Depression in Older Adults

David Sultzer, MD
UCLA Neuropsychiatric Institute
VA Greater Los Angeles Healthcare System
Melancholia
Depression in Older Adults

- Phenomenology
- Evaluation Strategy
- Treatment
- Interaction with Dementia
Depression in Older Adults

- Common
- Disability
- Morbidity and mortality
- Costs
  - Healthcare utilization
  - Medication use
Depressive Symptoms in the Elderly

- Major Depression
- Bipolar Disorder, depressed
- Dysthymia
- Mood Disorder Due to a Medical Condition
- Substance-induced Mood Disorder
- Adjustment Disorder with Depressed Mood
- Other:
  - Minor depression
  - Mixed anxiety-depressive disorder
  - Bereavement
  - Loss
  - Personality
Major Depressive Episode – DSM-IV

- At least 5 symptoms for 2 weeks:
  - Depressed mood
  - Fatigue or loss of energy
  - Reduced interest or pleasure
  - Worthlessness or guilt
  - Appetite change
  - Poor concentration
  - Sleep change
  - Thoughts of death
  - Psychomotor retardation or agitation

- Clinically significant distress or impairment in social/occupational functioning
- Not due to the direct physiological effect of drug or medical condition
- Not bereavement
Epidemiology
Depression in Older Adults

- Major Depression
  Women: 1 - 4%
  Men: 0.5 - 2%
- Dysthymic Disorder: 2%
- Adjustment Disorder, Depressed: 4%
- Other: ~10%
Special Populations
Depression in Older Adults

Medical Outpatients: 20%
Medical Inpatients: 35%
Long-Term Care Facilities: 45%+
Late-Life Depression Causes and Effects

- Medical Conditions
- Disability
- Psychosocial Stressors
- Genetics
- Neurochemistry

- Suicide
- Anxiolytic Dependence Or Alcoholism
- Cognitive Impairment
- Disability
- Medical Symptoms
- Healthcare Utilization
- Mortality
- Poor Compliance

Adapted from Geriatric Psychiatry Alliance
Health Care Costs Associated With Depression

Unutzer et al. 1997
Suicide
Depression in the Older Adults

• 2X frequency of general population
• Attempts: women, OD or laceration
• Completers: men, white, guns or hanging
• Physical illness, loss, late-onset depression, first episode
• Greater association with depression in elderly
Late-Life Suicide
Recent contact with physician

35% → Visited primary care physician within 7 days

75% → Visited primary care physician within 30 days

14% → Received psychiatric care within 15 years
Late-Onset Depression vs. Early-Onset, Now Older

- Fewer with family history
- Suicide risk
- Similar rate of treatment response
- More often with residual symptoms and recurrence
- Cognitive impairment
High-Risk Medical Conditions
Depression in the Elderly

- Alcohol abuse
- Stroke
- Parkinson’s disease
- Alzheimer’s disease
- Vascular dementia
- Delirium

- Other medical conditions:
  - Cardiac disease
  - Pancreatic cancer
  - Hypothyroidism

- Medications
  - Steroids
  - Cardiac/antihypertensive
  - Benzodiazepines
  - Opioids
  - Others
Depression in Older Adults

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Is Late-Life Depression Recognized and Treated?
Primary Care Settings

- $< 50\%$ of those with a depressive syndrome are identified
- $< 50\%$ of those identified receive any treatment
- $50\%$ of those treated receive treatment for an adequate period of time

Also, many with early dose reduction or discontinuation

Mulsant
Distinctive Diagnostic Features
Depression in the Elderly

• Look for -
  - Somatic concerns or chronic pain
  - Anxiety
  - Memory impairment: forgetful, aware
  - Motor slowing
  - Excessive functional disability
  - Men: anger, apathy, anhedonia without sadness
  - Women: somatic symptoms, sadness

• Remember -
  - Depression associated with medical illness is not only due to disability
Depression vs. Medical Illness

Physical Symptoms

- When depression is prominent, physical symptoms aren’t well-explained by medical illness or treatment
- **Less likely** to be depression, when:
  - Looks forward to some things, e.g. family
  - Responds to affection
  - Some interests are present
  - Participates in therapy and engaged in the treatment process
  - Acknowledges specific links to medical illness
Screening & Rating Scales

• A question:
  Are you feeling down, depressed, or hopeless over the past couple weeks?

• Followup:
  What do you enjoy?
  What do you look forward to?

• Rating Scales
  Geriatric Depression Scale
  Beck Depression Inventory
  PHQ-9
Depression in Older Adults

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Therapeutic Options
Depression in Older Adults

- Eliminate causal factors
- Education
- Psychotherapy
- Pharmacotherapy
- ECT
Education
Depression in Older Adults

- Not a character defect
- Treatment works
- Treatment takes awhile to work
- Treatment plan is long-term: remission and staying well
- Beware recurrence
Psychotherapy

- Supportive relationship
- Cognitive – behavioral therapy
- Problem-solving therapy
- Interpersonal therapy
- Consider when:
  - Patient preference
  - Diagnosis other than major depression
  - Medication sensitivity
  - Combined treatment model
Psychotherapy + Medication
Maintenance Treatment for Depression

- Acute and continuation rx → stable
- Maintenance rx x 3 years
- IPT ≅ nortrip at 1 year
- Older age more vulnerable to recurrence in all groups, except combined rx

