

Stigma in Substance Use Disorders

Objectives

- Understand the definition and types of stigma related to substance use disorders
- Appreciate the damaging effects of stigma regarding substance use disorders
- Understand how stigma related to substance use can influence trainees and professionals
- Gain an understanding of the neurobiology of substance use disorders and the disease model of addiction
- Utilize a reflection exercise as a tool to address stigma in trainees

Sara

- Sara S - 15 y/o female
- CC: Depressed mood
- HPI: Mild anhedonia, sleeping more, worsening concentration and decreased appetite for 2 months.
- Past psychiatric history: No suicide attempts or self-injurious behavior. No past psychotropic use
- Medical Hx: None
- Abuse Hx: None



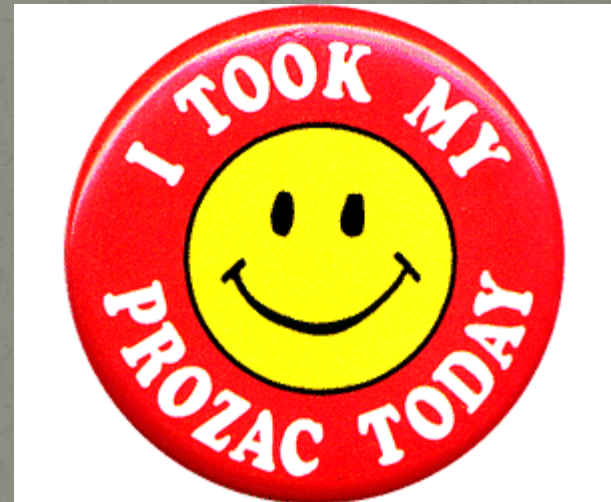
Sara

- Substance Use:
 - smokes cigarettes 1-2 times per month
 - drank 1 beer 1 time
 - smoked cannabis 3 times



Sara

- Diagnosis: Major Depressive Disorder, Mild, Recurrent.
- Treatment: Fluoxetine 10 mg daily. Continue therapy
- Second appointment: Increase Fluoxetine to 20 mg daily.
- Third appointment: Canceled



Sara

- Fourth appointment:
 - More “moody”
 - New friend group
 - Stopped playing guitar and Volleyball because she is “over them”
 - Denies suicidal ideation
 - Smoking cannabis 2 times per week and drinking alcohol with her new friends on weekends



Sara

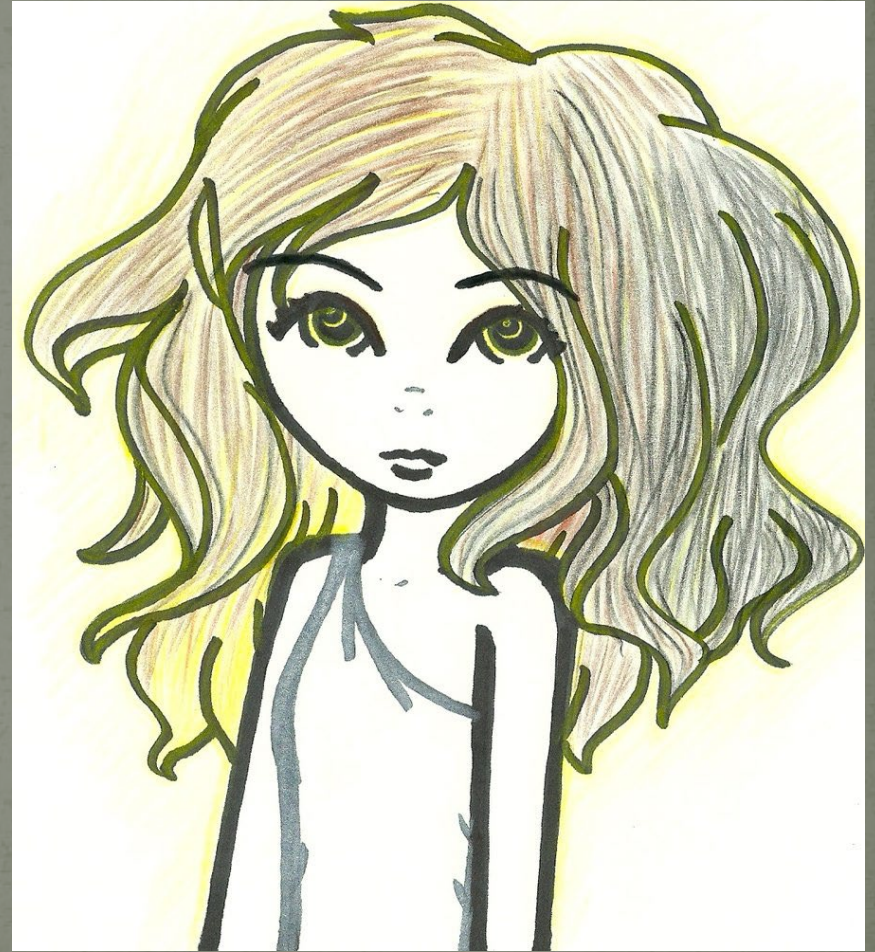
The following week mother calls and tells you over the weekend Sara had come home late acting “out of it”.

