From Addiction to Recovery: Becoming Recovery Champions

Amanda Foley-Byard, PhD Kentucky Opioid Response Effort Cabinet for Health and Family Services Introduction, Objectives & Format

• Agenda

- Neurobiology of Addiction
- Substance Use Disorder & Opioid Use Disorder
- Stigma & Discrimination
- OUD Treatment
- Recovery & Recovery Supports
- Recovery-Oriented System of Care

Neurobiology of Addiction

Exercise 1

- Think for 2-3 minutes about something you do now or have done in the past that you wanted to stop or regulate and found that you could not.
- Write down one or more things that come to mind.

What is Addiction?

Addiction is a **primary, chronic disease of brain** reward, motivation, memory and related circuitry. Dysfunction in these circuits leads to characteristic **biological, psychological, social** and **spiritual** manifestations. This is reflected in an individual pathologically <u>pursuing reward</u> and/or relief by substance use and other behaviors.

- inability to consistently abstain
- impairment in behavioral control
- ➤ craving
- diminished recognition of significant problems with one's behaviors and interpersonal relationships
- dysfunctional emotional response
- > progressive
- if not treated, oftentimes fatal

American Society of Addiction Medicine, Public Policy Statement, 2011

Visual Scientific Evidence



National Institute on Drug Abuse

Dopamine D2 Receptors Are Lower in Addiction









Adapted from: Koob GF, Lloyd GK, Mason BJ (Nat Rev Drug Discov 2009) and Koob GF, Volkow ND (Neuropsychopharmacology 2010)



- Less Dopamine produced naturally
- Less Dopamine produced with natural rewards
- Fewer Transporters
- Ones left, less sensitive
- Brain becomes preoccupied completely with the substances that will provide "normal level" of dopamine
- Substance = Survival

National Institute on Drug Abuse

Zoom Back out to Symptoms (Behavior)

- -Family isn't enough
- -Priorities are completely in disarray
- -Consequences aren't recognized, given attention
- Person acting against their values
- -Appears nothing else matters
- Act like they are going to die without the substance
- -Can't regulate emotions
- -Can't enjoy things anymore
- "Before I realized it, I was using"

Standard Dopamine Levels On a good day.....5ong/dL

On a bad day....4ong/dL

On best day....100ng/dL



Hazelden Betty Ford, COR-12 Curriculum

Further Noteworthy Dopamine Levels • Dopamine levels after opioid detox....10- 20 ng/dL

• Patients with low dopamine levels have extremely low retention rates for treatment (less than 10%)

• Dopamine levels achieved with MOUD...<u>50-6ong/dL</u>

Hazelden Betty Ford, COR-12 Curriculum

While individuals heal,

- Medication can be the dopamine replacement
- WE can be the pre-frontal cortex for a while

Is Reward Network only CNS Pathway Affected by Addiction?

No.

- Reward circuit (survival, motivation, pleasure)
- Habit (learning, drives automatic behavior)
- Salience (select which stimuli are deserving of our attention; contributes to a variety of complex functions, including communication, social behavior, and self-awareness, rallies other parts of brain)
- **Executive** (self-regulation, decision-making, self-control, achieving, inhibition, cognitive flexibility)
- **Memory (**short-term memory, sensory memory, and long-term memory)
- Self-directed (self-reflection, self awareness, focus on negative, overlook positive)

Protectors/Filters are either offline, or not connecting, not sending messages like normal functioning brain



Neural Circuits are Wired in a Bottom-Up Sequence

(700 synapses formed per second in the early years)



Life Course Health Development Critical Period of Brain Development



Birth – 2 years; critical window for hardwiring the brain for social-emotional development.

