8th International Conference on HIV Treatment and Prevention Adherence

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International Association of Providers of AIDS Care

NIMH
National Institute of Mental Health

PIM
Postgraduate Institute for Medicine
Psychiatric Comorbidity in Depressed HIV Individuals: Common and Clinically Consequential

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Disclosure

- I have no real or apparent conflicts of interest to report
Acknowledgement

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Introduction

• Single psychiatric disorders have been associated with decreased access to highly active antiretroviral therapy (HAART) and poor antiretroviral adherence

• Yet, for many individuals with mental illness, having more than one psychiatric diagnosis concurrently is common
There is limited literature addressing the effect of psychiatric comorbidity on HIV management and outcomes.

Of particular concern is the association of unmanaged psychiatric illness with nonadherence to HAART and the potential development of antiretroviral-resistant HIV.
Aims

• To describe the prevalence of comorbid psychiatric disorders in a representative sample of HIV outpatients with MDD

• To identify sociodemographic and clinical/behavioral features associated with the number of concurrent psychiatric conditions
Methods

- Strategies to **Link Antidepressant and Antiretroviral Management at Duke, UAB, and UNC**
- NIMH-funded R01, 2009-2014 (PIs: Pence, Gaynes)
- RCT to test the effect of depression treatment on ARV adherence
SLAM DUNC Study

Population: HIV clinic attendees with current major depression

Selection Criteria

- 18-65 years old
- On ART, or expected to start soon
- No current substance disorder requiring inpatient treatment
- No failure to respond to $\geq2$ different antidepressants during the current episode
- No confirmed history of bipolar disorder or psychosis
Exposure: Psychiatric comorbidity

• Mini-International Neuropsychiatric Interview
  – Dysthymia
  – Anxiety disorders
    • Panic Disorder
    • Generalized Anxiety Disorder
    • Posttraumatic Stress Disorder
  – Substance use disorders
    • Alcohol dependence/abuse
    • Substance dependence/abuse
Associated variables of interest

• Sociodemographic measures
• Clinical/behavioral measures
  – Adherence
    • Baseline self report
    • 1 month pill count
  – HIV symptom count (self report)
  – Unprotected Sex (self-report)
  – Viral load
• We report data on the first 231 enrolled HIV patients with MDD
Results:
Complicated depression was common

- No comorbidity: 19%
  - Single episode MDD = 4%
  - Recurrent MDD = 15%
- Any comorbid dysthymia: 55%
- Any comorbid anxiety disorder: 58%
- Any comorbid substance use disorder: 28%
- All three: 8%
- Both substance use and anxiety: 14%
Full Study Population (n=203)

- Major depression, nonchronic, no comorbidities: N=42 (19%)
- Dysthymia: N=20 (9%)
- Substance use Disorder: N=18 (8%)
- Any Anxiety Disorder: N=48 (22%)

- Any Anxiety Disorder: N=49 (22%)
- N=17 (8%)
- N=13 (6%)

- N=42 (19%)
- N=13 (6%)
- N=18 (8%)
- N=49 (22%)
- N=17 (8%)
- N=13 (6%)
Multiple comorbidities were common

<table>
<thead>
<tr>
<th>Number of comorbidities</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>18%</td>
</tr>
<tr>
<td>1</td>
<td>31%</td>
</tr>
<tr>
<td>2</td>
<td>24%</td>
</tr>
<tr>
<td>3</td>
<td>19%</td>
</tr>
<tr>
<td>4</td>
<td>5%</td>
</tr>
<tr>
<td>5</td>
<td>3%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
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</table>
## Sociodemographic Features Associated with Comorbidity

<table>
<thead>
<tr>
<th># of Comorbidities</th>
<th>None</th>
<th>≥ 1</th>
<th>P value</th>
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</thead>
<tbody>
<tr>
<td>Female</td>
<td>73%</td>
<td>68%</td>
<td>0.496</td>
</tr>
<tr>
<td>Race (Caucasian)</td>
<td>20%</td>
<td>36%</td>
<td>0.045</td>
</tr>
<tr>
<td>Sexual Orientation (heterosexual)</td>
<td>46%</td>
<td>47%</td>
<td>0.941</td>
</tr>
<tr>
<td>High school education or less</td>
<td>46%</td>
<td>53%</td>
<td>0.346</td>
</tr>
<tr>
<td>Unemployed</td>
<td>59%</td>
<td>75%</td>
<td>0.030</td>
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Clinical/Behavioral Features Associated with Any Comorbidity

<table>
<thead>
<tr>
<th># of Comorbidities</th>
<th>None</th>
<th>≥ 1</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-reported adherence, BL (continuous)</td>
<td>86%</td>
<td>86%</td>
<td>0.988</td>
</tr>
<tr>
<td>Month 1 pill count (continuous)</td>
<td>88%</td>
<td>90%</td>
<td>0.51</td>
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<tr>
<td>Mean # of HIV symptoms</td>
<td>3.9</td>
<td>5.5</td>
<td>0.006</td>
</tr>
<tr>
<td>SF-12 score (physical component)</td>
<td>47</td>
<td>43</td>
<td>0.053</td>
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</tbody>
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Clinical/Behavioral Features Associated with Substance Abuse

<table>
<thead>
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<th>Substance Abuse Comorbidity</th>
<th>No</th>
<th>Yes</th>
<th>P value</th>
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</thead>
<tbody>
<tr>
<td>Any protected sex</td>
<td>15%</td>
<td>29%</td>
<td>0.04</td>
</tr>
<tr>
<td>HIV RNA VL &gt;48 copies/ml</td>
<td>34%</td>
<td>48%</td>
<td>0.06</td>
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Limitations

• Limited sample size

• Missing values

• Preliminary findings
Conclusions

• For HIV patients with MDD, chronic depression and psychiatric comorbidity are the rule rather than the exception

• This complexity is associated with greater HIV disease severity and worse prevention and treatment indicators

• Appreciating this comorbidity can help clinicians better target those at risk of harder-to-treat HIV disease, and underscores the challenge of treating depression in this population.
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<thead>
<tr>
<th>Duke</th>
<th>UNC</th>
<th>UAB</th>
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<tbody>
<tr>
<td>Brian Pence, MPH, PhD (PI)</td>
<td>Byrd Quinlivan, MD</td>
<td>Mike Mugavero, MD, MPH</td>
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<tr>
<td>Nathan Thielman, MD</td>
<td>Amy Heine, NP</td>
<td>Teena McGuinness, NP (Psychiatry)</td>
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<tr>
<td>Julie Adams, MD, MPH</td>
<td>Malaika Edwards, MA</td>
<td>Riddhi Modi, MBBS</td>
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<tr>
<td>Kristen Shirey, MD</td>
<td>Charita Montgomery</td>
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<tr>
<td>Quinn Williams</td>
<td>Katya Roytburd, MPH</td>
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<td>Elise Nelson</td>
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<tr>
<td>Marcus Hawley</td>
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<td>Scotty Elliott, MSW</td>
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