Mother made Sara take a home drug screen.

A screaming match between the two ensued.

Mother found Sara drowsy and confused with empty bottles of Benadryl and Motrin by her head.

She was admitted to a child and adolescent psychiatry unit.



Sara

- Several text messages on Sara's phone were found discussing her trading sexual favors for illicit substances.
- Later that day you speak with Sara's inpatient child and adolescent psychiatrist. They tell you that Sara attempted suicide because she knew her family would know she was using substances and trading sexual favors to obtain the drugs. Sara reported that the shame of this was worse than the thought of dying.

George

- CC: George -45 year old homeless man brought to the ER after he was found unconscious on the street smelling of alcohol
- HPI (gathered from EMR): Well known to this ER as he has been evaluated and treated twice in the last 3 months for alcohol-related issues.
- Total of 10 visits to this ER in the last year all related to alcohol
- Three of these visits resulted in admissions to the medical floors for complicated alcohol withdrawal

George

- He has been referred to rehabilitation facilities and leaves AMA
- Two different rehab facilities in the area are refusing to readmit him as he has been verbally aggressive toward staff and patients at the facility.
- Past substance use also includes cannabis, cocaine, Xanax and opioid use
- Substance of choice is alcohol
- History of anxiety and suicidal ideation.
- He has been admitted to the inpatient psychiatry unit two times for suicidal ideation with urine drug screens positive for cocaine both times. Once sober, he demanded discharge.
- He reported in the past being prescribed Xanax and Ativan for anxiety

George

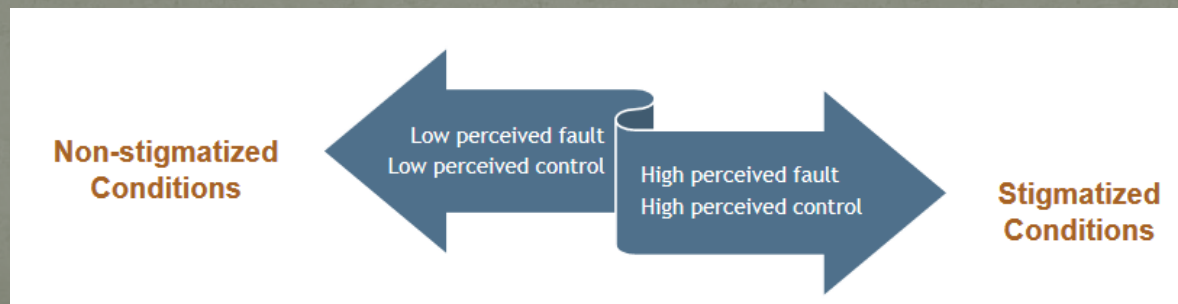
- When you enter into his ER room you find him obtunded.
- Initial BAL was 0.41.
- Eight hours after admission BAL 0.2
- UDS is negative.
- HR is 105 bpm, BP 125/90 mm HG
- He is starting to complain of feeling cold and anxious
- He starts to become verbally aggressive and demands to be discharged

Reflection Exercise #1

- If you could rewrite the narrative of in any way, what would you change?
- What do you think would have to happen for the change to take place?
- What does this individual's story have you thinking about substance abuse?