- Social-Emotional development is based on secure attachment and becomes the foundation for cognitive development and sense of self-identity.
- Attachment comes from a nurturing relationship with a caregiver that is consistent and caring.







rwjf.org/aces

Adverse Childhood Experiences And **Chronic Depression** as an Adult



Relationship Between the ACE Score and Attempting Suicide During Adolescence



Adverse Childhood Experiences vs. Smoking as an Adult





Relationship Between Number of ACEs and the Age at Initiation of Illicit Drugs 16 ₇ ■ 15–18 Years 14 12 Percent (%) 10 8 6 4 2 0 2 3 <u>></u>5 4 0 1 **ACE Score**

Dube et al., 2003, Pediatrics

ACE Score and Intravenous Drug Use



% Have Injected Drugs

N = 8,022 p<0.001

Substance Use Disorder (SUD) & Opioid Use Disorder (OUD)

All Substance Use Disorders share aberrations in the same CNS pathways



Thus, there is a shared vulnerability to different substances

Witkiewitz K, et al. Alcohol Clin Exp Res 2018; 42(7):1249-1259. Votaw et al. Addict Behav. 2018; 88:48-55



- DSM-5 diagnostic criteria
- Substance use disorders are defined by diagnostic criteria within these four different categories per the *Diagnostic and Statistical Manual of Mental Disorders*, 5th Edition (*DSM-5*).



Opioid Use Disorder (OUD) is a type of Substance Use Disorder (SUD)

Levels of Substance Use Disorder

• Substance use disorders are defined by diagnostic criteria that identify an individual's disorder as mild, moderate, or severe.



DSM-5 Substance Use Disorder Assessment

1) The substance is often taken in larger amounts or over a longer period than was intended.

2) There is a persistent desire or unsuccessful efforts to cut down or control

3) A great deal of time is spent in activities necessary to obtain the substance, use the substance, or recover from its effects.

4) Craving, or a strong desire or urge to use the substance.

5) Recurrent substance use resulting in a failure to fulfill major role obligations at work, school, or home.

6) Continued substance use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of the substance.

7) Important social, occupational, or recreational activities are given up or reduced because of the use of the substance.

8) Recurrent substance use in situations in which it is physically hazardous.

9) The substance use is continued despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by the use of the substance.10) Tolerance, as defined by either of the following:

(A) A need for markedly increased amounts of the substance to achieve intoxication or desired effect;(B) A markedly diminished effect with continued use of the same amount of the substance.

11) Withdrawal, as manifested by either of the following: (A) The characteristic withdrawal syndrome for the substance; (B) The substance is taken to relieve or avoid withdrawal symptoms.

What would my answers mean? A Pattern of substance use leading to clinically significant impairment or distress as manifested by at least 2 of the following occurring within a 12-month period:

Mild Substance Use Disorder (2-3 Symptoms) Moderate Substance Use Disorder (4-5 Symptoms) Severe Substance Use Disorder (6 or More Symptoms)

In Early Remission (no symptoms for 3 to under 12 months) In Sustained Remission (no symptoms for more than 12 months) In a Controlled Environment (if in an environment in which access to substances is limited) SUD/Addiction Meets Criteria for Chronic Illness

- Heritability (40-60% genetic)
- A long development period, for which there may be no symptoms
- Associated functional impairment or disability
- Without adequate treatment can be progressive and result in substantial morbidity & mortality
- Often no cure; involves cycles of remission/recovery and relapse
- Requires continuous disease management over lifetime
- A prolonged course of illness, perhaps leading to other health complications
- Responds to appropriate treatment
- Complex causality, with multiple factors leading to onset

Comparison to Other Chronic Illnesses

Diabetes and SUD -30-50% rate of re-occurrence of symptoms

Diabetes and SUD -9-10 % of U.S. population

Re-occurrence of symptoms serves as a sign for resumed, modified, or new treatment Correlation between **Diabetes** and **Obesity** = 80.3%

Correlation between **trauma** and **addiction/SUD** = 84%

> JAMA 284: 1689–95, 200; National Health and Nutrition Examination Survey



Heritability of Chronic Illnesses



Range across studies

Range across studies

Compliance Rates for Chronic Illnesses






Comparison of Relapse Rates



Biopsychosocial model of substance use disorder

Factors that have a role in the cause, course, and outcomes of a substance use disorder:

| and outcomes of a substance use disorder. |
|---|
| Psychological |
| Social |
| Biological |
| |



Biopsychosocial model of substance use disorder

Factors that have a role in the cause, course, and outcomes of a substance use disorder:

Psychological childhood influences, attachment, depression, trauma, anxiety, etc.

