Opioid Dependence in Criminal Justice Populations: *Treatment Matters*

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Public Matters
What are opioids?

- Opioids are substances chemically related to opium that act on the brain’s opioid receptor.

- These brain receptors regulate instinctual drives – hunger, thirst, sex, pain.

- Opioids include *Illicit substances* such as heroin.

- Opioids include *Prescription Drugs* such as Vicodin, Oxycotin, MS Contin, Dilaudid, Demerol etc.
Why does it matter?

- Opioid dependence is a large and growing public health problem – sparing no group.
  
  - 2 million new people admit abusing opioids every year.

- One in ten high school seniors report having abused opioids at least once in the past year.
How do the number of deaths from opioids compared to motor vehicle fatalities and homicides?
Cost Matters
What are the costs?

- Costs of heroin alone.
  
  estimated at $15-20,000,000,000 (1996).

  - 40% Crime-related (e.g. shop lifting)
  - 40% Medical costs (Medicaid and private insurance)
  - 10% Lost employment
  - 10% Treatment

- Human costs (individual and family suffering) are not calculable.
How do opioids act on the brain?

- The brain produces its own natural opioids including endorphins, enkaphalins, and dynorphins.

- These brain chemicals help regulate motivation, instinctual urges, emotion and response to pain.

- Natural brain opioids bind to the brain’s opioid receptors (lock and key).
What makes opioid dependence a brain disease?

- Opioid receptors in the brain respond to opioid drugs in the same way they do to the brain’s natural opioids, just more vigorously.

- Repeated powerful jolts from potent opioid drugs (that displace natural opioids) eventually produce lasting corruption of brain reward pathways – producing a Zombie like brain.

- Dependence develops when the brain adapts to the repeated drug exposure and only function normally in the presence of the drug.
The hijacked brain

• The brain’s natural opioid system is hijacked – focused on acquiring and ingesting opioids.

• Normal brain instinctual/motivational pathways are subverted.

• All of the brain’s resources become fixated on a single, zombie-like, automaton purpose – acquiring and using opioids – by any means necessary.
### Opioid dependence and diabetes, compared

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<thead>
<tr>
<th>Contribution of Genetic factors</th>
<th>Opioid Dependence</th>
<th>Diabetes</th>
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<tbody>
<tr>
<td>50% of risk</td>
<td>50% of risk</td>
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<tr>
<th>Behavioral risk factors</th>
<th>Opioid Dependence</th>
<th>Diabetes</th>
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<tr>
<td>Repeated abuse of opioids</td>
<td>Repeated over eating</td>
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<td>Stress</td>
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<tr>
<th>Long-term effects</th>
<th>Opioid Dependence</th>
<th>Diabetes</th>
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<tr>
<td>Blunted brain response to natural opioids</td>
<td>Blunted cell response to insulin</td>
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<table>
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<tr>
<th>Effect on health if untreated</th>
<th>Opioid Dependence</th>
<th>Diabetes</th>
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<tbody>
<tr>
<td>High risk of early death and other complications</td>
<td>High risk of early death and other complications</td>
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<tr>
<th>Social attitudes</th>
<th>Opioid Dependence</th>
<th>Diabetes</th>
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<td>Stigma</td>
<td>Compassion</td>
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What makes opioid dependence so difficult to treat without medication?

Opioid dependence – double whammy

- Psychological dependence.

- Physical (physiological) dependence.
Psychological dependence—“chemical brain control”

- **Obsession**
  - Repetitive, unrelenting, intrusive, thoughts of use.
  - Endless DVD played over and over again in brain.
  - Same theme acquiring and using as much opioids as possible.

- **Compulsion-automaton-like behavior**
  - Overwhelming cravings and urges to obtain and use opioids.
  - Seemingly mindless behavior – use despite adverse consequences - loss of health, family disruption and pain, loss of job, bankruptcy or threat of imprisonment.
Physical dependence-enforced opioid-seeking

- **Punishment for failing to comply.** Gut wrenching withdrawal symptoms when brain fails to obtain opioids.

- **Reward.** Immediate alleviation of withdrawal symptoms. When brain is successful - euphoric bliss early on, when take is great.

- **Never enough.** Greater and greater amounts of drug needed to forestall withdrawal. Euphoria fades.
Death spiral

- Person’s daily life – from dawn to dusk – is fixated around a single purpose of obtaining and using opioids. Everything else is subverted.

- Often dramatic change in behavior - lying, cheating, stealing, selling drugs, prostituting.

- Drug use escalates, person resorts to criminal means to obtain drug.

- Downward spiral leading to imprisonment or early death
Treatment Matters
How is opioid dependence treated?

- Medication-Assisted Treatment (MAT).
  - Methadone
  - Buprenorphine

- Counseling – behavior change, new skills.
  - New ways of living (changing people, places and things).
  - New ways of coping
  - New ways of relating

- Treatment of other health problems.
  - Mental health
  - Physical health
What does MAT do?