Stigma

- Stigma is defined as “a mark of disgrace or reproach” or a negative attribute that causes someone to devalue or think less of the whole person
- Burden of stigma affected by two main factors
 - Perceived control over the condition
 - Perceived fault in acquiring the condition
- Example
 - Cancer vs substance use disorders



Stigma

- Stereotyping can occur when public perception connects labeled individuals to negative traits
- Stereotyping causes an emotional reaction by the general public
- Consequences for individuals
 - Discriminated against
 - Treated unjustly
 - Perceived as less valued by others

Stigma

- Used to discourage unhealthy habits such as substance use
 - Collateral consequence is this group becomes marginalized and devalued by society
 - Stereotypes regarding substance use have a small degree of accuracy, this makes offsetting the stigma difficult
 - Livingston JD et al 2011



Stigma

- Individuals with substance abuse disorders are often believed to have control over their substance use and more likely to be held responsible and blamed
- This can affect the social response to substance use disorders and influence how individuals with substance use disorders view themselves
- Livingston JD et al 2011, Volkow ND et al 2016

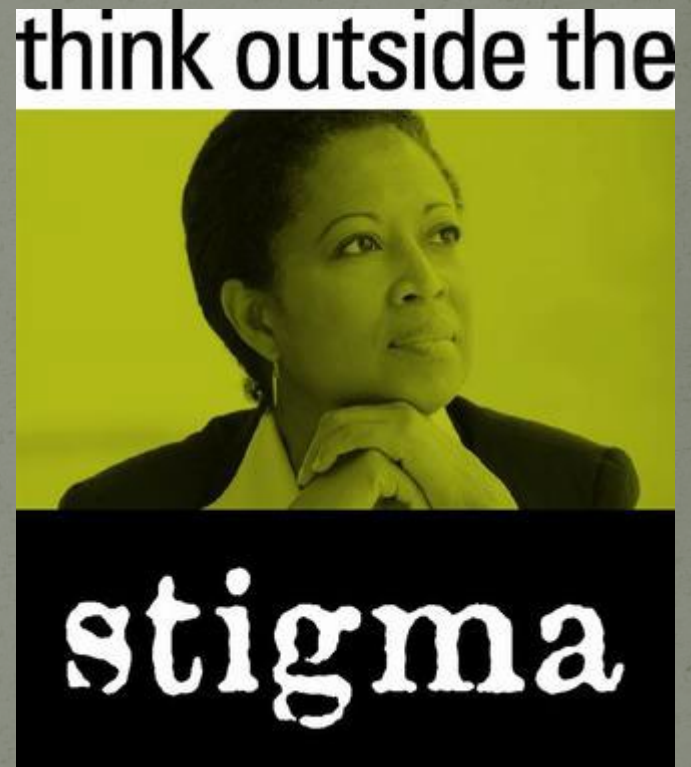


STIGMA

Types of Stigma

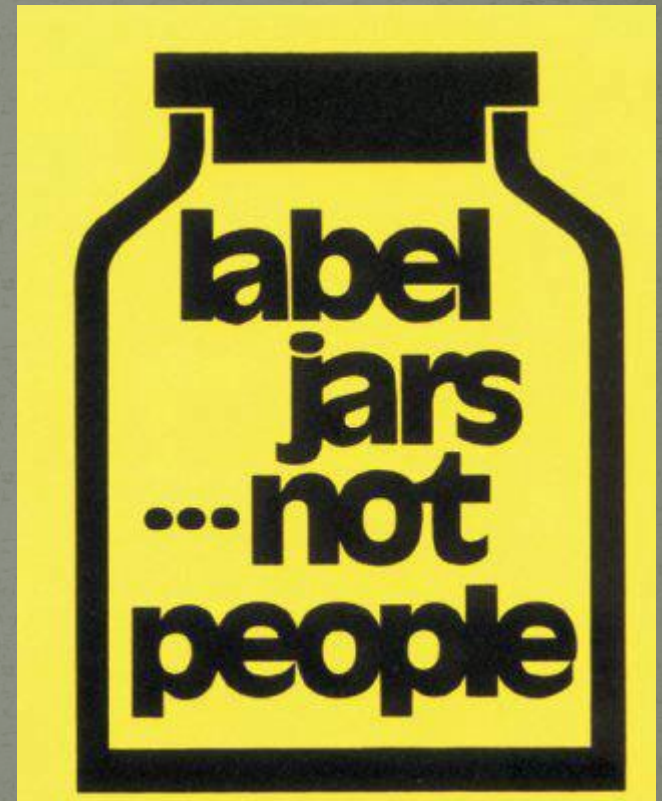
- Self-stigma
- Social stigma
- Structural stigma