Social parenting, education, housing, employment, social and cultural norms, ethnic background, law, religion, social network, etc.

Biological genetics, birth, adoption, diet and nutrition, mental health disorders, disease and illness, withdrawal and cravings, etc.



Biopsychosocial model of substance use disorder

This holistic view of a person helps explain that each element contributes, but it's the sum of all three that explains the disorder.



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For some people, there are so many of these factors that they begin to overflow. That's when a substance use disorder is most likely to happen.



Acknowledging that a substance use disorder has many complicating and contributing factors helps us to understand that it is a **no-fault disease**.

People don't choose it.





What makes Opioid Use Disorder unique?

- In 2017 in 16% of US Counties enough opioid prescriptions were written for every man, woman and child to have one
- Opioids killed more than 47,600 people in 2017 more than any other year on record
- 130 Americans die every day from an opioid related overdose
- Prescribed for wisdom teeth removal, pain, labor/delivery, minor procedures
- Availability- youth (exposure before age 16-33% increase)
- Number of opioid prescriptions peaked in 2012 at a rate of 81.3 per 100 persons
- Opioid crisis main driver of decreased life expectancy in US
- Intense, overwhelming craving and withdrawal

- heroin
- morphine (Kadian, Avinza)
- codeine
- methadone (Dolophine)
- hydromorphone (Dilaudid)
- hydrocodone (Vicodin)
- oxycodone (Percocet, OxyContin)
- fentanyl (Sublimaze, Actiq)
- meperidine (Demerol)

Center for Disease Control and Prevention

Opioids, withdrawal, and cravings

- Opioid withdrawal can be especially challenging. In fact, the fear of experiencing severe opioid withdrawal symptoms prevents many people from getting the help they need and deserve.
- At the height of withdrawal, symptoms typically include intense anxiety, tremors, shakes, muscle cramps, and joint and deep bone pain.
- Withdrawal can precipitate craving, but craving can persist long after physiological withdrawal.
- Anxiety, depression, and cravings can continue for months, even years after being free of use.

Tolerance

- Tolerance is the body's ability to process a certain amount of a drug.
- Increased tolerance occurs when a person's body has grown accustomed to a certain dosage of a drug and requires an increased dose to achieve the desired effect.
- A person's tolerance can decrease rapidly after stopping drug use, for example, while in drug treatment, in jail, or in the hospital.
- Within days of stopping the use of opioids, an individual's tolerance plummets. When people return to using the same amount of opioids they had previously used, they can easily overdose.



USA oxycodone consumption (mg/capita) 1980-2015

Sources: International Narcotics Control Board; World Health Organization population data By: Pain & Policy Studies Group, University of Wisconsin/WHO Collaborating Center, 2018

2015 AMRO Consumption of Oxycodone (mg/capita)





Produced by the Kentucky Injury Prevention and Research Center (KIPRC), a bona fide agent for the Kentucky Department for Public Health, Dec 2018. Data sources: Centers for Disease Control and Prevention, National Center for Health Statistics. Multiple Cause of Death 1999-2017 on CDC WONDER Online Database, released December, 2018. Data are from the Multiple Cause of Death Files, 1999-2017, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Accessed at http://wonder.cdc.gov/mcd-icd10.htmlon Dec, 2018. Data are provisional and subject to change.



