Diagnosing and Treating Major Depressive Disorder Among the Elderly

By: Ben Braus, MD, MPH
Minneapolis VA Medical Center

I have no financial or other conflicts to disclose.
Any off label use of medical therapeutics will be identified as such.
Road map:

❖ Identify some common problems impacting care

❖ Attempt to lay out a framework for doing better focusing on some of the fundamental concepts of depression care and geriatrics

❖ Such a huge topic - I’ll do my best!

Case

73 year old man
Married 2nd time, grown children mixed family, retired successful businessman
Former swimmer, nearly qualified for the Olympics
Type A personality, large and in charge his entire life.
Case

Age 70 - Parkinson’s disease diagnosis
Age 72 - several months: irritable, amotivated, anhedonic, psychomotor agitation
→ MDD diagnosis
   Escitalopram 20 mg -- no response
   Bupropion 300 mg -- no response

A year later, not really any better, patient and family stressed/worried....

→ Geriatric psychiatry consult

Pause to consider what we all might feel/think...

- Oh my god it’s been a year and he never gets better.
- Maybe this is just the Parkinson’s disease and not depression?
- Who wouldn’t be depressed having to go through that?
- It’s so impossible trying to treat depression in old patients.
- What even is “depression” anyways?
- Why is it so impossible to find a psychiatrist?
Identifying and treating MDD in elderly patients is a challenging part of medical care.

We miss the majority of cases. And even when we find a case, the treatment is usually not adequate.

❖ Mansour (1999) systematic review of 12 observational studies: 4% - 37% of older patients received at least some care
Consequences of MDD are profound

❖ Currently the 3rd leading contributor to global disease burden

❖ By 2030 expected to be 2nd leading cause of global disability
  ➢ And the leading cause among industrialized nations.

*Geriatric Depression a Clinical Guide. Gary Kennedy, 2015*

These challenges in identifying and treating MDD among the elderly are not theoretical.

We must always keep in mind that we are talking about real people who seek relief from terrible pain and suffering.
How can we do better?

Focus on the fundamentals:
How can we do better?

Focus on the fundamentals:

1. Major depressive disorder is a brain syndrome that is well characterized and poorly understood.

2. Major depressive disorder is a treatable disorder

3. In the care of elderly patients, attend to:
   a. multimorbidity, functional status, and goals of care.
Hippocrates, 400BC

“If a fright or despondency lasts for a long time, it is a melancholic affection.”

*Aphorisms*, section VI

Other symptoms mentioned by Hippocrates:
- Poor appetite
- Abulia
- Sleeplessness
- Irritability
- Agitation

https://en.wikipedia.org/wiki/Melancholia
https://en.wikipedia.org/wiki/Hippocrates

**DSM -5**

**Major Depressive Disorder**

*5 or more symptoms nearly every day for >2 weeks*

*Change from prior function*

*Not attributable to another illness*

1. Depressed mood
2. Markedly diminished interest or pleasure in all or almost all activities
3. Significant weight loss/gain (>5% in a month), or reduced appetite
4. Insomnia or hypersomnia
5. Psychomotor agitation/retardation observable by others
6. Fatigue or loss of energy
7. Feeling worthless or excessive guilt
8. Diminished concentration, indecisiveness
9. Recurrent thoughts of death, suicidal ideation, plan, or attempt

American Psychiatric Association, 2013
Dysregulated homeostasis & connectome disharmony

EMBARC study
Cherise R. Chin Fatt, et al.
Am J Psychiatry 177:2, Feb 2020

Disruption of Neural Homeostasis as a Model of Relapse and Recurrence in Late Life Depression.
Disruption of Neural Homeostasis as a Model of Relapse and Recurrence in Late Life Depression.

“If a fright or despondency lasts for a long time, it is a melancholic affection.”

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“If a fright or despondency lasts for a long time, it is a melancholic affection.”
Research Letter

June 3, 2020

Psychological Distress and Loneliness Reported by US Adults in 2018 and April 2020

Emaia E. McGinty, PhD, Rachel Peskindoetter, MSW, Mahie Jia, PhD, et al.


