Co-Occurring Mental Health Disorders in Patients with OUD

Presenter: Jason Ehret, MD
Dual Diagnosis: Scope of the Problem

- General pop, schizophrenia, bipolar, unipolar, dysthymia (ECA data early 1980’s) Regier et al. (JAMA, 1990)
- PTSD (NCS data early 1990’s) Kessler et al. (Arch. Gen Psy, 1995)
- All smoking data (1980 local outpt study), Hughes et al. (Am J Psy, 1986)

Dual Dx
- Majority
- Sickest
- Most homeless
- Most incarcerated
- Least adequately studied
- Least adequately treated

MI
SUDs

Lifetime Prevalence Substance Use Disorders

- ETOH abu/dep
- Illicit abu/dep
- Smoking
Lifetime Prevalence of Psychiatric Disorders: General Population vs OUD

Lifetime Prevalence of Substance Use Disorders: General Population vs OUD

Psychiatric Disorders and Opioid Dependence Reciprocally Increase Risk

- **Pre-existing psychiatric disorders:**
  - Generalized anxiety disorder: 11x risk of developing opioid dependence
  - Bipolar I disorder: 10x risk of developing opioid dependence
  - Panic disorder: 7x risk of developing opioid dependence
  - Major depression: 5x risk of developing opioid dependence

- **Pre-existing opioid dependence:**
  - 9x risk of developing panic disorder
  - 5x risk of developing major depression
  - 5x risk of developing bipolar I disorder
  - 4x risk of developing generalized anxiety disorder

*Martins et al 2009*
Common Presentation

Methamphetamine Use

Bipolar Disorder

Anxiety

ADHD

Depression

PTSD

Trauma
Instructions:
In your life, have you ever had any experience that was so frightening, horrible, or upsetting that, in the past month, you:

1. Have had nightmares about it or thought about it when you did not want to?
   YES / NO

2. Tried hard not to think about it or went out of your way to avoid situations that reminded you of it?
   YES / NO

3. Were constantly on guard, watchful, or easily startled?
   YES / NO

4. Felt numb or detached from others, activities, or your surroundings?
   YES / NO
PHQ-9

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

<table>
<thead>
<tr>
<th></th>
<th>Not At all</th>
<th>Several Days</th>
<th>More Than Half the Days</th>
<th>Nearly Every Day</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, staying asleep, or sleeping too much</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're 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>Level of Depression Severity, PHQ-9 Score</td>
<td>Major Depressive Disorder (N = 41)</td>
<td>Other Depressive Disorder (N = 65)</td>
<td>No Depressive Disorder (N = 474)</td>
<td></td>
</tr>
<tr>
<td>------------------------------------------</td>
<td>-----------------------------------</td>
<td>-----------------------------------</td>
<td>---------------------------------</td>
<td></td>
</tr>
<tr>
<td>Minimal, 0–4</td>
<td>1 (2.4)</td>
<td>8 (12.3)</td>
<td>348 (73.4)</td>
<td></td>
</tr>
<tr>
<td>Mild, 5–9</td>
<td>4 (9.8)</td>
<td>23 (35.4)</td>
<td>93 (19.6)</td>
<td></td>
</tr>
<tr>
<td>Moderate, 10–14</td>
<td>8 (19.5)</td>
<td>17 (26.1)</td>
<td>23 (4.9)</td>
<td></td>
</tr>
<tr>
<td>Moderately severe, 15–19</td>
<td>14 (34.1)</td>
<td>14 (21.5)</td>
<td>8 (1.7)</td>
<td></td>
</tr>
<tr>
<td>Severe, 20–27</td>
<td>14 (34.1)</td>
<td>3 (4.6)</td>
<td>2 (0.4)</td>
<td></td>
</tr>
</tbody>
</table>

*Depression diagnostic status was determined in 580 primary care patients by having a mental health professional who was blinded to the PHQ-9 score administer a structured psychiatric interview.*
1. Has there ever been a period of time when you were not your usual self and...

<table>
<thead>
<tr>
<th>Question</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>...you felt so good or so hyper that other people thought you were not your normal self or you were so hyper that you got into trouble?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>...you were so irritable that you shouted at people or started fights or arguments?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>...you felt much more self-confident than usual?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>...you got much less sleep than usual and found that you didn't really miss it?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>...you were more talkative or spoke much faster than usual?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>...thoughts raced through your head or you couldn't slow your mind down?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>...you were so easily distracted by things around you that you had trouble concentrating or staying on track?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>...you had more energy than usual?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>...you were much more active or did many more things than usual?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>...you were much more social or outgoing than usual, for example, you telephoned friends in the middle of the night?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>...you were much more interested in sex than usual?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>...you did things that were unusual for you or that other people might have thought were excessive, foolish, or risky?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>...spending money got you or your family in trouble?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. If you checked YES to more than one of the above, have several of these ever happened during the same period of time?