Year

Consequences of the Opioid Crisis

- Record number of individuals incarcerated in state and local correctional facilities
 - Ky has 41,000 residents in correctional settings (ninth highest rate in country)
 - Majority meet criteria for SUD
- Kentucky has highest rate of children who have one or more parent incarcerated
 - Thirteen percent of children in Kentucky have one or more parent in correctional setting
- Kentucky has the highest number of women incarcerated of any state in U.S.
- Kentucky has dramatic increase in grandparents raising children
- Record number of children in out-of-home care

Stigma & Discrimination

Stigma: That Pernicious Mark





"Stigma is a **degrading and debasing attitude** of the society that **discredits** a person or a group because of an **attribute**... Stigma **destroys a person's dignity**; **marginalizes** affected individuals; **violates basic human rights**; markedly **diminishes the chances of a stigmatized person of achieving full potential**; and seriously **hampers pursuit of happiness** and contentment."

Stigma=Negative message/belief/assumption

Discrimination=when stigma drives our actions and words

The antidote to stigma is support and compassion.

Exercise 3

- Think about your own medical history.
- Write down a current (or past, if in remission or cured) medical condition with which you have been diagnosed.

Note: You do not have to share this with anyone if you do not feel comfortable; this is a personal activity and you will not be asked to discuss or disclose any personal health information.

Imagine for a moment:

- You go to the hospital, sit down with a doctor and begin explaining symptoms associated with the diagnosis you wrote down. Now imagine:
 - Told it's "your fault" because of your "choices"
 - Denied treatment because you "did it to yourself"
 - Given a list of people to call, none of which were open, taking patients, or would accept your insurance
 - Only given aspirin if you agree to go to counseling
 - Kicked out of the hospital
 - Dropped as a patient

3 Types of Stigma

"Public stigma" encompasses the attitudes and feelings expressed by many in the general public toward persons living with mental health or SUD challenges or their family members.

"Institutional stigma" occurs when negative attitudes and behaviors about mental illness or SUD, including social, emotional, and behavioral problems, are incorporated into the policies, practices, and cultures of organizations and social systems, such as education, health care, and employment.

"Self-stigma" occurs when individuals internalize the disrespectful images that society, a community, or a peer group perpetuate, which may lead many individuals to refrain from seeking treatment for their mental health or SUD conditions."

Deconstructing False Concept of "Choice"

- Individuals with SUD often stigmatized because they "chose" to use substances in the first place
- Raise your hand if you have "chosen" to use alcohol in your lifetime
- 87% of Americans have tried alcohol; 10% are diagnosed with Alcohol Use Disorder; similar numbers for other substance use
- Science
- Ask anyone currently trapped in the cycle of active addiction if they ever chose the hopelessness and despair they feel. You will hear a resounding "no."

Exercise 4: Questions to Consider

- Are there underlying negative, stigmatizing beliefs/messages we have about addiction?
- What are they?
- How can some of them be challenged or changed by what we are learning today?

Deconstructing Stigma Takes Work & Intentionality

- Messages-Words-Actions
- We can take a lesson from the recovery space and "act as if"



Drug Overdose Death Rates among Women Ages 18-44, 2000-2017

Produced by the Kentucky Injury Prevention and Research Center, July 2019. Data source: Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2017 on CDC WONDER Online Database, released 2018.

Why does language matter?

Language is

- a major contributor to stigma
- a barrier to recovery
- **at odds** with our understanding of addiction as a disease that affects the structure and function of the brain



Consequences of stigmatizing language

The cost of stigma includes

• shame and isolation — fewer people seek treatment

-88-89% of people who need treatment don't get it

- suboptimal patient care
- shorter visits with providers/professionals
- less empathy
- less patient engagement
- lower patient retention
- increased staff turnover and burnout

SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health



The Language We Use vs. Reality

They're not ready

They don't want it bad enough

They haven't hurt/lost enough

They're too resistant

They're in denial

My clients don't hit bottom; they live on the bottom. If we wait for them to hit bottom, they will die. The obstacle to their engagement in treatment is not an absence of pain; it is an absence of hope. — Outreach Worker (Quoted in White, Woll, and Webber 2003)

Adapted from The Language of Recovery, Johnson

Language as a Framework

Person First

Person with a substance use disorder

Person in recovery

Morally Neutral

Symptom reoccurrence Return to use

Medically Accurate

Positive drug test Medication for Opioid Use Disorder I've learned that people will forget what you said, people will forget what you did, but people will never forget how you made them *feel*.