Coronavirus Live Updates

Michelle Obama Says She’s Dealing With ‘Low-Grade Depression’ During Lockdown

August 6, 2020 - 10:15 PM ET

LAUREN KEBBLE
Late Life Depression

❖ Syndromic differences?
  ➢ somatic complaints
  ➢ cognitive impairments
  ➢ Mood not classically “low” or “sad”

❖ When investigated empirically, overall weak evidence for substantial differences
Late Life Depression

❖ Syndromic differences?
  ➢ somatic complaints
  ➢ cognitive impairments
  ➢ Mood not classically “low” or “sad”

❖ When investigated empirically, overall weak evidence for any substantial differences

Haigh, et al. Am J Geriatr Psych 26:1, Jan 2018

Late Life Depression

❖ Syndromic differences?
  ➢ somatic complaints
  ➢ cognitive impairments
  ➢ Mood not classically “low” or “sad”

❖ When investigated empirically, overall weak evidence for any substantial differences

❖ Geriatric pearl: Look for the natural history, not just the symptoms!

Haigh, et al. Am J Geriatr Psych 26:1, Jan 2018
Sorrowing Old Man, Vincent Van Gogh, 1890

April:
“What can I tell you of these two last months, things aren’t going well at all, I’m more sad and bored than I could tell you, and I no longer know what point I’m at …”

May:
Painted Sorrowing Old Man (At Eternity’s Gate)

July:
Died by suicide at age 37
12 month prevalence of MDD in old age: ~2%

12 month prevalence of MDD in non-elderly: ~7%
(Kok & Reynolds, JAMA May 2017, Vol 317, No 20)
Research Letter
June 3, 2020
Psychological Distress and Loneliness Reported by US Adults in 2018 and April 2020
Emma E. McGinley, MD, Rachel Pressman, MD, Mahneet Noh, MD, et al.

Figure. Psychological Distress Among US Adults Aged 18 Years or Older Overall and by Subgroup, April 2020 vs 2018

- Stress Exposure
  - Disruption of Homeostasis
  - Recurrence

- Psychological Distress and Loneliness Reported by US Adults in 2018 and April 2020
Myth of Tithonus:

_Homeric Hymn to Aphrodite, 218 ff._

“Getting old is the worst, except for the alternative.”
Late Life Depression

Major depressive disorder prevalence:

➢ Primary care clinic: 6%–10%
➢ Nursing home residents: 12%–20%
➢ Hospitalized older adults: 11%–45%

(Kennedy & Cabassa, Geriatrics Review Syllabus, 2019 American Geriatrics Society)

Late Life Depression - Suicide

2010
Proportion of US population age 65+: 12%
Proportion of suicides in USA age 65+: 15%

Death rate due to suicide all ages: 14.89/100k
Death rate due to suicide white men 85+: 50.82/100k

Ratio of attempted suicide to suicide death, age 15-24: 100:1
Ratio of attempted suicide to suicide death, age 65+: 4:1

Firearm as cause of suicide deaths among age 65+: 70%

Geriatric Depression a Clinical Guide. Gary Kennedy, 2015
Late Life Depression

❖ Medical comorbidities associated with incident MDD:
  ➢ Heart attack
  ➢ Stroke
  ➢ Macular degeneration
  ➢ Parkinson’s disease

❖ Medical comorbidities with bidirectional relationship with MDD:
  ➢ Alzheimer’s disease
  ➢ Chronic cerebrovascular disease
  ➢ Congestive heart failure
  ➢ Diabetes mellitus
  ➢ Frailty syndrome

As always in geriatrics....
Beware of interlopers in disguise!
Hypothyroidism

Signs and symptoms of Hypothyroidism

- Psychological: Poor memory and concentration
- General: Fatigue
- Skin: Pallor or dusky complexion
- Lungs: Halitosis
- Mouth: Coarsening of facial features
- Gastrointestinal: Constipation
- Muscular: Exostosis, fibrous xanthomas
- Extremities: Coldness, Carpal tunnel syndrome
- Cardiovascular: Slow pulse rate, Pericardial effusion
- Muscular: Delayed reflexes, muscle weakness

Malnutrition

- They Starved So That Others Be Better Fed: Remembering Ancel Keys and the Minnesota Experiment

Leah M. Kalm and Richard D. Semba
The Johns Hopkins School of Medicine, Baltimore, MD
**Substance use disorders**