3. How much of a problem did any of these cause you - like being unable to work; having family, money or legal troubles; getting into arguments or fights?

- No problems
- Minor problem
- Moderate problem
- Serious problem
Don’t Bring a Knife to a Gun Fight
Screening for bipolar disorders in patients with alcohol or substance use disorders: Performance of the Mood Disorder Questionnaire

Jan van Zaane, Belinda van den Berg, Stasja Draisma, Willem A. Nolen, Wim van den Brink

<table>
<thead>
<tr>
<th></th>
<th>BD</th>
<th>BPD</th>
<th>APD</th>
<th>ADHD</th>
<th>Any externalizing disorder</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Prevalence, n (%)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>31</td>
<td>23</td>
<td>31</td>
<td>48</td>
<td>98 (38)</td>
</tr>
<tr>
<td><strong>Sensitivity, (95% CI)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>.45 (.32–.48)</td>
<td>.30 (.16–.44)</td>
<td>1.00</td>
<td>.57 (.45–.69)</td>
<td>.59 (.49–.69)</td>
</tr>
<tr>
<td><strong>Specificity, (95% CI)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>.54 (.47–.61)</td>
<td>.77 (.70–.84)</td>
<td>.61 (.55–.67)</td>
<td>.60 (.53–.67)</td>
<td>.67 (.60–.74)</td>
</tr>
<tr>
<td><strong>False positives</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>.46</td>
<td>.23</td>
<td>.39</td>
<td>.40</td>
<td>.33</td>
</tr>
<tr>
<td><strong>False negatives</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>.55</td>
<td>.70</td>
<td>0.00</td>
<td>.43</td>
<td>.41</td>
</tr>
<tr>
<td><strong>PPV, (95% CI)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>.20 (.13–.27)</td>
<td>.11 (.05–.17)</td>
<td>.30 (.21–.39)</td>
<td>.35 (.26–.44)</td>
<td>.52 (.43–.61)</td>
</tr>
</tbody>
</table>
## Diagnostic Clues

### Bipolar Disorder
- Early onset depression < 25 years
- Multiple depressive episodes (> 5)
- 90% have recurrent MDEs
- MDEs vary in character (e.g. some episodes melancholic, some atypical)
- Seasonality (depressed late fall/winter; manic spring)
- Index mood episode can be postpartum
- Family history of bipolar disorder

### MDD
- Later onset depression > 25 years
- Fewer episodes
- 50% have recurrent MDEs
- MDEs similar in character
- Seasonal pattern less likely
- No bipolar history
Ruminating Thoughts

VS.

Racing Thoughts
**DSM Version:** DSM IV - TR

A. A distinct period of abnormally and persistently elevated, expansive, or irritable mood, lasting at least 1 week (or any duration if hospitalization is necessary).

B. During the period of mood disturbance, three (or more) of the following symptoms have persisted (four if the mood is only irritable) and have been present to a significant degree:
(1) inflated self-esteem or **grandiosity**
(2) decreased need for sleep (e.g., feels rested after only 3 hours of sleep)
(3) more talkative than usual or **pressure** to keep talking
(4) **flight of ideas** or subjective experience that thoughts are **racing**
(5) **distractibility** (i.e., attention too easily drawn to unimportant or irrelevant external stimuli)
(6) increase in goal-directed activity (either socially, at work or school, or sexually) or **psychomotor agitation**
(7) excessive involvement in pleasurable activities that have a high potential for painful consequences (e.g., engaging in unrestrained buying sprees, sexual indiscretions, or foolish business investments)
C. The symptoms do not meet criteria for a Mixed Episode.

D. The mood disturbance is sufficiently severe to cause marked impairment in occupational functioning or in usual social activities or relationships with others, or to necessitate hospitalization to prevent harm to self or others, or there are psychotic features.

E. The symptoms are not due to the direct physiological effects of a substance (e.g., a drug of abuse, a medication, or other treatment) or a general medical condition (e.g., hyperthyroidism).