- Maya Angelou

OUD Treatment

Levels of care

Treatment has different levels of care, depending on what a person needs and how it fits into their life. (ASAM)

Determining the level of care is part of a process and dependent on several factors.



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It's a continuum of care

People often go from one level to another depending on how they are progressing and what they need to be as successful as possible.





Examples of evidence-based treatment

- **Cognitive-behavioral therapy (CBT)** helps people look at their problems and find better ways to respond.
- Motivational enhancement therapy (MET) helps people plan for recovery based on what motivates them what they care about.
- **Contingency management** provides positive reinforcement for making good choices.
- Medications for Opioid Use Disorder (MOUD) use of FDAapproved medications alongside psychosocial therapies to address the medical and psychological aspects of substance use disorder concurrently.

These practices are effective for substance use, mental health, and co-occurring disorders.

What does effective treatment look like?

- Integrated, including all aspects of a person's care: medical, mental health, supportive services, etc.
- Nonpunitive and person-centered leveraging a person's strengths
- Individualized and flexible, providing what is needed in a way that works
- Stigma-free, embracing all pathways to recovery regardless of bias
- Trauma-informed and responsive, focusing on safety, transparency, trustworthiness, collaboration, empowerment, and choice
- Long-term with wraparound services
- Culturally competent
- Using approved **evidence-based treatments, such as MOUD** for appropriate clients

Medications Used to Treat Opioid Use Disorder

Methadone

Prevents withdrawal symptoms and reduces craving by activating opioid receptors in the brain

Buprenorphine (Suboxone, Subutex,)

Eliminates opioid withdrawal symptoms without producing the euphoria or dangerous side effects.

Activates and blocks opioid receptors in the brain

For non pregnant woman it can be combined with naloxone to deter diversion or abuse as an injection causes withdrawal reaction if used intravenously by an individual dependent on opioids.

Naltrexone (Vivitrol) (NOT Appropriate During Pregnancy)

Prevents relapse following complete detoxification from opioids. Blocks opioid receptors so if opioids are used, euphoria is blocked.

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Medications for Opioid Use Disorder



Source: SAMHSA, 2012 National Survey on Drug Use and Health, 2013.

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Goals of Pharmacological Treatment in Opioid Use Disorder

- Reduce drug craving, withdrawal symptoms and illicit drug use
- Normalize physiological functions disrupted by drug use
- Implement pharmacological strategy appropriate to target specific phase of substance abuse:
 - Agonist, partial agonist, antagonist
- Correction of underlying/associated psychiatric disorders

**Characteristics of therapeutic medication interventions for OUD: SLOW ONSET, LONG DURATION OF ACTION, SLOW OFFSET

SAMSHA Medications for Opioid Use Disorder. Treatment Improvement Protocol (TIP) Series 63, Full Document. HHS Publication No. (SMA) 18- 5063FULLDOC. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2018.



Why are medications so important for individuals with OUD? • Because they save lives

- Stabilization of dopamine system
- Improved treatment retention, decreased recidivism, greater likelihood of employment, reduced risk of infectious disease
- Individualized treatment plans
- Psychosocial Interventions

Increase access to and awareness of treatment resources for clients and providers

| Start here | to find treatment | openings in Kentuck | y for drug use. |
|---------------------------------------|--|------------------------------------|-----------------------------------|
| Who Needs Help? Not Sure | Gender | City, county or zip code | |
| Type of Treatment Not Sure | | Payment Not Sure | 0 \$ |
| Pregnant | Under 18 | E LGBTQ | Q Start Search Advanced Search |
| Need help about treat 1-833-8KY | or want to talk to someone tment? -HELP (1-833-859-4357) | If you are having call 911 now. | g a medical emergency, |

findhelpnowky.org

Recovery Champions

Recovery & Recovery Supports

Recovery

A process of change through which individuals improve their health and wellness, live a self-directed life, and strive to reach their full potential



