A brief summary of differences in the presentation and management of common mental illnesses in older adults compared to young adults

# Mental illness in older adults

[Document subtitle]

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# **DEPRESSION**

MCC-59-1 objectives (adapted to the geriatric population): Enabling objectives are referenced in parentheses

Very common in older adults

(1.A)Similar to younger adults, except older depressed patients more likely to display neuro-vegetative signs (disturbance of sleep, appetite, digestion, libido), cognitive disturbance, melancholic features and functional decline.

- Specific screening method for older adults (PHQ-2):
  - Over the past 2 weeks, how often have you been bothered by the following problems:
    - Little interest or pleasure in doing things?
    - Feeling down, depressed or hopeless?
  - 0 = not at all, 1 = several days, 2 = more than half the days, 3 = nearly every day
  - Clinically significant depression based on total score:
    - 1+: 37%, 2+: 48%, 3+: 75%, 4+: 81%, 5+: 85%, 6+: 93%
- o Rating scales for depression in older adults:
  - Geriatric Depression Scale (GDS); Cornell Scale for Depression in Dementia (CSDD)
- (1.B) Rule out organic causes first. **Don't forget PAIN** as a cause of secondary depression in older adults. Differential diagnosis of primary depressive syndromes is similar to adult population based on DSM criteria. Also include bereavement, demoralization and apathy in the differential for older adults.
- (1.C) Risk assessment same as adult population with some considerations:
  - o Age is positively correlated with suicide mortality
  - O Depressed patients are at highest risk of suicide when depression is severe, melancholic, psychotic, with significant anxious distress or involves mild-moderate (but not severe) cognitive impairment.

- Most important acute risk factor in older adults access to firearms.
- (2.A) Older patients should have the same work-up as adult population (endocrine, metabolic, rheumatic, neurologic, toxicology) with additional work-up as follows based on history and physical:
  - R/o stroke, pain, neoplasms, cardiovascular disease, chronic renal disease, other neurologic (i.e. Parkinson's)
  - Despite history/physical indications, acquire ECG and electrolytes in older adults to establish baseline before starting treatment for depression as risk of QTc prolongation and SIADH is higher in older than in younger adults
- (3.A) Ask about and assess for things in (1.C) in addition to usual risk assessment (thoughts, plan, intent, general risk factors).
- (3.B) Pharmacotherapy generally similar to adult treatment with some exceptions:
  - For depression with melanchoilc features, psychotic features, catatonic features or other signs of severity (i.e. acute suicidality, refusing to eat), consider ECT considered more effective and safer in older adults compared to combination therapy (especially safer in cases of severe post-stoke depression, severe depression in Alzheimer's dementia and severe depression in Parkinson's disease).
- (3.B addition) Psychotherapy
  - Best evidence for CBT (cognitive behavioral therapy). Good evidence for IPT (interpersonal therapy).
     Some evidence for PST (problem-solving therapy).
- (3.C) Family and supportive resources should include education, social programming/ engagement and supportive living environment based on clinical assessment.
- (3.D) Specialized care should be sought in cases with high level of comorbidity, treatment resistance, or high-severity symptoms requiring more aggressive treatment.

Coffey, M. Justin and C. Edward Coffey. "Mood Disorders." *The American Psychiatric Publishing Textbook of Geriatric Neuropsychiatry*. Ed. C. Edward Coffey and Jeffrey L. Cummings. Third ed. Washington, DC: American Psychiatric Pub., 2011. 473-492. Print.

Rapoport, M. (Ed.). (2016). Geriatric psychiatry review and exam preparation guide: a case-based approach. Toronto: University of Toronto Press.

# **ANXIETY**

(MCC-69) objectives [adapted to the geriatric population] Enabling objectives are referenced in parentheses [(1.A) Stressors associated with aging can be anxiogenic, but do not always cause anxiety "disorders".