Reynolds 1999
Antidepressant Treatment Principles

- Identify specific target symptoms
- Choose a medication based on
  - Previous response
  - Target symptoms
  - Side effect profile
  - Likely adherence

- \text{START}_{\text{low}}, \text{GO}_{\text{slow}}
- Underdosing is common in primary care settings
- Education
# SRIs

<table>
<thead>
<tr>
<th></th>
<th>Usual starting dose</th>
<th>Usual dose*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Citalopram</td>
<td>10mg/day</td>
<td>20-40 mg/day</td>
</tr>
<tr>
<td>Escitalopram</td>
<td>5-10mg/day</td>
<td>10-20mg/day</td>
</tr>
<tr>
<td>Sertraline</td>
<td>25mg/day</td>
<td>50-200 mg/day</td>
</tr>
<tr>
<td>Paroxetine</td>
<td>10mg/day</td>
<td>10-30 mg/day</td>
</tr>
<tr>
<td>Fluoxetine</td>
<td>10mg/day</td>
<td>10-30 mg/day (long T½)</td>
</tr>
</tbody>
</table>

**Notable side effects:** nausea, diarrhea, anorexia, insomnia, fatigue, anxiety, sexual dysfunction, hyponatremia, drug interactions

* Usual doses are reduced by about 25% in those with multiple medical illnesses
**Other Antidepressants**

<table>
<thead>
<tr>
<th>Drug</th>
<th>Initial dose</th>
<th>Usual dose</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bupropion</strong></td>
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<tr>
<td>Wellbutrin IR, SR, XL</td>
<td>100 mg/day</td>
<td>150-300 mg/day</td>
<td>Anxiety, insomnia; seizure risk at high dose</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>BID if SR&gt;150mg</td>
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<tr>
<td><strong>Mirtazepine</strong></td>
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<td></td>
</tr>
<tr>
<td>Remeron</td>
<td>15 mg/day</td>
<td>15-30 mg/day</td>
<td>Sedation, weight gain?</td>
</tr>
<tr>
<td><strong>Venlafaxine</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Effexor XR</td>
<td>37.5 mg/day</td>
<td>75-225 mg/day</td>
<td>Nausea, dizziness, ↑BP (rare)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Higher doses, if rx resistant</td>
</tr>
<tr>
<td><strong>Duloxetine</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cymbalta</td>
<td>20 mg/day</td>
<td>30-60 mg/day</td>
<td>Can rx BID, ↑BP (rare)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>GI effects, hyponatremia</td>
</tr>
<tr>
<td><strong>Phenelzine</strong></td>
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<td></td>
</tr>
<tr>
<td>Nardil</td>
<td>15 mg/day</td>
<td>15-45 mg/day</td>
<td>MAO inhibitor – rarely recommended</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(BID or TID)</td>
<td>Hypotension, sedation, Food and drug interactions</td>
</tr>
</tbody>
</table>
# Tricyclic Antidepressants

**Usual dosage**

<table>
<thead>
<tr>
<th>Nortriptyline</th>
<th>50-100 mg/day (start 10-25 mg/day)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Titration required</td>
</tr>
<tr>
<td></td>
<td>Plasma level 50-100ng/ml</td>
</tr>
</tbody>
</table>

**Notable side effects:**

- Anticholinergic (constipation, tachycardia, urinary retention, dry mouth, cognitive impairment), cardiac conduction, hypotension, sedation
- Contraindicated if bundle branch block
Time Course of Clinical Response

- 2 weeks – Initial response
- 4 weeks – Substantial response
- 8-12 weeks – Maximal benefit

- Maintenance
  - 9-12 months minimum treatment
  - Full dosage
  - Relapse risk up to 70% if early discontinuation
Insufficient Treatment Response

- Adherence?
- ↑ time, ↑ dose
- Change meds
- Augment
- ECT

NIMH STAR*D
Brain Stimulation Treatments

- Electroconvulsive therapy (ECT)
- Vagus nerve stimulation (VNS)
- Repetitive transcranial magnetic stimulation (rTMS)
Depression in Older Adults

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Many older patients with major depression have reversible cognitive deficits

**Typical features** -
- Memory complaints
- Poor concentration
- Forgetful
- Poor executive skills (may predict poorer outcome)
- Effort-dependent performance
Major Depression with Cognitive Deficits
- Outcome -

Depression with Cognitive Impairment
Depression Alone

Alexopoulos et al. 1993
Risk for Subsequent Cognitive Decline in Patients with Depression

![Relative Risk Graph]

- Case-Control Studies
- Cohort Studies

- Jorm 1991
- Speck 1995
- Dufouil 1996
- Devanand 1996
- Bassuk 1998

- Relative Risk

- <10y
- >10y

- 3y
- 6y
- 12y
Depression in Alzheimer’s Disease vs. Vascular Dementia

Sultzer et al. 1993

Matched for age, education, and cognition
Mean MMSE= 19.4
Mood and neurovegetative symptoms on HamD
Who cares about apathy?

A fundamental aspect of Alzheimer’s disease
Occurs early in AD
Not strongly associated with dysphoria
May respond to cholinesterase inhibitor treatment
Apathy is associated with low metabolic rate, adjusted for MMSE effects

Marshall et al. 2007
Depression in Older Adults

- Common, not universal
- Variable symptoms
- Linked to medical and social morbidity
- Treatment works
- Long-term monitoring is important
- Cognitive deficits occur in depressive disorders
- Mood symptoms occur in cognitive disorders