disorder- 2.57%

Any personality disorder- 13.24%

P<0.001

75-84 (n=2,673)

Any mood disorder – 8.48%

Any anxiety disorder- 4.40%

Any substance use disorder- 1.73%

Any personality disorder- 10.36%

P<0.001

85+ (n=870)

Any mood disorder – 4.23%

Any anxiety disorder- 7.15%

Any substance use disorder- 0.15%

Any personality disorder- 10.67%

P<0.001

Practice Recommendation

Screen patients with **any chronic health condition** for depression, especially patients with diabetes, cardiovascular disease, or chronic pain as depression

Remember the presence of any psychiatric disorder or SUD **will greatly impact on all treatment recs and ability to follow them**

US Preventive Services Task Force. Screening for depression: recommendations and rationale. Ann Intern Med. 2002;136(10):760-764

AAFP Approved source: Institute for Clinical Systems Improvement

Website: http://www.icsi.org/depression_5/depression__major__in_adults_in_primary_care_3.html

Strength of Evidence: Grade A (randomized, controlled trials)

Is it really a psychiatric issue or is it…?

- **55%-98% OF OLDER PEOPLE HAVE TWO OR MORE CHRONIC DISEASES**
- POLYPHARMACY = FOUR OR MORE MEDICATIONS
  - Both prescribing multiple drugs appropriately or too many drugs inappropriately.
  - What's inappropriate? – Complex medication regimens, Dose form, Dosing frequency
- POLYPHARMACY HAS BEEN ASSOCIATED WITH:
  - Non-Adherence
  - Mental Health problems
    - Sedation
    - Poor memory
    - Lack of energy
    - Poor cognition

Reducing polypharmacy

- Use Motivational interviewing to assist patient in finding intrinsic motivation to adhere
- Choose drugs with the lowest adverse effect profile
- Maximize one drug before moving to another
- Decrease the Regimen complexity, and ensure ease of handling
- Review patient co-morbidities and medication profile for potential drug-drug interactions
- Frequent follow-up with limited refills
- **Medication review and schedule at *every* visit**

Other physiologic problems that mimic psychiatric issues…

- Cancer
- Delirium
- Head injury or CVA
- Infections
- Vitamin B12 deficiency
- Hypothyroid
- Beta-Blockers
- Insomnia
- Sedating medications
- Psychosocial

Depression and Geriatrics -- it's one in 20 of your patients

- Studies suggest that 5-20% of older adults in the United States experience depression.
- Most geriatric patients tend to prefer psychotherapy over psychopharmacotherapy, although psychotherapy is rarely offered.
  - Especially if patients are struggling with illness, death of friends, loneliness, financial issues
- Antidepressants are weak drugs and work over time, they require monitoring and titration
  - A fair trial is when the med is optimized and checked for six weeks
  - Patients need education/support or they will not keep taking it

Karel, M. J., Gatz, M., & Smyer, M. A. (2012). Aging and mental health in the decade ahead: What psychologists need to know. *American Psychologist*, *67*(3), 184-198. doi:10.1037/a0025393

Suicide - How pervasive and who?

- **650,000 ED visits for self-harm & about 41,000 deaths:** median 12:1 ratio for self-harm vs. completion (teens 25:1 & **elderly 4:1**)
- **Men complete suicide/ *Women attempt it* :** in 2013 78% of completers were men; three-fourths of attempts by women
- **Caucasian males** account for 70% of all suicides in 2013
- **Firearms** were implicated in 52% of deaths (2013)
- **Highest risk is not the ages you think:** 45-64 (19.1/100,000) **and >85 (18.6/100,000) –** teens 15-24 are much lower (10.9/100,000)
- **The rate is stable:** suicide rate 12.5/100,000 in 1985 – 12.6/100,000 in 2013 (some dip in the 90s, never less than 10/100,000)

(Violence Prevention, 2016)

Choosing Antidepressants
Start low – go slow

A medication with low potential for short -term weight loss may be more appropriate for frail patients.