- o Stressors associated with aging:
  - Chronic illness and disability, caregiver status, bereavement, financial issues
- (1. A) True anxiety disorders may be missed in older adults when using standard measures (i.e. DSM criteria) that typically require insight into the "excessiveness" of the anxiety.
  - E.g. several seniors have a fear of falling; few believe it is an "excessive" fear and therefore screen negative for an anxiety "disorder". However, the fear of falling interferes with function and requires clinical attention.
- (1.A) Older patients with anxiety disorders can also have cognitive symptoms such as decreased attention and poorer memory
- (1.B) Look for medical and medication-related cause
  - Medical causes
    - Rule out same causes as adults (i.e. TSH, B12, Folate, etc.)
    - In older adults also rule out dementia, stroke, heart disease, lung disease, neurological disease (i.e. Parkinson's)
  - o Medication-related causes
    - New meds psychostimulants, antidepressants
    - Withdrawal from meds sedative-hypnotics, antidepressants
    - Polypharmacy additive anticholinergic load, drug-drug interactions
- (1.C) Comorbidities
  - Depression
  - o Functional decline, frailty, gait instability (comorbid with fear of falling and agoraphobic-like behavior)
- (1.D) Severity
  - O Anxiety disorders in late life are often chronic and persistent. In addition to suicidal ideation, consider the following measures of severity in older adults with anxiety disorders
    - Disability:
      - Anxiety has a bidirectional relationship with disability in older adults

- Anxiety associated with increased mortality in medically unwell patients
- Somatic symptoms can appear medical in nature
- Anxiety can worsen medical conditions (e.g. anxiety related to medication side effects causes person to avoid taking antihypertensives) and related disability
- Some medical conditions can cause anxiety symptoms
- Medical symptoms can be frightening causing anxiety
- Medical illness can worsen anxiety (e.g. difficult recovery after hip fracture can cause anxiety about walking independently / future falls) and related disability
- Anxiety-associated disability is greater with increasing age
- Quality-of-life:
  - o Significant quality-of-life impairment has been noted in older adults with GAD
- (2.A) Clinical investigations
  - o Same as general adults, guided by history and physical as appropriate.
  - For geriatric anxiety, consider Beck Anxiety Inventory (21-item) or Penn State Worry Questionnaire (8item). Self-report scales that can be used include Geriatric Anxiety Inventory and Worry Scale for Older Adults.
- (3.A) Safety assessment in older adults does not only involve suicidal ideation, but also risk for falls, neglect, isolation and accidents (e.g. cognitive effects of mood and anxiety symptoms in older adults can lead to safety risks such has house fires and floods)
- (3.B) Treatment:
  - Environmental
    - Ensure safe environment (hospitalize if significant safety risk)
    - Ensure risk for falls is addressed medication review, OT/PT assessment
    - Ensure risk of neglect (malnutrition, hygiene) is addressed Meals on Wheels, PSW support
    - Ensure risk of isolation is addressed appropriate engagement in social or treatment groups
  - Psychological CBT
  - Pharmacological
    - SSRIs and SNRIs first line try to avoid fluoxetine, paroxetine and fluvoxamine as these
      have significant p450 interactions. Also be careful of QTc prolongation, bleeding risk (i.e.
      concomitant warfarin use) and comorbid insomnia (some SSRIs can be activating rather than
      sedating)
    - Avoid benzodiazepines
- (3.C) Treat underlying and comorbid conditions as outlined in (1.B) and (1.C)
- (3.D) Provide support to family and/or caregivers
  - Risk of care-giver burnout is very high in caregivers of older adults, especially if the patient has multiple comorbidities

Lenze, Eric J., Julie L. Wetherell, and Carmen Andreescu. "Anxiety Disorders." *The American Psychiatric Publishing Textbook of Geriatric Neuropsychiatry*. Ed. C. Edward Coffey and Jeffrey L. Cummings. Third ed. Washington, DC: American Psychiatric Pub., 2011. 499-511. Print.