<table>
<thead>
<tr>
<th>Table 2. Signs of Possible Problematic Substance Use in Older Adults.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychiatric symptoms: sleep disturbances, frequent mood swings, persistent irritability, anxiety, depression</td>
</tr>
<tr>
<td>Physical symptoms: nausea, vomiting, poor coordination, tremors</td>
</tr>
<tr>
<td>Physical signs: unexplained injuries, falls, or bruises; malnutrition; evidence of self-neglect, such as poor hygiene</td>
</tr>
<tr>
<td>Cognitive changes: confusion and disorientation, memory impairment, daytime drowsiness, impaired reaction time</td>
</tr>
<tr>
<td>Social and behavioral changes: withdrawal from usual social activities, family discord, premature requests for refills of prescription medications</td>
</tr>
</tbody>
</table>

Susan W Lehman & Michael Fingerhood

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**Other psychiatric disorders**

- PTSD
- GAD
- Schizophrenia
- Other mood disorders
Summary: Diagnosis and epidemiology

How can we do better?

Focus on the fundamentals:

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Treating MDD in the elderly

“The 4P’s”

1. Predisposing factors
2. Provoking factors
3. Perpetuating factors
4. Protective factors
Pharmacotherapy

❖ NOT “mood lifting.” Help get you “unstuck.”
❖ Guiding principle: safety & comorbidity assessment
  ➢ Start low, go slow, but keep going!
❖ Usual first step: SSRI w/ short half life, few drug interactions
❖ Trial: 4-6 week @ therapeutic dose
❖ Success? 4 weeks --> symptoms down at least 30%
❖ Approx 1/3 will respond to first Rx trial
❖ If not responding:
  ➢ Switch vs augment
  ➢ Reconsider the diagnosis and the 4P’s!
  ➢ Hint: ⅓ of patients don’t refill Rx after 1st month.

(Helpful algorithms: STAGED, STAR*D, PROSPECT, IMPACT)

Psychotherapy

❖ Cognitive Behavioral Therapy
❖ Interpersonal Psychotherapy
❖ Problem Solving Therapy
❖ Reminiscence Therapy
❖ Behavioral Activation Therapy
❖ Brief psychodynamic therapy
❖ Supportive therapy
❖ Dialectical Behavioral Therapy
❖ Bereavement & Complicated Grief Therapy

Shared features:
Problem Focused
Here & Now
Education
Social Support

Geriatric considerations:
Sensory impairments
Cognitive inefficiency
Age-related goals and expectations
ECT

❖ FDA approved for:
  ➢ Severe major depressive episode or catatonia
  ➢ Treatment-resistant or requiring rapid response

❖ 2004 prospective study of 253 adults with depression (CORE, Husain et al)
  ➢ 50% of patients - at least 50% improvement after 3rd treatment (1 week)
  ➢ 65% of patients - full remission after 10th treatment (4 week)
  ➢ 90% of adults over age 65 - full remission at end of series

❖ Risks/burdens
  ➢ Acute confusion post treatment, mild aches/pains, often some amnesia
  ➢ Hospitalization/Anesthesia risks
  ➢ Depression recurrence - common
  ➢ Social determinants of health - barriers to effective treatment

Exercise

❖ 2014 Cochrane review: exercise similar efficacy as medications / therapy

❖ Widely beneficial for elderly across most health/functional domains

❖ You don’t have to do an Iron Man Triathlon.

❖ Learning to “prescribe” takes organization and skill
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Lower remission rates associated with:

- Longer index episode of depression
- Multiple comorbid psychiatric disorders
- Multiple comorbid medical disorders
- Low baseline level of function and quality of life
- **NOT AGE alone**

STAR*D, 2006
# Multimorbidity

## Good MDD tx response | Poor MDD tx response
---|---
Myocardial infarction | Congestive heart failure
Stroke | Alzheimer’s disease
Parkinson’s disease | Frailty syndrome
Multimorbidity
MDD tx synergistic effects?


![Graph showing survival probability among people with no depression or major depression in practices randomized to usual care (top panel) or to intervention (bottom panel). Data from PROSPECT (1999-2008)](image)

Functional status

versus:

"Walk me through a normal day for you right now."

