HIV & The Treatment of Depression

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Disclosures

I have no conflicts of interest or relationships to disclose
Data Considerations

Data in this presentation offer a limited perspective of how systemic, social, and economic factors impact health. We recognize that racism, not race, creates and perpetuates health disparities.

To Learn More:
https://www.cdc.gov/minorityhealth/racism-disparities
Objectives

- Describe the burden of depression in people with HIV (PWH)
- List some of the validated screeners for depression in the primary care setting
- Describe the general treatment algorithm for depression
Depression and HIV Infection

• Depression is the most common psychiatric comorbidity among PWH

• Prevalence of depression among PWH is 3 times greater than the general population

• Past month prevalence of depression ranges between 21% to 25.6%

• Consequences of Untreated Depression on HIV Care
  - Lower antiretroviral adherence (2x greater risk than non-depressed PWH)
  - Increased odds of dropping out of care
  - Length of depressive episode increases risk losing viral suppression
Screening for Depression

• Patient Health Questionnaires
  - PHQ-2/PHQ-9
  - PHQ-2 = Items 1 & 2 of PHQ-9 = cardinal symptoms of depression
  - Validated in many medical settings including HIV Clinics
  - 4-point Likert Scale
  - Patient self report

• Geriatric Depression Scale (GDS-30 and GDS-15)
  - Validated in adults 65 and older; and PWH
  - Less focus on somatic symptoms than other screeners which may be a benefit in PWH
  - Somewhat more sensitive and specific than PHQ-9
  - Lacks suicidality question
  - Yes/No Scale
  - Patient self-report
## PHQ-9

Over the **last 2 weeks**, how often have you been bothered by any of the following problems?

<table>
<thead>
<tr>
<th>Problem</th>
<th>Not at all</th>
<th>Several Days</th>
<th>More than half the days</th>
<th>Nearly everyday</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Little interest or pleasure in doing things</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2. Feeling down, depressed, or hopeless</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3. Trouble falling asleep or staying asleep</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4. Feeling tired or having little energy</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5. Poor appetite or overeating</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>6. Feeling bad about yourself – or that you are a failure or have let yourself or your family down</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>7. Trouble concentrating on things, such as reading the newspaper or watching television</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>8. Moving or speaking so slowly that other people could have noticed. Or the opposite – being so fidgety or restless that you have been moving around a lot more than usual</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>9. Thoughts that you would be better off dead or of hurting yourself in some way</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>No.</td>
<td>Question</td>
<td>Answer</td>
<td>Score</td>
<td></td>
</tr>
<tr>
<td>-----</td>
<td>--------------------------------------------------------------------------</td>
<td>--------</td>
<td>-------</td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Are you basically satisfied with your life?</td>
<td>YES / NO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Have you dropped many of your activities and interests?</td>
<td>YES / NO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Do you feel that your life is empty?</td>
<td>YES / NO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Do you often get bored?</td>
<td>YES / NO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Are you in good spirits most of the time?</td>
<td>YES / NO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Are you afraid that something bad is going to happen to you?</td>
<td>YES / NO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Do you feel happy most of the time?</td>
<td>YES / NO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Do you often feel helpless?</td>
<td>YES / NO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Do you prefer to stay at home, rather than going out and doing new things?</td>
<td>YES / NO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>Do you feel you have more problems with memory than most people?</td>
<td>YES / NO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>Do you think it is wonderful to be alive?</td>
<td>YES / NO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>Do you feel pretty worthless the way you are now?</td>
<td>YES / NO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>Do you feel full of energy?</td>
<td>YES / NO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td>Do you feel that your situation is hopeless?</td>
<td>YES / NO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td>Do you think that most people are better off than you are?</td>
<td>YES / NO</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Severity Scores

<table>
<thead>
<tr>
<th>PHQ-9</th>
<th></th>
<th>GDS-15</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>0-4</td>
<td>No Depression</td>
<td>0-4</td>
<td>No Depression</td>
</tr>
<tr>
<td>5-9</td>
<td>Mild Depression</td>
<td>5-8</td>
<td>Mild Depression</td>
</tr>
<tr>
<td>10-14</td>
<td>Moderate Depression</td>
<td>9-11</td>
<td>Moderate Depression</td>
</tr>
<tr>
<td>15-19</td>
<td>Moderate-Severe Depression</td>
<td>12-15</td>
<td>Severe Depression</td>
</tr>
<tr>
<td>20-27</td>
<td>Severe Depression</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Scores are only indicative of severity; clinical judgement must be utilized.
### SIG E CAPS in Persons with HIV