- Livingston JD et al 2011



Self-Stigma

- Negative feelings about one's self and their maladaptive behaviors causing an identity transformation resulting from the person's experiences, perceptions, or anticipation of negative social responses' due to a stigmatized social status or health condition
 - “I am selfish and lazy because I abuse drugs”



Social Stigma

- Large social groups endorsing stereotypes about a stigmatized group
 - “Most people believe that people who use illicit drugs are lazy and selfish and should be punished.”



Structural Stigma

- Policies, procedures and rules of an institution limit the opportunities for members of the stigmatized group
 - Examples include negative attitudes/behaviors of representatives of public institutions
 - ex people who work in the health system
 - Livingston JD et al 2011



Effects of Substance Use Disorder-Related Stigma

- Exacerbates social alienation
- Can worsen mental and physical health
- Non-completion of substance use treatment, delayed recovery, increase in risk taking behaviors

- Livingston JD et al 2011



Health Care Provider Attitudes

- Overuse system resources
- Not vested in their own health
- Abuse the system through drug-seeking, diversion and failure to adhere to recommended care

- Livingston JD et al 2011



Health Care Provider Attitudes

- These views can influence poor provision of care
- Due to stigma, providers may refuse to offer services or pharmacologic treatment for other medical illnesses
- Individuals may hide substance use problem to avoid stigma

• Livingston JD et al 2011

**Medical
Professionals**



Physician Attitudes

- One study documented that physicians in practice do not like working with patients with SUD, do not screen for SUD and do not feel they have the skills to treat them
 - Renner JA 2004
- Multiple studies have reported physicians' failure to diagnosis SUD and provide appropriate care
 - Matthews J et al 2002



Physician Attitudes

- A large European study found multiple providers (psychiatrists, other physicians, psychologists, nurses and social workers) had lower respect for patients with SUD than for patients with depression or diabetes

- Gilchrist G et al 2011



Resident Related Attitudes

- A survey of PGY 2-4 residents reported a negative attitude toward working with individuals with substance use disorders
 - Shorter D & Dermatis H 2012
- Another study reported that the satisfaction in caring for these patients consistently lessened as their years in training continued Avery J et al 2016, Renner JA et al 2005



Resident Related Attitudes

- Attitudes may be reinforced by:
 - Perceived lack of skills, resources and time to care for patients
 - Reinforcement of societal attitudes
 - Attitudes of other clinicians
 - Fear of failure
 - Difficulty connecting with patient
 - Greenberg WM et al 2002, Avery J et al 2017, Patil D & Andry T 2016, Agrawal S et al 2016



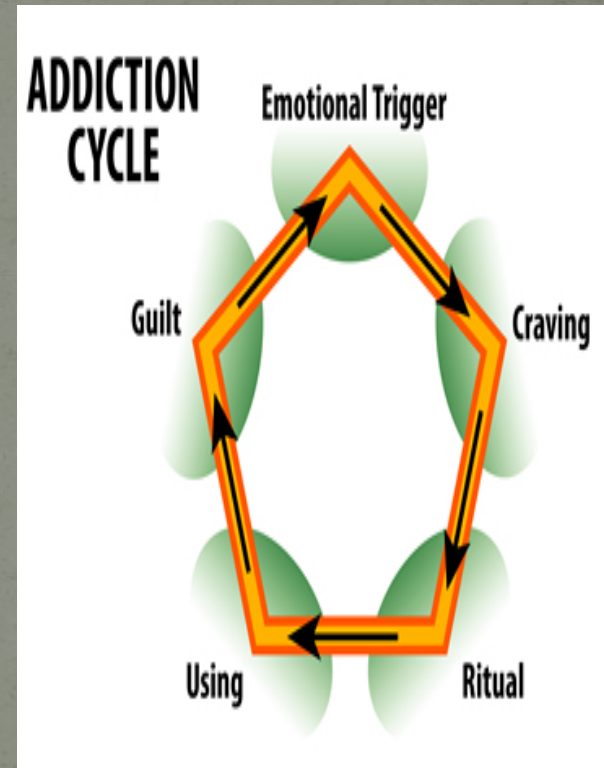
Resident Related Attitudes

- Only seeing patients in ED, severely hospitalized, end stage substance users or repeat withdrawal management where they are more likely to have a negative experience with the patient and the possibility of recovery may feel remote
- Should see patients succeeding in recovery and longitudinal care to develop an understanding of the recovery process
 - Greenberg WM et al 2002, Avery J et al 2017, Patil D & Andry T 2016, Agrawal S et al 2016