- Citalopram/ Escitalopram: Most studied and highly effective in the elderly.
  - Citalopram doses should be limited to a maximum of 20 mg/day because QT prolongation is a concern.]
- Sertraline - safest for complex co-morbid patients, e.g. cardiac, renal, glycemic issue
- Mirtazapine – however remember that sedation is in 57% of patients and weight gain is 17% - many practitioners like it, renally dosed, at higher doses is energizing
- Venlafaxine: May increase BP. Often a very good choice
  - Clinical pearl – Use XR formulation, IR can cause nausea
- Buproprion – Use to increase energy and **curtail** appetite, caution if seizure risk

Choosing antidepressants continued

To avoid:

- Paroxetine: More sedating than other SSRIs, has anticholinergic effects, and, like some other SSRIs, can inhibit hepatic cytochrome P-450 2D6 enzyme activity, possibly impairing the metabolism of several drugs.
- TCAs : Highly anticholinergic and sedating and cause orthostatic hypotension; avoid.

Alternatives:

Methlyphenidate – may be used in treatment resistant apathy and low energy – use in low doses before breakfast and lunch

Agitation in Geriatrics

- According to BEERS Criteria - Antipsychotics should be used only for psychosis.
- Treatment depends on the underlying cause of the psychosis.
- 1st Intervention should be environmental and behavioral.

1. Decrease stimulation
2. Remove objects in room that could be used as weapons.
3. Use relaxation techniques.
4. Treat all treatable causes – polypharmacy, pain, hunger, depression

Agitation and geriatrics

- Avoid antipsychotics for behavioral problems in the elderly with dementia until nonpharmacological attempts have failed, and the patient is a threat to themselves or others.
- **Acute** psychosis or agitation: Low dose haldol.
- Antipsychotics – started at ¼ to ½ the usual starting dose
- Titration – *Slowly* up to the lowest dosage associated with clinical response.
- AIMS Scale: Every 6 months.
- Attempt to taper and discontinue within 4 months
- Closely monitor for recurrence of symptoms for at least 4 months post discontinuation.

Campanelli, C. M. (2012). American Geriatrics Society Updated Beers Criteria for Potentially Inappropriate Medication Use in Older Adults: The American Geriatrics Society 2012 Beers Criteria Update Expert Panel. *Journal of the American Geriatrics Society*, *60*(4), 616–631. http://doi.org/10.1111/j.1532-5415.2012.03923.x

Side effects of antipsychotics in geriatric patients.

- Increased risk of cerebrovascular accident (stroke) and mortality in persons with dementia from 2.2 → 4.1%
- May exacerbate or cause syndrome of inappropriate antidiuretic hormone secretion or hyponatremia; need to monitor sodium level closely when starting or changing dosages in older adults due to increased risk
- In nonpsychotic, agitated patients, antipsychotics control symptoms only marginally better than placebo and can have severe adverse effects.
- High-risk of NMS in Parkinson's/Lewy Body Dementia
- Black-box warning about using antipsychotics for dementia-related psychosis
- Risk/benefit – does it keep the patient home longer?

Benzodiazepines

In a word – DON'T

A national addiction?

