BREAKING STIGMA

What if we treated Substance Use Disorders like other Chronic Illnesses?

George Brenner, LCSW, LMFT, LCAC
Member of MINT
Disclaimer

☐ George Brenner LCSW, LMFT, LCAC has no financial interest to disclose.
Welcome

- Address personal stigma
- Some origins of stigma
- Knowledge to break stigma
- SPIRIT of Motivational Interviewing
- Some ways stigma affects treatment delivery
- Participation is welcome
- It is about learning, not about teaching
- Safety for all in conversation
* Research in the early ‘90 indicated general public saw substance use as a public health crisis—long before politicians.
Can stigma be affected by...?

- Type of drug: Rx vs. Street, Heroin vs. Tobacco
- Gender: Father vs. Mother
- Culture/Ethnicity: Persons of color vs. Caucasian
- Familial: Being a parent or sibling
- Etc.

* What do you think of “Black Opium”?
Older Views Related to Stigma

- Moral weakness/Spiritual failing
- Lack of self-control or will-power
- Character defect (Older version of DSM had as a Personality Disorder)

*One of the first identified groups with a narcotic dependence in this country-Civil War Veterans*
BREAKING STIGMA
Knowledge Can Help Break Stigma

Addiction as a Brain Disorder
“The Task... is to not change the brain back but to compensate for the brain changes...”

Alan Leshner PhD
US deaths by substance

- Opioid overdose deaths (2016) = 60,000 +/-
- Alcohol = 80,000
- Tobacco = 480,000
- Cannabis = essentially 0
Patterns of Use

- Experimentation
- Social/Recreational/Responsible
- At-Risk Use (25-30% of USA adults)
- Substance Use Disorders: Various Stages of Progression and Impaired Areas of Function (most never get arrested, they have premature health problems)
- Abstainers/Rarely Use
1. **Addiction is a Disease of the Brain**
as other diseases it affects the tissue function.

- **Decreased Brain Metabolism in Drug Abuse Patient**
  - Control
  - Cocaine Abuser

- **Decreased Heart Metabolism in Heart Disease Patient**
  - Healthy Heart
  - Diseased Heart

*Sources: From the laboratories of Drs. N. Volkow and H. Schelbert*
2. ADDICTION IS A DEVELOPMENTAL DISEASE

Brain areas where volumes are smaller in adolescents than young adults. 

Age at **tobacco**, at **alcohol** and at **cannabis** dependence as per DSM IV

3. ADDICTION INVOLVES MULTIPLE FACTORS

- Biology/Genes
- Environment

Brain Mechanisms

Addiction
Why is it so hard to cut back or quit? (not the only pathway of memory)
Some basic biology: Neurotransmitters

Some examples...

**Inhibitory**
Serotonin, GABA, Dopamine (both)

**Excitatory**
Epinephrine, Norepinephrine, Dopamine (both)
Some basic biology: Neurotransmitters
Dopamine’s Role in Substance Use Disorders

The Dopamine Pathway is the Reward Pathway of the brain: REWARD can be both euphoria or relief

Certain drugs of abuse are commonly thought to “hijack the dopamine system” in the brain

Other neurotransmitters are affected by drugs of abuse, such as serotonin and GABA, but dopamine is the main pathway affected
Dopamine’s Role in Substance Use Disorders

**Reduced dopamine activity.** We depend on our brain's ability to release dopamine to motivate our responses to the natural rewards of everyday life, such as the sight or smell of food. Drugs produce very large and rapid dopamine surges and the brain responds by reducing normal dopamine activity. A disrupted dopamine system reduces the person’s ability to feel routine pleasure even from the drugs they seek.
Natural Rewards Elevate Dopamine Levels

**FOOD**

- NAc shell
- Empty
- Box Feeding

**SEX**

- DA Concentration (% Baseline)
- Mounts
- Intromissions
- Ejaculations

Sample Numbers:
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17

Source: Di Chiara et al.

Source: Fiorino and Phillips
Effects of Drugs on Dopamine Levels

**AMPHETAMINE**

- DA
- DOPAC
- HVA

**COCOAINE**

- DA
- DOPAC
- HVA

**NICOTINE**

- Accumbens
- Caudate

**ETHANOL**

- Dose (g/kg ip)
  - 0.25
  - 0.5
  - 1
  - 2.5

Source: Di Chiara and Imperato
Effects of Drugs on Dopamine Release

Amphetamine

Cocaine

Nicotine

Morphine

Di Chiara and Imperato, PNAS, 1988
Andrew Chambers, M.D.