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# **BIPOLAR DISORDERS**

MCC-59-2) objectives [adapted to the geriatric population]: Enabling objectives are referenced in parentheses

- (1.A) Similar to adults but symptoms may be more attenuated.
- (1.B) Along with acquiring similar collateral information as adults, also inquire about comorbid general
  medical illness older patients with bipolar disorder have a high rate of comorbid general medical illness,
  including diabetes and neurological disease.
- (1.C) Rule out organic causes first. Remaining differential similar to adults.
- (1.D) Acute mania is especially dangerous for older patients
  - o In addition to generally increased risk of suicide and all-cause mortality during manic states, older patients have an increased risk of dehydration and falls.
- (2.A) Older patients should have the same work-up as adult population (endocrine, metabolic, rheumatic, neurologic, toxicology) with additional work-up as follows based on history and physical:
  - o R/o stroke, neoplasms, cardiovascular disease, chronic renal disease, other neurologic (i.e. Parkinson's), hydration status, signs of trauma (secondary to falls)
  - Despite history/physical indications, acquire ECG and electrolytes in older patients to establish baseline before starting treatment for depression as risk of QTc prolongation and SIADH is higher in older than in younger adults
- (3.A) Bipolar disorder has highest rate of suicide. Admit acute mania. Assess suicidal / homicidal ideation in hypomania, mixed states and depression as would be done with adult patient. Also include assessment of risk for falls, neglect and isolation.
- (3.B) Pharmacotherapy generally similar to adult treatment with ECT preferable to significant polypharmacy, especially in patients with multiple medical comorbidities. Be careful with ECT and lithium can increase risk of post-ECT confusion / delirium (holding lithium the night before ECT can mitigate this).
  - O Special considerations for Lithium in older adults:
    - Remains one of the best agents for bipolar disorder, even in older adults
    - Lower therapeutic range in older adults (0.3-0.8) vs. younger adults (0.8-1.0)
    - Increased risk of toxicity and delirium

- Renal function often already compromised in older adults
- Combination with thiazides, loops, ACEI's/ARB's and NSAID's dangerous in general older adults at higher risk of such combinations given comorbidities
- Tremor is common older adults may end up inappropriately treated with dopaminergic drugs (i.e. suspected Parkinsonism)
- (3.C) Family and supportive resources should include education, sleep hygiene, social programming/ engagement and supportive living environment based on clinical assessment.
- (3.D) Specialized care should be sought in cases with high level of comorbidity, treatment resistance, or high-severity symptoms requiring more aggressive treatment.

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# **PSYCHOSIS**

MCC-86 objectives (adapted to the geriatric population) Enabling objectives are referenced in parentheses

