Opioid Dependence 101 and Medication Assisted Treatment

Dr. Joji Suzuki
Director of the Division of Addiction Psychiatry, Brigham & Women’s Hospital
Assistant Professor of Psychiatry, Harvard Medical School

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Comments & Questions?
Opioid Use Disorders and Medication-Assisted Treatment
I have no relevant conflicts of interest to disclose
Opioid Receptor Activity

- **Pain relief**
  - Moderate to severe pain
  - Dental pain
  - Injuries

- **Sedation**
  - Insomnia
  - Anxiety

- **Constipation**
  - Diarrhea

- **Cough suppression**
  - Respiratory illness
BAYER Pharmaceutical Products

HEROIN—HYDROCHLORIDE

is pre-eminently adapted for the manufacture of cough elixirs, cough balsams, cough drops, cough lozenges, and cough medicines of any kind. Price in 1 oz. packages, $4.85 per ounce; less in larger quantities. The efficient dose being very small (1/48 to 1/24 gr.), it is

The Cheapest Specific for the Relief of Coughs
(In bronchitis, phthisis, whooping cough, etc., etc.)

WRITE FOR LITERATURE TO

FARBENFABRIKEN OF ELBERFELD COMPANY
SELLING AGENTS
P. O. Box 2160
40 Stone Street, NEW YORK
Mostly subcortical: Automatic, can be outside of awareness

Panksepp, Affective Neuroscience

Slide Credit: Jim Hopper PhD
- **Loss of Control**
  - Inability (or persistent desire) to stop or reduce substance use

- **Cravings**
  - Strong psychological urge to use

- **Compulsive use**
  - Repeated, heavy use

- **Consequences**
  - Continued use despite knowledge of physical, psychological, and social consequences
Rapid increase in the non-medical use of psychotherapeutic medications since the early 90s
Pain relievers and marijuana most common drugs for new initiates (age 12 and older)
Source of misused prescription opioids

- Multiple doctors: 19%
- One doctor: 1%
- Drug dealer: 4%
- Internet: 0%
- Other: 5%
- Bought or stolen from friend or family: 15%
- Free from friend or family: 56%
Initial source of misused opioids

- One doctor: 81%
- Bought/taken from family/friend: 5%
- Free from family/friend: 7%
- More than one doctor: 3%
- Drug dealer: 2%
- Other: 2%
## Top leading causes of death by age group (2012)

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<thead>
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<th>&lt;1</th>
<th>1-4</th>
<th>5-9</th>
<th>10-14</th>
<th>15-24</th>
<th>25-34</th>
<th>35-44</th>
<th>45-54</th>
<th>55-64</th>
<th>65+</th>
<th>Total</th>
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<td>Accidental deaths</td>
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<td>Suicides</td>
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</table>
Poisoning now the leading cause of accidental death

Deaths per 100,000

Motor vehicle accident
Poisoning
Drug induced overdoses
## Heroin use increasing in most populations

<table>
<thead>
<tr>
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<th>2002-2004</th>
<th>2011-2013</th>
<th>% change</th>
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<tbody>
<tr>
<td><strong>Sex</strong></td>
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<tr>
<td>Male</td>
<td>2.4</td>
<td>3.6</td>
<td>+50%</td>
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<tr>
<td>Female</td>
<td>0.8</td>
<td>1.6</td>
<td>+100%</td>
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<tr>
<td><strong>Age (years)</strong></td>
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<td>12-17</td>
<td>1.8</td>
<td>1.6</td>
<td>-11%</td>
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<tr>
<td>18-25</td>
<td>3.5</td>
<td>7.3</td>
<td>+109%</td>
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<tr>
<td>&gt;25</td>
<td>1.2</td>
<td>1.9</td>
<td>+58%</td>
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<tr>
<td><strong>Race/ethnicity</strong></td>
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<td></td>
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<tr>
<td>Non-Hispanic white</td>
<td>1.4</td>
<td>3.0</td>
<td>+114%</td>
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<tr>
<td>Other</td>
<td>2.0</td>
<td>1.7</td>
<td>-15%</td>
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<tr>
<td><strong>Annual income</strong></td>
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<tr>
<td>&lt;20K</td>
<td>3.4</td>
<td>5.5</td>
<td>+62%</td>
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<tr>
<td>20K-&lt;50K</td>
<td>1.3</td>
<td>2.3</td>
<td>+77%</td>
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<tr>
<td>&gt;50K</td>
<td>1</td>
<td>1.6</td>
<td>+60%</td>
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<tr>
<td><strong>Insurance</strong></td>
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<td></td>
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<tr>
<td>None</td>
<td>4.2</td>
<td>6.7</td>
<td>+60%</td>
</tr>
<tr>
<td>Medicaid</td>
<td>4.3</td>
<td>4.7</td>
<td>+9%</td>
</tr>
<tr>
<td>Private</td>
<td>0.8</td>
<td>1.3</td>
<td>+63%</td>
</tr>
</tbody>
</table>
Heroin addiction and overdose deaths are increasing.