Brain Disease Model of Addiction

- Neurobiology has started to explain the mechanisms that underlie the significant disturbances in decision making and affective lability in those with SUDs
 - Volkow ND et al 2016
- Critical brain structures are disrupted by prolonged exposure to drugs and alcohol
 - <https://www.niaaa.nih.gov/news-events/news-noteworthy/nida-and-niaaa-commentary-strongly-supports-brain-disease-model>



Brain Disease Model of Addiction

- Many people experiment with drugs, few will become addicted

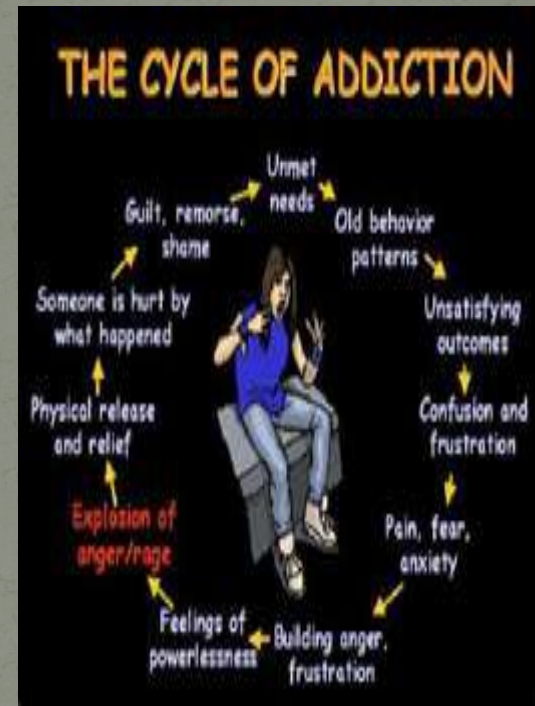
- Turton S & Lingford-Hughes A 2016



Neurobiology of Addiction

- Individuals lose control over drug use behavior
- Catastrophic consequences do not decrease/stop their use due to alterations in circuitry of the brain

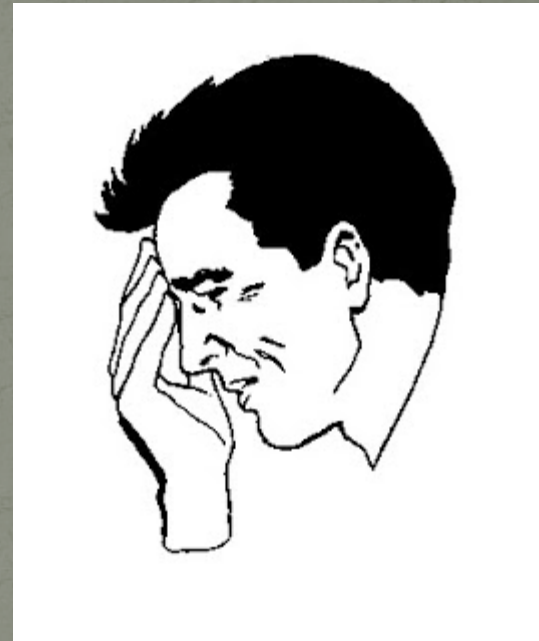
- Noel X, Brevers D, Bechara A 2013



Neurobiology of Addiction

- Disruptions of circuitry in 3 Key Neural Systems are seen in addiction
 - The Impulsive System-A hyperactive impulsive, amygdala-striatum dependent
 - The Reflective System-Prefrontal cortex dependent neural system
 - Insula mediated neural system