- Restores brain function – removes craving and prevents withdrawal.
- Blocks “high” – no euphoria.
- Minimizes risk of overdose.
- Frees up brain for counseling.
- Provides *a hook* for continued treatment.
## Methadone treatment

### Advantages
- Gold standard
- 40+ years of experience
- Low cost of medication
- May used during pregnancy
- No dose limit

### Disadvantages
- Stigma
- Risk for overdose
- Risk for diversion
- Ingestion must be witnessed
- Requires facility license
## Buprenorphine treatment

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<tr>
<th>Advantages</th>
<th>Disadvantages</th>
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<tr>
<td>Minimal sedation</td>
<td>Medication expense</td>
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<tr>
<td>Low risk for overdose</td>
<td>May not fully control cravings in those dependent on high doses of opioids</td>
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<tr>
<td>Less risk for diversion</td>
<td>Requires physician training and amended DEA license</td>
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<tr>
<td>Less stigma</td>
<td>Limited experience during pregnancy</td>
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<td>Fewer ancillary expenses</td>
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Does treatment work?

There is overwhelming scientific evidence that treatment is effective.

- NIH Consensus Statement, 1997
  
  *Effective Medical Treatment of Opiate Addiction*
  

- National Institute of Drug Abuse (NIH), 2006
  
  *Principles of Drug Abuse Treatment for Criminal Justice Populations*
  
What are the benefits of treatment?

- Elimination of opioid obsession/compulsion.
- Improved health and reduced mortality.
- Elimination of opioid use.
- Reduction in HIV/HCV infection.
- Improved employment.
- Reduction in property crime.
- Reduction in arrests/re-arrests.
- Reduction in costs to state (Medicaid and criminal justice).
Criminal Justice Matters
Why target criminal justice?

- Why did Willy Sutton rob banks?

- Critical entry points into treatment.

- Tax payers can no longer afford to pay for the revolving door.
How prevalent is opioid abuse among criminal justice populations?

- About 14 million arrests are made annually in the United States - one million arrests involve persons who abuse opioids.

- 10% of jail and prison inmates report regular use of opioids.

- Rates differ widely between community.
Long arm of justice
- short arm of treatment

- 7 million persons under jurisdiction in the US.
- 2.1 million in jail or prison.
- 60% - Black or Hispanic.
- 45% of men and 54% of women have any substance disorder.
- Less than one in ten are treated.
What is the state of opioid treatment in criminal justice?

- Rates of opioid treatment are low – both in community criminal justice populations and even worse among those incarcerated.
  - Prison <1%
  - Jail <2%
  - Probation/Parole <1%

- Many correctional facilities fail to provide even minimal standards for detoxification – much less ANY treatment.

- High rates of death following release.
Inadequate assessment and treatment is pervasive

- Arrest/pretrial/probation.
- Drug courts.
- Jails/prisons.
- Re-entry.
Failing grades for treatment

✓ Failure to offer *systematic assessment* for opioid dependence throughout system.
✓ Failure to continue MAT during confinement.
✓ Failure to meet minimum standards for detoxification.
✓ Failure to offer MAT throughout system.
✓ Failure to refer to MAT upon release or during parole.
Time for a change?

- Neither threat of incarceration nor prolonged incarceration cures an opioid dependent brain – Zombie behavior persists.

- Failing to assess and adequately treat opioid dependence results in a costly, wasteful revolving door for opioid dependent persons.
Mindless system for a mindless disease

- What do you call a system that locks up people with opioid dependent brains - at considerable tax payer expense –fails to treat them, and releases them into the community in the same condition they came in, over, over, and over again?

- “The definition of insanity is doing the same thing over and over again and expecting different results.”
Barriers Matter
What’s the problem?

- **Inadequate education and training of those working in criminal justice**
  - Lack of understanding of scientific basis of addiction – not just bad decisions – but
  - also faulty brain circuits.
  - Lack of understanding of MAT.
  - Stigma – chemical dependency and MAT.

- **Concerns about diversion**
  - Illicit sale or exchange of drugs.

- **Lack of resources**
  - Overwhelmed criminal justice system.
  - Need to spend money to save money.

- **Lack of community treatment programs**
  - Limited availability of MAT in many communities.
Legislation Matters
What can you do?

✓ Learn about current practices in your state and communities.

✓ Learn about effective treatment models.

✓ Educate other legislators and public about the science behind opioid dependence.

✓ Support model demonstration projects.

✓ Work to transform the current revolving door into a pathway to effective treatment.
Community-based treatment for criminal the justice population

- Support and fund drug courts and diversion programs.
- Support education and training throughout system.
- Support, fund and mandate systematic assessment, treatment and referral for substance dependence (and co-occurring mental illnesses) for community-based criminal justice programs.

- Drug court.
- Pretrial diversion.
- Sentenced to probation.
- Upon jail/prison release.
- During prison parole.
Correctional facilities

- Require and fund accreditation of health care in correctional facilities.

- Mandate that assessment and treatment of opioid dependence is consistent with current medical practice.

- Mandate continuity of treatment for opioid dependence – e.g. coordination of care on admission and release.

- Prohibit barbaric practices – un-medicated detoxification e.g. cold turkey jail detoxification.
You can make a difference