- (1.A) Similar mental status exam as general adult with certain key differences:
  - o First look for signs of delirium (disoriented, fluctuating attention or alertness, visual hallucinations) and dementia (low MMSE scores). These are more common than late-onset schizophrenia
  - Late onset schizophrenia patients are more likely to have paranoia and less likely to have disorganized thought and less inappropriate/flat/blunted affect compared to early onset schizophrenia
- (1.B) Collateral history should be screened similarly to adult population with the addition of acquiring information about function (B/I ADL's) in more detail. This is because it can be very difficult to determine if the symptoms have caused a decrease in function in older patients who may be retired, widowed or less socially active (compared to adult population where it is easier to see these changes in the context of psychosis)
- (1.C) Similar physical exam as adults, guided by history.
- Don't forget to assess vision and hearing in older adults (people with compromised vision and hearing can
  have hallucinatory experiences that may not have functional consequences and therefore, would not be
  syndromal).
- (2.A) Complete a thorough delirium work-up. Assess for cognitive impairment. Reassess pharmacology (especially in patients with polypharmacy). Drug screen and imaging should be acquired. Remainder is based on history and exam (i.e. signs of stroke/TIA), or is otherwise similar to general adult work-up.
- (3.A) Safety assessment is similar as adults risk of harm to self, risk of harm to others, risk of serious deterioration. Need to assess both baseline risk (i.e. risk of deterioration in someone with dementia) and acute risk (i.e. risk of patient who has baseline dementia presenting with superimposed delirium and related psychotic symptoms).
- (3.B) Capacity needs to be assessed for each clinical decision. In geriatric patients, capacity assessment needs to consider outcomes a bit more (e.g. when finding a patient with late-onset schizophrenia incapable, need to consider the value of the incapacity finding will it be safe to issue community treatment orders (CTO's) and use depot antipsychotics in certain geriatric patients with multiple medical comorbidities?)
- (3.C, E) Psychosocial needs of safe housing, financial support and rehabilitative approach apply to geriatric care just as much as adult care. Additional concerns of managing medical comorbidity (after discharge), access to follow-up care, appropriate placement, caregiver burnout and decreasing social networks also need to be addressed.
- (3.C, E) Cognitive-Behavioural and Social Skills Training (CBSST) may be helpful for older patients when added to pharmacotherapy.
- (3.D) Pharmacotherapy usually Risperidone, Quetiapine and Olanzapine preferred in older adults. PO medication mostly used as risk of using depots is much higher in older patients. Higher risk of adverse effects with typicals and newer atypicals. Severe cases can be treated with Clozapine but adverse effects have to be watched very carefully in older patients.

- (3.F) Always look for a delirium or reversible vascular event first. Then consider cognitive impairment or other progressive neurological disorders second. Finally, consider primary psychotic syndrome with late onset as diagnosis of exclusion in older adults.
- (3.G) Family interventions shown to be helpful in younger patients with psychosis. May be helpful in older patients as well.
- (3.H) Referral to psychogeriatric services is warranted in most cases (unless the clinical picture is relatively straightforward or a clear underlying medical cause has been identified and is being treated).

Jeste, Dilip V., Laura B. Dunn, and Laurie A. Lindamer. "Psychoses." *Comprehensive Textbook of Geriatric Psychiatry*. Ed. Joel Sadavoy, Lissy F. Jarvik, George T. Grossberg, and Barnett S. Meyers. New York: W.W. Norton, 2004. 655-85. Print.

# AGING AND PSYCHOPHARMACOLOGY

## Key points highlighted in yellow

- (1) Pharmacokinetic Changes:
  - Absorption decreases (causes decreased mesenteric blood flow, decreased gastric acids, anticholinergic drugs delaying absorption, certain antacids)
  - b. Distribution changes
    - i. Volume of distribution decreases for water-soluble drugs (cause total body water decreases) and increases for fat-soluble drugs (cause total body fat increases)
    - ii. Plasma albumin decreases with age most psychotropic drugs are highly protein bound (lithium is not)
  - c. Metabolism decreases (causes hepatic metabolism decreases, patient may have comorbid CHF which further impairs hepatic metabolism)
  - d. Elimination decreases (causes GFR decreases, chronic renal disease would further decrease elimination)
- (2) Pharmacodynamic Changes:
  - a. Receptor concentrations and sensitivities change with age
    - i. Baroreceptor sensitivity decreases
    - ii. Dopamine (specifically D2) receptor concentration decreases
  - b. Neurotransmitter and enzyme concentrations change with age
    - i. Decreased levels of acetylcholine (therefore greater risk of anticholinergic side effects with medications)
    - ii. Increase monoamine oxidase
    - iii. Activity of some P450 isoenzymes (i.e. CPY 2C19) decreases
- (3) General rules of pharmacology in older adults:

- a. Side effects and toxicity are more likely in older adults than younger adults (this also applies to toxicity from illicit substance use)
- b. Start low, go slow ... but go! (i.e., don't rush the titration but at the same time don't hesitate to use therapeutic doses).

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