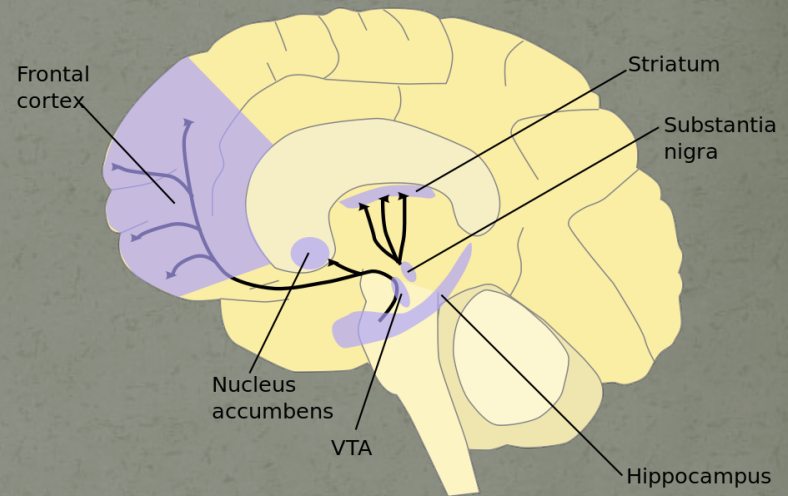
- Noel X, Brevers D, Bechara A 2013



Neurobiology of Addiction

The Impulsive System

- Drugs activate the reward system in the brain by releasing severe increases in dopamine
- With continued exposure to the same reward, the dopamine cell will start to fire to a conditioned stimuli that will predict the reward



Volkow ND et al 2016, Noel X, Brevers D, Bechara A 2013

Neurobiology of Addiction

The Impulsive System

- Through operant conditioning actions can easily switch from goal oriented outcomes to perseverative, repetitive actions that are excessive, inappropriate and focused on obtaining the drug of abuse

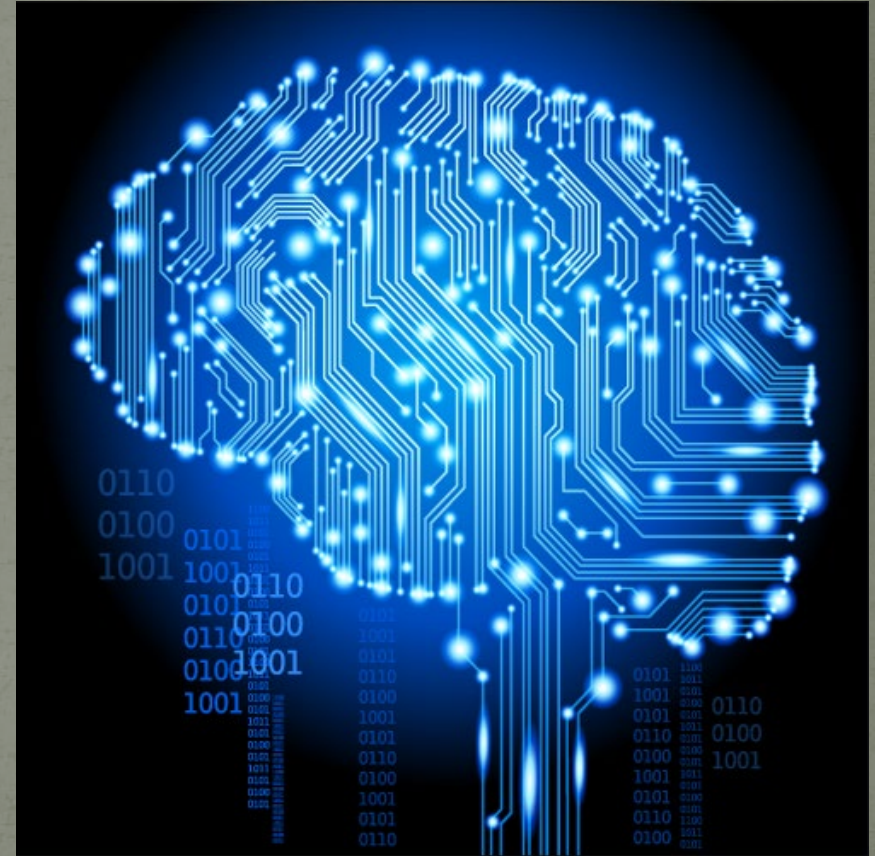


- Volkow ND et al 2016; Noel X, Brevers D, Bechara A 2013

Neurobiology of Addiction

- Incentive salience is defined as motivation for rewards derived from a physiological state and learned associations of a reward cue mediated by the dopamine system in the mesocorticolimbic area.
- Executive control over incentive salience is key to maintaining goal directed actions and sobriety