- Heroin Addiction: +100%
- Heroin Overdose: +286%
Drug users utilize hospitals at high rates

55.6
37.5
27.5
24.5

58,243 drug users in NY Medicaid program (Laine et al 2001)
12% of Americans have diabetes.
Any diabetes treatment: 84%
No treatment: 16%
10% of Americans have a mood disorder in a given year.
10% of Americans have a substance use disorder in a given year.
Any addiction treatment: 91%
No treatment: 9%
1) Buprenorphine BLOCKS other agonists: HIGH affinity and SLOW dissociation
2) Buprenorphine is a partial agonist
Percent of doses taken (choice between money or heroin)
Percent positive urine tests

- Methadone
- Buprenorphine

Detoxification (Strain 1994)
Treatment retention: buprenorphine vs. placebo, with intensive psychosocial support.

Buprenorphine
Placebo

Kakko 2003

4/20 subjects dead in placebo group by end of the study.
Conclusions

• Opioids are an important part of our pharmacotherapy options to treat pain

• Addiction is a chronic brain disease, not an acute illness

• Over-prescribing and diversion are big drivers of the current epidemic of opioid addiction and overdoses

• Access to treatment is limited in many places

• Effective treatments are available, and medication-assisted treatment is gold standard
What is PCSS-MAT?

The Providers’ Clinical Support System for Medication Assisted Treatment is a three-year grant funded by SAMSHA in response to the opioid overdose epidemic.

PCSS-MAT is a national training and mentoring program developed to educate healthcare professionals on the use and availability of the latest pharmacotherapies.
PCSS-MAT Target Audience

• The overarching goal of PCSS-MAT is to make available educational and training resources on the most effective medication-assisted treatments to serve patients in a variety of settings, including primary care, psychiatric care, and pain management settings.
PCSS-MAT Training Modalities

PCSS-MAT offers no-cost training activities with CME to health professionals through the use of:

- **Webinars** (Live and Archived)
- **Online Modules**
- **Case Vignettes**
- **Buprenorphine Waiver Trainings**
- **One-on-one and Small Group Discussions**—coaching for clinical cases

In addition, PCSS-MAT offers a comprehensive library of resources:

- **Clinical Guidances and other educational tools**
- **Community Resources**
- **Listserv** - Provides a “Mentor on Call” to answer questions about content presented through PCSS-MAT. To join email: pcssmat@aaap.org
PCSS-MAT Mentoring Program

• Designed to offer general information to clinicians about evidence-based clinical practices in prescribing medications for opioid addiction.

• A national network of trained providers with expertise in medication-assisted treatment, addictions and clinical education.

• 3-tiered mentoring approach allows every mentor/mentee relationship to be unique and designed to the specific needs of both parties.

• The mentoring program is available at no cost to providers.

For more information to request or become a mentor visit: pcssmat.org/mentoring
PCSS-MAT Program Highlights

- 98 webinars and online modules with 22,399 training participants
- 175 Buprenorphine waiver trainings with 2,768 training participants
- 54 clinicians have participated in Small Group Discussions within mentoring program (new initiative starting 2015)
- 59 mentors and 123 mentees and growing

*Mentee Feedback*

“I wanted to compliment my Mentor. I sent an email to him with a question…and within four hours I had not only his response but the input of four of his peers. This is a great service for those of us who are stretching the edges of what we would otherwise consider ‘comfortable.’”

– William Roberts, MD, Medical Director, Northwestern Medical Center Comprehensive Pain Management

*All figures as of 8/20/2015*
PCSS-MAT is a collaborative effort led by American Academy of Addiction Psychiatry in partnership with: American Osteopathic Academy of Addiction Medicine, American Psychiatric Association, American Society of Addiction Medicine and Association for Medical Education and Research in Substance Abuse.

For more information visit: www.pcssmat.org
For questions email: pcssmat@aaap.org

Twitter: @PCSSProjects
Comments & Questions?
Fall Webinar Series

Making the Case: How MAT Improves Mental Health Care for those with Opioid Dependence
October 6, 2015, 1:00 PM ET

Join Dr. Hilary Connery – Assistant Professor in the Department of Psychiatry at the Harvard Medical School and Clinical Director for McLean Hospital Division of Alcohol and Drug Abuse – to learn more about MAT’s contribution to improved mental health care and outcomes for individuals with mental illnesses and opioid dependence and successful modalities for mental health and MAT coordination and integration.

MAT Roundtable: Lessons Learned from CBHOs Implementing MAT for Opioid Dependence
November 17, 2015, 12:30 PM ET

During this roundtable, join leaders in community behavioral health – including Lynn Fahey, CEO of Brandywine Counseling and Community Services and Raymond Tamasi, President and CEO of Gosnold on Cape Cod – who will share their organizations’ experiences with successful and replicable models of mental health and MAT integration.

To register, visit: http://www.thenationalcouncil.org/events-and-training/webinars/
For more information, contact Jake Bowling, at JakeB@thenationalcouncil.org
Thank you!