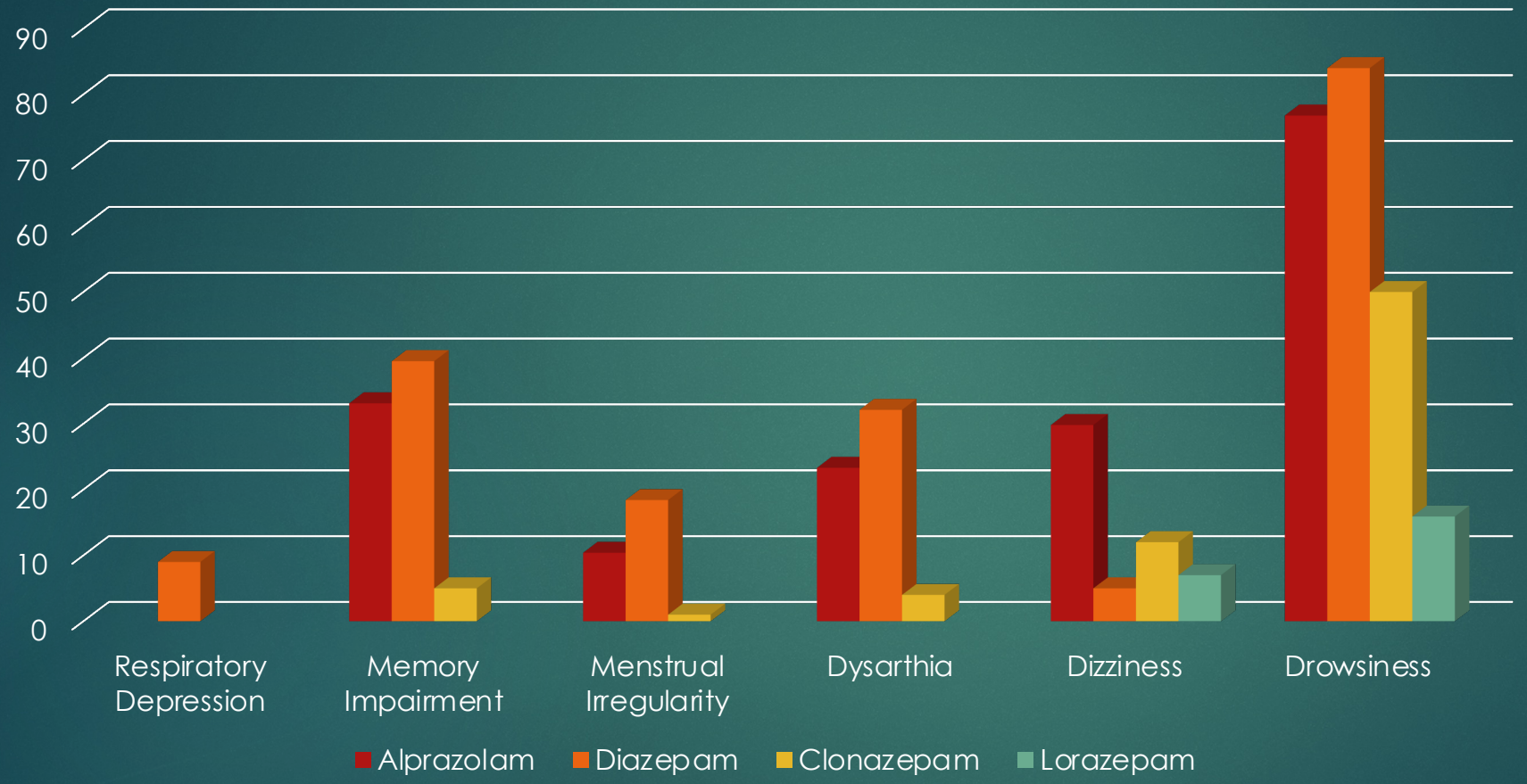
- 2015: First US national Benzo prescription epidemiology study, used 2008 sample to estimate 75 million Rxs
- However, national rate of use for age 65-80 Men (6.1%) and Women (10.8%) despite many warnings about use in elderly – mostly from non-psychiatrist providers
- Highest rate of use (11.9%) observed among 80-year-old women
- Mean tx episode ranged from 224.9 days in young adults to 245.4 days in elderly
- **Across all age and sex groups <10% were getting Rx from a psychiatrist, esp. 65-80 year olds (3.6%)**

(Olfson, King, & Schoenbaum, 2015)

Common Misuses

- ANYTHING over 4 weeks
- Delirium (which is around ½ of general inpatient agitation cases)
- Geriatric (see Beers Criteria)
- GAD (indicated, but don't do it)
- Insomnia
- PTSD (doesn't work…really!)
- Panic Attacks

Adverse Effects



Tannenbaum, C., Martin, P., Tamblyn, R., Benedetti, A., & Ahmed, S. (2014)

5.5 million American have Alzheimer's

- One in 10 adults 65+
- Women> Men 2:1
- African-Americans> Whites 2:1
- 5th Leading cause of death age 65+

And don't forget…there are other dementias

Major Neurocognitive Disorder- Formerly known as Dementia

Alzheimer's

"Plaques" Misshapen Beta-Amyloid deposits

"Tangles" misshapen Tau

Thought to attack the Acetylcholine circuits in the brain which has implications in Memory and learning

- Avoid anticholinergic meds
- Acetylcholinesterase Inhibitors – Slow for 6-12 months but do not stop progression
- NMDA antagonist also slows dementia - Mementine

Lewy body

Lewy bodies destroy Dopaminergic neurons

- In the Substantia Nigra causes Parkinsons Disease
- In the cortex causes Lewy Body Dementia/ Parkinsons Dementia
- Treat with Parkinson Agents and/or refer