• Koob GF & Volkow ND 2016

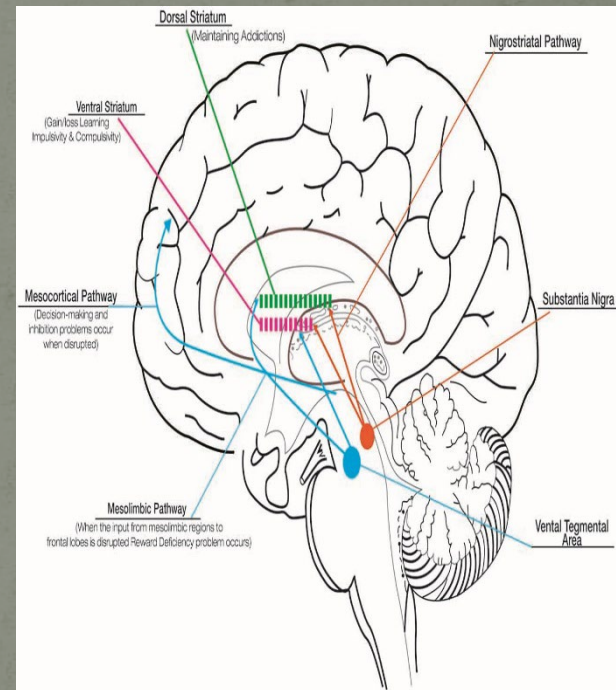


Neurobiology of Addiction

The Reflective System

- As a result of the physiologic process, ordinary rewards lose motivational power
- The reward system becomes conditioned to focus on the more potent release of dopamine caused by the substance cues

- Volkow ND et al 2016



Neurobiology of Addiction

The Reflective System

- Substance use will eventually start to trigger smaller releases of dopamine in a person with a SUD
- The lower release of dopamine makes the brain's reward system much less sensitive to drug-related and non-drug related rewards
- Volkow ND et al 2016



Neurobiology of Addiction

The Reflective System

- The change in this system:
 - affects a person's ability to control basic impulses and pursue long-term goals
 - Impairs response inhibition and abnormal salience
 - Impacts emotion and memory which compromises the ability to make appropriate decisions

• Noel X, Brevers D, Bechara A 2013



Neurobiology of Addiction Circuitry

- Due to repeated exposure of substances, the circuitry of the extended amygdala in the basal forebrain is altered
- These alterations lead to increased reactivity to stress and negative emotions
- Volkow ND et al 2016; Koob GF, Volkow ND 2016



Neurobiology of Addiction

- There is a highly dysphoric phase when the effect of the substance has tapered off
- Due to this highly dysphoric state, the term 'anti-reward' circuitry was developed

- Volkow ND et al 2016; Koob GF, Volkow ND 2016



Anti-Reward Circuits

- Produces an aversive or stress like state
- Present when the drug is removed during acute withdrawal and protracted abstinence

- Koob GF & Volkow ND 2016



Neurobiology of Addiction

- In addition to the reward from drug use there is also the want to escape the dysphoria from the after use
- Due to these neurobiological changes a person with an addiction stops using substances to get 'high' and starts using them to feel 'normal'
 - Volkow ND et al 2016



Neurobiology of Addiction

- The person with the addiction may even struggle to understand why they continue to use
- Often individuals with addictions will continue to use to escape the anguish they feel when they are not using