PHQ-9 Copyright © Pfizer Inc, [https://www.uspreventiveservicestaskforce.org/Home/GetFileByID/218](https://www.uspreventiveservicestaskforce.org/Home/GetFileByID/218)
Goals of care

“What do you want things to look like 3 months from now?”

versus:

<table>
<thead>
<tr>
<th>PHQ-9 Score</th>
<th>Depression Severity</th>
<th>Proposed Treatment Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 4</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>5 to 9</td>
<td>Mild</td>
<td>Watchful waiting; repeat PHQ-9 at follow-up</td>
</tr>
<tr>
<td>10 to 14</td>
<td>Moderate</td>
<td>Treatment planning, considering counseling, assertive follow-up and/or pharmacotherapy</td>
</tr>
<tr>
<td>15 to 19</td>
<td>Moderately Severe</td>
<td>Immediate initiation of pharmacotherapy and/or psychotherapy</td>
</tr>
<tr>
<td>20 to 27</td>
<td>Severe</td>
<td>Immediate initiation of pharmacotherapy and, if severe impairment or poor response to therapy, expedited referral to a mental health specialist for psychotherapy and/or collaborative management</td>
</tr>
</tbody>
</table>

The PHQ-9: A New Depression Diagnostic and Severity Measure
Kurt Kroenke, MD; Robert L Spitzer, MD
Psychiatric Annals. 2002;32(9):509-515

Summary - Treatment

❖ What is disrupting homeostasis?
  ➢ The “4 P’s”
    ✓ Predisposing
    ✓ Provoking
    ✓ Perpetuating
    ✓ Protective

❖ Treatment:
  ➢ Use evidence-based therapies
  ➢ Address immediate needs
  ➢ What are your patient’s goals of care?
  ➢ Apply core geriatric principles
How does this framework play out in real life?

❖ Case example –
73-year-old with Parkinson’s and MDD

Try to get as good of a diagnosis as you can

❖ Agreed with MDD, further characterized:
   ➢ 1st episode – onset after Parkinson’s disease
   ➢ Prolonged course (>1yr)
   ➢ Melancholic features
   ➢ Suicidal ideation + with recent near miss episode
   ➢ Rx resistant (SSRI, bupropion)
   ➢ No other psychiatric illness
   ➢ Other concerns: polypharamcy w/ eszopiclone and modafinil
What is the homeostasis disturbance?

- **Predisposing:**
  - Parkinson’s disease

- **Provoking:**
  - difficulty accepting functional limitations, conflict with self/spouse

- **Perpetuating:**
  - Default passive role in medical care
  - Polypharmacy → eszopiclone, modafinil

- **Protective:**
  - Favorable social determinants of health
  - Otherwise pretty healthy & functionally intact
Treatment plan

❖ Medications:
  ➢ START venlafaxine monotherapy -- aim for 225 mg
  ➢ Discuss option of ECT
  ➢ STOP bupropion, escitalopram, modafinil, and eszopiclone

❖ Address suicide risk
  ➢ Remove firearms, make a safety plan, involve family
  ➢ Routine candid discussions about my risk assessment

❖ Individual therapy with me:
  ➢ Identifying expectations, strengths, weakness, goals of care
  ➢ ACT skills and education about MDD and Parkinson’s

❖ Specialty psychotherapy referral:
  ➢ Couples counseling focused on effective adaptation to Parkinson’s

Evidence-based interventions
most immediate needs
geriatric principles
patient’s goals of care
Outcome:

6 months later - Doing well!

Major Depressive Disorder episode is in remission

Still has Parkinson's Disease, including apathy and cognitive impairment

Normal thoughts and feelings --> sometimes echo his depression

Case

Some things I could have done better?

Monitor symptoms with standardized tools

Collaborative care model

Incorporate exercise more deliberately
SUMMARY

Thank you!

For additional reading:

Geriatric Depression A Clinical Guide.

Depression Among Older Adults: A 20-Year Update on Five Common Myths and Misconceptions.

Disruption of Neural Homeostasis as a Model of Relapse and Recurrence in Late Life Depression.

Mechanisms and treatment of late-life depression.

Depression and Other Mood Disorders.

Management of Depression in Older Adults: A Review.
Ben Braus, MD, MPH
Minneapolis VA Medical Center
Benjamin.Braus@va.gov

Questions or Comments:
contact info@mngero.org

Next Webinar: September TBD
How Senior Centers are Evolving with Covid 19
Laura Hood, MGS Board of Directors