Vitamin B/Folate

- May indicate longterm malnutrion
- Replete Vitamin and/or folate, also recommend Thiamine

Frontemporal

- Usually earlier onsite
- Sudden personality/behavior change – impulsive/aggressive
- No treatments as of yet, aim for symptomatic relief
- Refer to memory clinic

Vascular

- Stair step Progress
- Treat vascular symptoms, cognitive rehab, manage diabetes, BP
- Refer to memory clinic

Dementia

- Concern for safety in the house (leaving things on the stove)
- Refer to a specialty clinic (e.g. CNADC at NMH or most major hospitals)
- **The Alzheimers Foundation has Case Managers free of charge that will help patients and families navigate the care system and help both patients and caregivers**

citations

- Campanelli, C. M. (2012). American Geriatrics Society Updated Beers Criteria for Potentially Inappropriate Medication Use in Older Adults: The American Geriatrics Society 2012 Beers Criteria Update Expert Panel. *Journal of the American Geriatrics Society*, *60*(4), 616–631. http://doi.org/10.1111/j.1532-5415.2012.03923.x

- Fried, T. R., O'Leary, J., Towle, V., et al. Health outcomes associated with polypharmacy in community-dwelling older adults: A systematic review. *Journal of the American Geriatrics Society* 2014; 62:2261–2272.

- George, J, Phun YT, Bailey MJ et al. Development and validation of the Medication Regimen Complexity Index. *The Annals of Pharmacotherapy* 2004; 38:1369–1376

- Karel, M. J., Gatz, M., & Smyer, M. A. (2012). Aging and mental health in the decade ahead: What psychologists need to know. *American Psychologist*, *67*(3), 184-198. doi:10.1037/a0025393

- Institute of Medicine (US) Committee on the Long-Run Macroeconomic Effects of the Aging U.S. Population. Aging and the Macroeconomy: Long-Term Implications of an Older Population. Washington (DC): National Academies Press (US); 2012 Dec 10. 3, Demographic Trends. Available from: https://www.ncbi.nlm.nih.gov/books/NBK148831/

- Marengoni, A., Angleman, S., Melis, R., et al. Aging with multimorbidity: A systematic review of the literature. *Ageing Research Reviews* 2011; 10:430–439

- National Medical Directors Institute. (2017). The Psychiatric Shortage Causes and Solutions(Rep.). Washington, DC: National Council for Behavioral Health.https://www.thenationalcouncil.org/wp-content/uploads/2017/03/Psychiatric-Shortage_National-Council-.pdf
- Olfson M, King M, Schoenbaum M. Benzodiazepine Use in the United States. *JAMA Psychiatry*. 2015; 72(2):136-142. doi:10.1001/jamapsychiatry.2014.1763.
- Reynolds, K., Pietrzak, R. H., El-Gabalawy, R., Mackenzie, C. S., & Sareen, J. (2015). Prevalence of psychiatric disorders in U.S. older adults: findings from a nationally representative survey. *World Psychiatry*, *14*(1), 74–81. http://doi.org/10.1002/wps.20193
- US Preventive Services Task Force. Screening for depression: recommendations and rationale. Ann Intern Med. 2002;136(10):760-764 Website: http://www.icsi.org/depression_5/depression__major__in_adults_in_primary_care_3.html
- Violence Prevention. (2016, July 19). Retrieved October 03, 2017, from https://www.cdc.gov/violenceprevention/suicide/statistics/Suicide Statistics
- World Health Organization (2017) Depression and Other Common Mental Disorders: Global Health Estimates. retrieved from http://apps.who.int/iris/bitstream/10665/254610/1/WHO-MSD-MER-2017.2-eng.pdf?ua=1 on September 25, 2017
- Wimmer, B. C., Cross, A. J., Jokanovic. N., et al. Clinical Outcomes Associated with Medication Regimen Complexity in Older People: A Systematic Review. *Journal of the American Geriatrics Society* 2017; 65(4):747-753
- Yap, A. F., Thirumoorthy, T., Kwan, Y. H. Systematic review of the barriers affecting medication adherence in older adults. *Geriatric Gerontology International 2016;*16: 1093–1101.