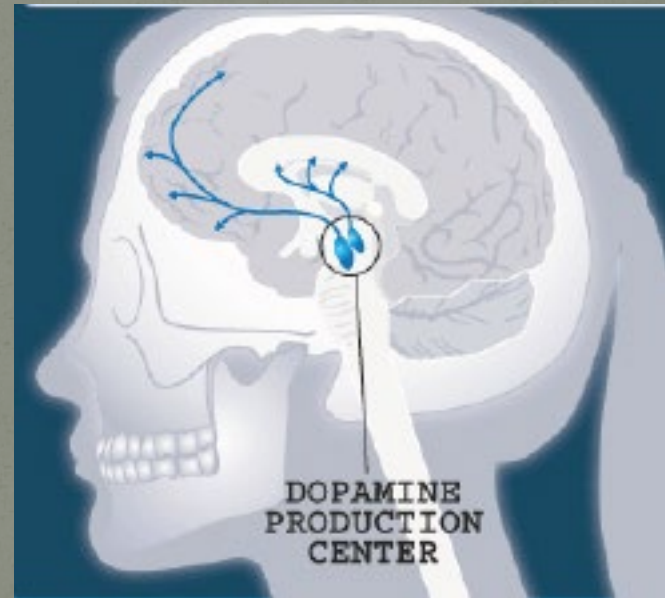
- Volkow ND et al 2016



Neurobiology of Addiction

- Along with the changes in reward and emotional circuitry of the brain there are also changes in the prefrontal cortex circuitry that affect executive functioning

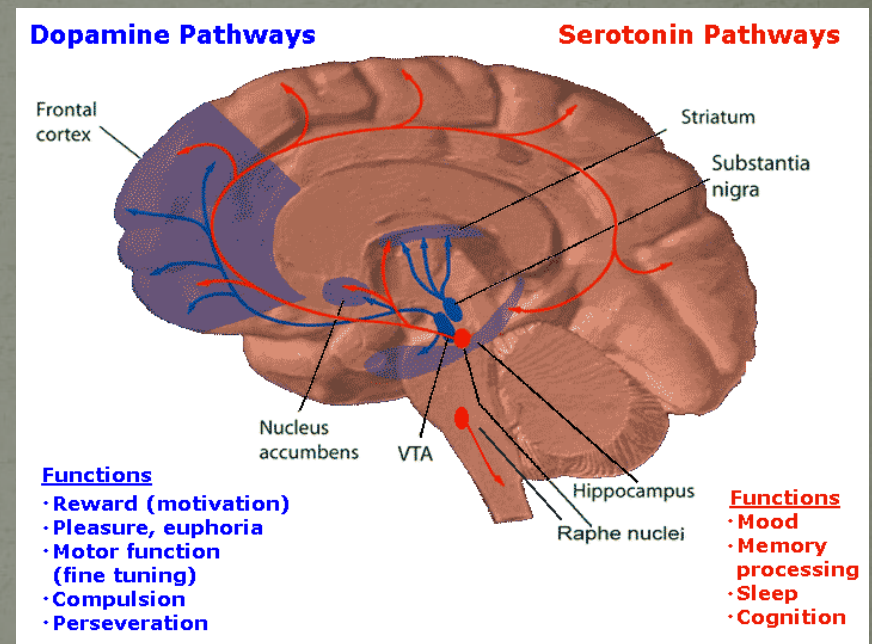
- Volkow ND et al 2016



Neurobiology of Addiction

- These changes in the prefrontal regions include neuroplastic changes in glutamatergic signaling
- These changes make it difficult to resist strong urges to abstain from the drug

• Volkow ND et al 2016



Everything you think you know about addiction is wrong

- Johann Hari- TED Talk (10 minutes)
- https://www.ted.com/talks/johann_hari_everything_you_think_you_know_about_addiction_is_wrong



Strategies to Improve Attitudes

- Education on the stigmatized attitudes that clinicians hold towards individuals with SUDs
- Exposure to maintenance pharmacotherapy (e.g. buprenorphine training)
- Exposure to patients in recovery
- Mentorship from senior clinicians trained in addiction psychiatry
- Reflection exercises

Reflection Techniques

- Facilitate the development of increased awareness of deeply held, yet often unexamined attitudes, values, and beliefs related to working with people with substance use disorders
- Internally examines and explores issues, triggered by an experience which clarifies the meaning to the individual
- Increase self-awareness of embedded beliefs
- Humanize the understanding of mental health and addiction problems and enhance the compassion and understanding of these problems
- Examples
 - Reflection journaling
 - Reflection papers

Reflection Exercise

- Self-reflection – 15 minutes
- Discussion questions
 - Describe positive or not-so-positive encounters with colleagues or community members related to addictions
 - What role does language play in perpetuating negative stereotypes in patients with SUDs?
 - What did you learn about addiction?

• Lay K. & McGuire L 2008

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Questions ???