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>S</td>
<td>Sleep changes (↑or↓)</td>
<td>70% of PWH suffer from insomnia</td>
</tr>
<tr>
<td>I</td>
<td>Decreased Interest (Anhedonia)</td>
<td></td>
</tr>
<tr>
<td>G</td>
<td>Guilt / Worthlessness</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>Low Energy / Fatigue</td>
<td>Fatigue is one of the most common complaints in PWH. Fatigue is more common in clinical AIDS, depression, and low hemoglobin. Fatigue remains common in virally suppressed PWH. Fatigue can be a complication of antiretroviral medications.</td>
</tr>
<tr>
<td>C</td>
<td>Decreased Concentration</td>
<td>Concentration deficits can be related to HIV disease severity</td>
</tr>
<tr>
<td>A</td>
<td>Appetite Changes (↑or↓)</td>
<td>Decreased appetite common in PWH who are not virally suppressed; some antiretroviral medications may decrease appetite</td>
</tr>
<tr>
<td>P</td>
<td>Psychomotor Changes</td>
<td>Psychomotor slowing is common in HAND; especially in gait velocity, finger tapping, and manual dexterity</td>
</tr>
<tr>
<td>S</td>
<td>Suicidality</td>
<td>PWH are 100x more likely to die by suicide than the general population</td>
</tr>
</tbody>
</table>
Make the Diagnosis of Major Depressive Disorder

- Exclude differential diagnoses that could mimic MDD
- Perform a mental status exam
- Perform a focused physical exam
- Assess for suicide risk
- Evaluate for psychiatric co-morbidities such as substance use

Assess severity of episode

- Mild
  - Non-Pharmacological Modalities
    - Empathetic Listening/Supportive Psychotherapy
    - Guided Self-Help
    - Behavioral Activation
    - Sleep Hygiene
    - Referral to Psychotherapy &/or Community Interventions

- Moderate
  - Pharmacotherapy ≈ Psychotherapy
    - Non-Pharmacological Modalities
      - Empathetic Listening/Supportive Psychotherapy
      - Guided Self-Help
      - Behavioral Activation
      - Sleep Hygiene
      - Referral to Psychotherapy &/or Community Interventions

- Severe
  - Pharmacotherapy
  - Referral to Psychiatry Services

Evidence Based Treatment of Depression

**STAR*D Algorithm**

- **Level 1**
  - **Initial treatment:** citalopram

- **Level 2**
  - **Switch to:** bupropion (sustained-release), cognitive therapy, sertraline, venlafaxine (extended-release)
  - **Or augment with:** bupropion (sustained-release), buspirone, cognitive therapy

- **Level 2a**
  - (Only for those receiving cognitive therapy in level 2)
  - **Switch to:** bupropion (sustained-release) or venlafaxine (extended-release)

- **Level 3**
  - **Switch to:** mirtazapine or nortriptyline
  - **Or augment with:** lithium or nortriptyline (only with bupropion [sustained-release], sertraline, venlafaxine [extended-release])

- **Level 4**
  - **Switch to:** tranylcypromine or mirtazapine combined with venlafaxine (extended-release)

Start Antidepressant
- Titrate to recognized therapeutic dose
- Assess efficacy after 4 weeks (Anxiety and Irritability may be first sx's to improve)

No Effect or Partially Effective
- Assess weekly for further 2-3 weeks
  - If still no response, increase dose
  - Increase to maximum tolerated, effective dose before switching

Effective
- Continue for 6-9 months at full effective dose
  - Consider longer-term treatment for recurrent depression
  - Lifelong treatment may be required for ≥2 MDEs or tx refractory depression

Not Tolerated
- Switch to a different antidepressant
  - Titrate to therapeutic dose
  - Assess efficacy over 3-4 weeks


At every stage of “Not Effective,” review diagnosis to ensure your diagnosis is correct.
First Line Antidepressant Agents

SSRIs
- Fluoxetine
- Sertraline
- Escitalopram
- Citalopram

SNRIs
- Venlafaxine
- Desvenlafaxine
- Duloxetine

Atypicals
- Bupropion
- Mirtazapine
- Vortioxetine
- Vilazodone

To be continued in part 2
Questions?
Acknowledgment

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