Recovery Research Institute

Recovery as Remission

- ♦ Shift from Black/White thinking
- Lifelong Journey: Chronic Disease
 Management
- Remission from a substance use disorder can take several years and multiple episodes of treatment, recovery support services, and/or mutual aid

Recovery goes beyond the remission of substance use disorder symptoms to include a positive change in the whole person

Abstinence' from substances, though often necessary, is not always sufficient to define recovery

People will choose their recovery pathway based on cultural values, socio-economic status, psychological and behavioral needs, and the nature of their substance use disorder

There are many paths of recovery



FOUR DIMENSIONS OF RECOVERY





FOUR COMPONENTS OF RECOVERY CAPITAL

- 1. Social
- 2. Physical
- 3. Human
- 4. Community

SOCIAL

PHYSICAL

HUMAN

Support, guidance and sense of belonging that comes from relating to others.

Connections from relationships often found in memberships in family, groups and community. More palpable resources such as; income, vehicles, housing, food, and clothes as well as health

These can be found in sober living, employment centers, temporary assistance, and access to reliable transportation. Values, knowledge, educational/vocational skills and credentials, problem solving capacities, self-efficacy purpose

These are the internal resources that provide a sense of purpose and hope

COMMUNITY

W. White-2008

RECOVERY CAPITAL SCALE

- High recovery capital + high problem severity
- Low problem severity + high recovery capital
- Low problem severity + low recovery capital
- High problem severity + high recovery capital

Clients with high problem severity but very high recovery capital may require fewer resources to initiate and sustain recovery than an individual with moderate problem severity but very low recovery capital.



Recovery Capital Scale

I have the financial resources to provide for myself and my family.

I have personal transportation or access to public transportation.

I live in a home and neighborhood that is safe and secure.

I live in an environment free from alcohol and other drugs.

____ I have an intimate partner supportive of my recovery process.

I have family members who are supportive of my recovery process.

____ I have friends who are supportive of my recovery process.

I have people close to me (intimate partner, family members, or friends) who are also in recovery.

I have a stable job that I enjoy and that provides for my basic necessities.

I have an education or work environment that is conducive to my long-term recovery.

I continue to participate in a continuing care program of an addiction treatment program, (e.g., groups, alumni association meetings, etc.)

I have a professional assistance program that is monitoring and supporting my recovery process.

I have a primary care physician who attends to my health problems.

____ I am now in reasonably good health.

I have an active plan to manage any lingering or potential health problems.

I am on prescribed medication that minimizes my cravings for alcohol and other drugs.

I have insurance that will allow me to receive help for major health problems.

I have access to regular, nutritious meals.

I have clothes that are comfortable, clean and conducive to my recovery activities.

____ I have access to recovery support groups in my local community.

____ I have established close affiliation with a local recovery support group.

I have a sponsor (or equivalent) who serves as a special mentor related to my recovery.

I have access to Online recovery support groups.

____ I have completed or am complying with all legal requirements related to my past.

____ There are other people who rely on me to support their own recoveries.

_____ My immediate physical environment contains literature, tokens, posters or other symbols of my commitment to recovery.

____ I have recovery rituals that are now part of my daily life.

I had a profound experience that marked the beginning or deepening of my commitment to recovery.

Recovery-Oriented System of Care



Families in recovery must navigate a myriad of systems in order to reach and maintain stability in recovery

Systems are:

- Complex
- Disjointed
- Lacking in understanding of addiction and recovery

Recovery-Oriented System of Care:

Values & Principles

- Person-centered
- Holistic approaches
- Family and other ally involvement
- Individualized and comprehensive
- Anchored in the community
- Continuity of care
- Strengths-based
- Welcoming, inspirational and encouraging
- Hopeful and positive opportunities, resilience
- Promotes dignity and respect
- Understands recovery values and recovery-oriented language
- Understands and supports the roles of individuals with lived experience



Exercise 6

Think about your organization:

- The top 5 recovery values & principles that you want all services in your region to exemplify
- One specific change that each agency represented here today can make
- One specific change that you as an individual can make beginning today