Note: Manic-like episodes that are clearly caused by somatic antidepressant treatment (e.g., medication, electroconvulsive therapy, light therapy) should not count toward a diagnosis of Bipolar I Disorder.
Bipolar Disorder Spaghetti Model
Have you heard of tiny Melinda Mae,
Who ate a monstrous whale?
She thought she could,
She said she would,
So she started in right at the tail.
And everyone said, "You're much too small,"
But that didn't bother Melinda at all,
She took little bites and she chewed very slow,
Just like a good girl should...
...and in eighty-nine years she ate that whale
Because she said she would!
The 2 x 4 Model: A Neuroscience-based Blueprint for the Modern Integrated Addiction and Mental Health Treatment System

Adapted From: Chambers “The 2 x 4 Model”, Routledge/CRC press, New York, 2018
<table>
<thead>
<tr>
<th>Specialty SU Treatment Services (using Evidence-Based models)</th>
<th>Intensive outpatient treatment/day treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outreach teams</td>
<td>Outpatient treatment</td>
</tr>
<tr>
<td>Crisis stabilization facilities (short term crisis assessment/treatment facilities that serve MH and/or SU disorders)</td>
<td>Residential treatment</td>
</tr>
<tr>
<td>Crisis respite facilities (follow up to stabilization with brief 4-5 day stay while service plans are developed)</td>
<td>Aftercare/12 step groups</td>
</tr>
<tr>
<td>Sobering sites</td>
<td>Supportive recovery/peer-to-peer support (up to 18 months of continuing care after the episode)</td>
</tr>
<tr>
<td>Social detoxification/residential</td>
<td>Parent support groups</td>
</tr>
<tr>
<td>Outpatient medical detoxification</td>
<td>Youth support groups</td>
</tr>
<tr>
<td>Inpatient medical detoxification</td>
<td></td>
</tr>
<tr>
<td>Pre-treatment groups</td>
<td></td>
</tr>
<tr>
<td>Medication-assisted treatment (including methadone treatment)</td>
<td></td>
</tr>
</tbody>
</table>

**Housing Supports**
- Housing First
- Oxford Houses
- Transitional housing
- Low income sober housing
The problem -- We know (comorbidity)
The solution -- We know (integrated care)
Implementation is the challenge
The solution lies in integrated care – the coordination of mental health, substance abuse, and primary care services. Integrated care produces the best outcomes and is the most effective approach to caring for people with complex healthcare needs.
Dual Dx
- Majority
- Sickest
- Most homeless
- Most incarcerated
- Least adequately studied
- Least adequately treated
Co-Occurring Addictions and Mental Illness: “Dual Diagnosis Disorders”

Key Pearls:

1. With Opioid Addiction, having Complex Co-morbidities of Mental illness and Addiction is the Rule and not the exception

2. Causality between the Addiction and Mental illness is bidirectional. Opioid Use Disorders Biologically pre-dispose to Mental Illness Mental Illness Biologically pre-disposes to Acquiring addiction
www.integration.samhsa.gov
RA Chambers “The 2 x 4 Model”, Routledge/CRC press/Taylor and Francis, New York, 2018

Available ON Line (AMAZON/ Barnes and Noble/Routledge):

https://www.amazon.com/Model-Neuroscience-Based-Blueprint-Integrated-Addiction/dp/1138563854/ref=mt_paperback?_encoding=UTF8&me=&qid=

Or directly from the author (RA Chambers) with a 30% discount.
robchamb@iupui.edu
References


- Chambers, RA. The 2 x 4 Model: A Neuroscience-based Blueprint for the Modern Integrated Addiction and Mental Health Treatment System, Routledge/CRC Press/Taylor and Francis/New York 2018


- Grella CE, Karno MP, Warda US, et al. Gender and comorbidity among individuals with opioid use disorders in the NESARC study

- Hasin DS, Grant BF. The National Epidemiologic Survey on Alcohol andRelated Conditions (NESARC) waves 1 and 2: review and summary of findings. Soc Psychiatry Psychiatr Epidemiol 2015;50:1609-1640


• Li Y, Liu XB, Zhang Y. Acupuncture therapy for the improvement of sleep quality of outpatients receiving methadone maintenance treatment: a randomized controlled trial. Zhongguo Zhong Xi Yi Jie He Za Zhi 2012;32:1056-1069


References


• Schiff M, Nacasch N, Levit S, et al. Prolonged exposure for treating PTSD among female methadone patients who were survivors of sexual abuse in Israel. Soc Work Health Care 2015;54:687-707