“Motivational Injury”

* Implications for engaging in behaviors that have behavioral and physical health risks
Your Brain on Drugs
Dopamine D2 Receptors Are Lower in Addiction

Cocaine
Meth
Alcohol
Heroin
Control  Addicted

DA D2 Receptor Availability
The Memory of Drugs

Amygdala not lit up

Amygdala activated

Front of Brain

Back of Brain

Nature Video

Cocaine Video
Altered Brain Functioning

Prefrontal Cortex / Frontal Lobe is responsible for:

- Decision making
- Judgment
- Consequence Analysis
- Problem-Solving
- Planning
- Concentration
- Cognition & Memory

- Approximate age of maturity for this part of the brain?
Your Brain After Drugs

Normal

Cocaine Abuser (10 da)

Cocaine Abuser (100 da)
Have you changed your mind?
Drugs Have Long-term Consequences

Pre-Amphetamine/Control

Post-Chronic Amphetamine (10 days)

4 weeks

6 months

1 year

years

Superior → Inferior
RECOVERY OF BRAIN FUNCTION WITH PROLONGED ABSTINENCE
<table>
<thead>
<tr>
<th>Intoxication</th>
<th>Withdrawal</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Pain relief</td>
<td>□ Onset within 24 hours</td>
</tr>
<tr>
<td>□ Euphoria/Rush</td>
<td>□ Duration 4-7 days</td>
</tr>
<tr>
<td>□ Drowsy</td>
<td>□ Nausea/vomiting</td>
</tr>
<tr>
<td>□ Respiratory depression and arrest</td>
<td>□ Diarrhea</td>
</tr>
<tr>
<td>□ Nausea</td>
<td>□ Runny nose</td>
</tr>
<tr>
<td>□ Sedation/Stupor</td>
<td>□ Muscle aches</td>
</tr>
<tr>
<td>□ Confusion</td>
<td></td>
</tr>
<tr>
<td>□ Poor boundaries</td>
<td></td>
</tr>
</tbody>
</table>
Additional Factors for Development of SUD

- What drug is available? **People rarely abuse a single substance.**
- Purity
- Route of administration: smoked, injected (IV or IM), snorted, or swallowed
- Dose, frequency, duration/half life
- Age of first use
- Genetics
- Mental Health issues
- Health issues including pain
- Personal preference
- Polypharmacy: mixing substances for effect
Brain Basics for Alcohol and Drug Use

- Immature Brain or Impaired Brain
  - Adolescent/Young Adult Brain
  - Head Injury
  - Intellectual or Developmentally Disabled Brain
Brain Basics for Alcohol and Drug Use

- Co-occurring Disorder Mental Health and Substance Disorders
  - Similar genetic predisposition
  - Both mid-brain disorders
  - Similar neurotransmitters involved in both
  - Norm in certain groups: Chronic pain, dangerous to self, homeless, trauma patients, etc.
Prevalence of COD

- Among the Mentally Ill estimated 56% lifetime
- Trauma is >70% with SUD
- Schizophrenia; 47% SUD
- Bipolar; 90% of imprisoned BP have COD
- 40% of Mood Disorder have Drug Use Disorder
- 30% with Anxiety Disorder have Drug Use Disorder

MI are likely to have 2-3 times the rate of SUD as General Public
DSM-5 Definition of Substance Use Disorder

“Substance Use Disorder describes a problematic pattern of using alcohol or another substance that results in impairment in daily life or noticeable distress.”

“Most people link dependence with “addiction” when in fact dependence can be a normal response to a substance.”
Definitions of Addiction

National Institute on Drug Abuse (NIDA):

Addiction is defined as a chronic, relapsing brain disease that is characterized by compulsive drug seeking and use, despite harmful consequences. It is considered a brain disease because drugs change the brain; they change its structure and how it works. These brain changes can be long lasting and can lead to many harmful, often self-destructive, behaviors.
Some Conclusions for Brain Science of SUD

- There is much evidence to show the biological basis for addiction as a brain disease.
- It is a treatable brain disorder.
- As with other chronic illnesses; symptom management is the goal.
- It can be arrested at some point and recovery is then possible.
- The nature of “addiction” is chronic, lapsing, and progressive.
- Lapses do not have to be a part of recovery, but it is a part of some people’s recovery efforts.
BREAKING STIGMA: CHANGING OUR APPROACH

Ready
Willing
Able

When do people change?
The Spirit of Motivational Interviewing
Dr. Seuss

“Today I shall behave, as if this is the day I will be remembered.”
Partnership

- Involves a partnership and consultation with the person
- Negotiation
- Honors client’s expertise and perspectives
- Caregiver provides an atmosphere that is conducive rather than coercive to change
Acceptance

- **Accurate Empathy**: The skill of perceiving and reflecting back another person’s meaning.

- **Absolute Worth**: Prizing the inherent value and potential of every human being.

- **Autonomy**: Interviewer accepts and confirms the client’s irrevocable right to self determination and choice (informed choice).

- **Affirmation**: Caregiver accentuates the positive, seeking and acknowledging a person’s strengths and efforts.
Compassion

- Caregiver acts benevolently to promote the client’s welfare.
- Caregiver gives priority to client’s needs.
Evocation

- Listening more than telling
- Eliciting rather than installing
- The resources and motivation for change are presumed to reside within the client
- Intrinsic motivation for change is enhanced by drawing on the client’s own perceptions, goals, and values.
# Values Card Sort: Sample

<table>
<thead>
<tr>
<th>Honest: To be honest and truthful</th>
<th>Helpfulness: To be helpful to others</th>
<th>Spirituality: To grow and mature spiritually</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adventure: To have new experiences</td>
<td>Caring: To take care of others</td>
<td>Health: To be physically well</td>
</tr>
<tr>
<td>Loving: To give love to others</td>
<td>Industry: To work hard at all life tasks</td>
<td>Fitness: To be physically fit and strong</td>
</tr>
<tr>
<td>Acceptance: To be accepted as I am</td>
<td>Beauty: To appreciate beauty around me</td>
<td>Family: To have a happy, loving family</td>
</tr>
<tr>
<td>Attractive: To be physically attractive</td>
<td>Dependability: To be reliable, trustworthy</td>
<td>Justice: To promote fairness and equality</td>
</tr>
<tr>
<td>Duty: To carry out my duties and obligations</td>
<td>Fun: To play and have fun</td>
<td>Service: To be of service to others</td>
</tr>
<tr>
<td>Fame: To be known and recognized</td>
<td>Comfort: To have a comfortable life</td>
<td>Humor: To see the humorous side of life</td>
</tr>
<tr>
<td>Friendship: To have close/supportive friends</td>
<td>Loved: To be loved by those close to me</td>
<td>Other Values</td>
</tr>
</tbody>
</table>
Landscape of Recovery: What if we treated Addiction as a Chronic Illness without stigma?
“Drug dependence is a chronic illness.”

* Implications for a continuum of services including services for acute and chronic care and lapses would be seen as a common issue within the care.
Relapse common amongst Chronic Illness

- Asthma: 50-70%
- Hypertension: 50-70%
- Drug (including alcohol) Addiction: 40-60%
- Type I Diabetes: 30-50%

Relapse points to need for various levels of care from acute care to chronic disease management and recovery supports beyond acute stabilization.
Resolve ambivalence-Increase motivation

“Most people who need to make a change are ambivalent about doing so.”

* Implications about effective treatment approaches and does not need to be voluntary to be effective.
Trauma Informed Care

- Acknowledges high prevalence and vulnerability to traumatic experiences by the persons we serve
- Acknowledges the need to screen for, assess, treat, and monitor for trauma including ongoing risk
- Treat trauma in an integrated fashion with other COD’s
- Acknowledges the impact of trauma on the caregiver
Medication Assisted Treatment:
Access often affected by **STIGMA**

Substance Abuse & Mental Health Administration (SAMHSA) website define it as the following:

“Medication Assisted Treatment (MAT) is the use of medications, and behavioral therapies, in combination with counseling to provide a whole-patient approach to the treatment of substance use disorders. Research shows that when treating substance-use disorders, a combination of medication and behavioral therapies is most successful. Medication assisted treatment (MAT) is clinically driven with a focus on individualized patient care.”
Medication Assisted Addictions Treatment

☐ As part of a comprehensive treatment program, **MAT** has been shown to:

☐ Improve survival
☐ Increase retention in treatment
☐ Decrease illicit opiate use
☐ Decrease hepatitis and HIV sero-conversion
☐ Decrease criminal activities
☐ Increase employment
☐ Improve birth outcomes
Medication Assisted Addictions Treatment

Medications for Alcohol Dependence
- Naltrexone (ReVia®, Vivitrol®, Depade®)
- Disulfiram (Antabuse®)
- Acamprosate (Campral®)

Medications for Opioid Dependence
- Methadone
- Buprenorphine (Suboxone® and Subutex®)
- Naltrexone (pill or injection: Vivitrol)
* This list does not include those for nicotine
Some Challenges: Some with Stigma Bias

- What is effective may not be available (both large communities and rural areas)- Community attitudes
- Bias against certain forms of Medication Assisted Treatment (MAT)
- Poor access to MAT- especially Methadone and Suboxone
- Poor access to psychiatric services for COD in Indiana
- Insurance coverage for services and medications
- Access to continuum of services
- Access to detoxification and stabilization services
- Access to Recovery Houses and Residential Treatment (greater issues for women)
- Access for parents who are custodial parents (primarily women)
- Viewing MAT maintenance as another form of Recovery
Resources

Neurogistics : What are Neurotransmitters?
http://www.neurogistics.com/thescience/whatareneurotransmitters09ce.asp

HBO Addiction
https://www.hbo.com/addiction/understanding_addiction/12_pleasure_pathway.html

American Society of Addiction Medicine (ASAM)
http://www.asam.org/for-the-public/definition-of-addiction


National Institute on Drug Abuse (NIDA)
Final Thoughts/Questions

☐ Thank you for all you do!
☐ Thank you for this opportunity!
☐ Questions?

☐ Contact me at: GBrenner@ecommunity.com
☐ Additional references: Indiana Prevention Resource Center, NIDA, NIMH, SAMHSA, Center for Disease Control