Substance Use Disorder ECHO

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State of New Jersey

MEDICATION-ASSISTED TREATMENT
CENTERS OF EXCELLENCE

RUTGERS
New Jersey Medical School

Hub Team Introductions

Clement Chen, PharmD
Clinical Pharmacist/Academic Detailer
Rutgers New Jersey Medical School

Lanvin Taylor II, DO,
NeuroMusculoskeletal Institute
Rehabilitation Medicine
Rowan University

Our Goal

- Combat the substance use crisis through education on best preactices in a safe space for peer-to-peer learning
- Engage healthcare providers in the primary care setting to increase skills to safely and compassionately manage, treat, and support their clients with a substance use disorder
- Recognize the importance of reducing stigma to advance equity and improve access to care for patients with substance use disorders

Terminating MOUD: When is it appropriate?

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Presented by:
Lanvin Taylor, DO
Neuromusculoskeletal Institute
Rehabilitation Medicine
Rowan University

Financial Disclosures

- The following sessions leader(s) have no relevant Financial relationships with ineligible companies to disclose:
  - Lanvin Taylor II, DO

Zoom Poll

1. A majority of my patients with OUD are on medications for opioid use disorder (MOUD)?
   - Yes
   - No

2. Amongst those on medications, approximately what % of patients want to taper off MOUD eventually?
   - 0-25%
   - 26-50%
   - 51-75%
   - 76-100%
   - Not sure

3. I believe that as a provider, it is appropriate that I may suggest an option to taper after a patient is stable (not using their opioid drug of choice)/maintained on MOUD.
   - True
   - False

Learning Objectives

- Discuss MOUD in terms of goals and objectives of successful treatment
- Identify situations where discontinuing MOUD may be appropriate
- Review the underlying pathophysiology of addiction and the role of MOUD
- Discuss pitfalls and dangers of discontinuing MOUD

SPOILER ALERT

NEVERRRRR!
No. No. No, no, no.

Discontinuing MOUD

- Increase risk of relapse
- Increased risk of overdose
- Return to unhealthy risk-taking behavior

Understanding MOUD

- Break the cycle of negative emotional states
- Binge, withdrawal, preoccupation
- Seeks to put out the “Fire” in the Mesolimbic System
- Allow time for the prefrontal cortex to establish better connection
  - Apply impulse control

Understanding MOUD

- Not a perfect solution
- Will not please the purist
- Room for continued evolution and improvement
- Necessary in the age of the fentanyl analogs
  - Death from overdose
  - Overdose from potent drug/decrease tolerance

Understanding MOUD

- Goals
  - Eliminate craving
  - Eliminate withdrawal
  - Improve functioning
  - Address underlying physical and mental health issue
  - Restore to positive role in society

Behavior and Motivation

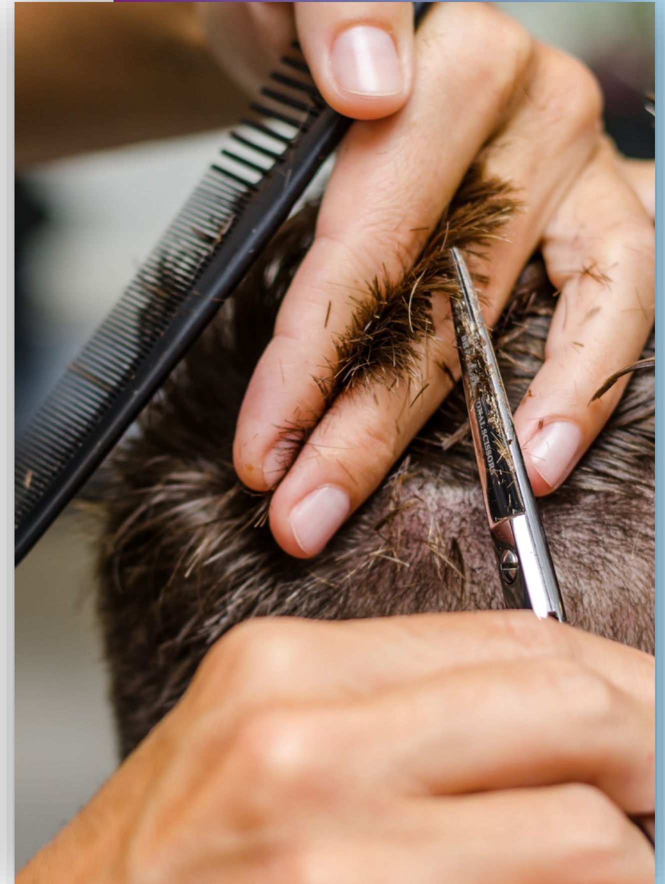
Questions:

1. Why do we do what we do?
2. How is behavior rooted in Survival Mechanisms?
3. Reward and Anti-reward pathways?

Behavior–Haircut
Motivation

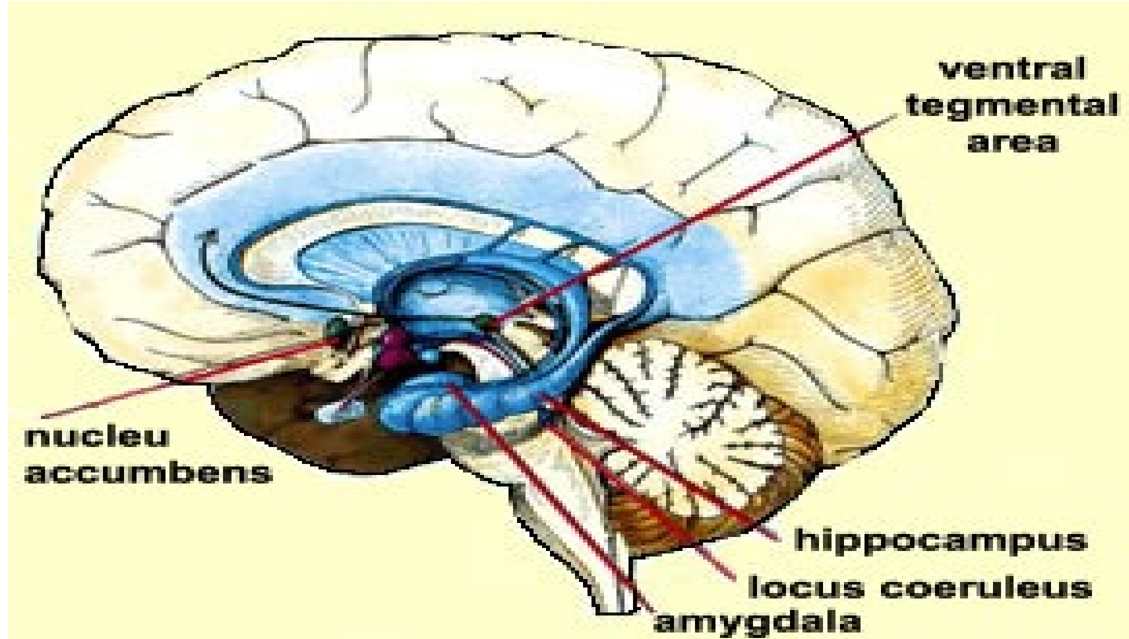
- Keeping oneself groomed is consistent with prosperity/health
- Prosperity attracts attention and cooperation from peers
- Attention and cooperation leads to greater survival and increased chance of reproducing

Attention /Compliments/greater cooperation FEELS GOOD. WHY?



Dopamine

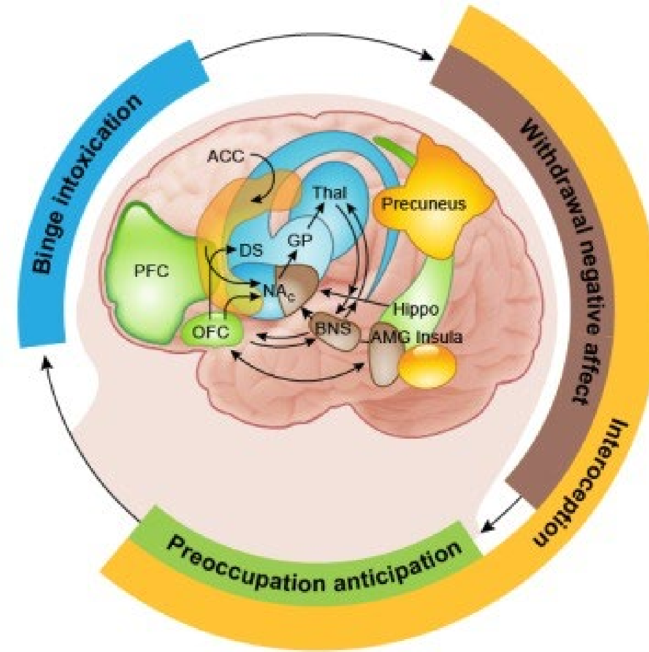
Nucleus Accumbens



Dopamine is a powerful neurotransmitter (highly rewarding) that largely influences behavior and decision making

Key Regions

Nucleus Accumbens
VTA
Prefrontal Cortex
Hippocampus
Amygdala



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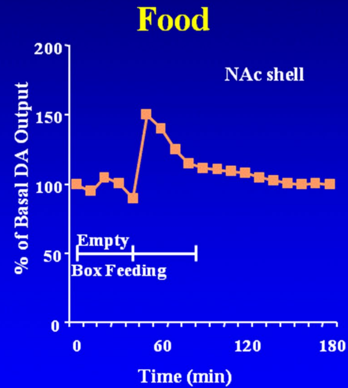
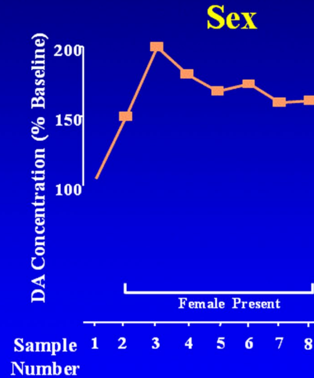
Dopamine Release

Natural Rewards Elevate Dopamine Levels

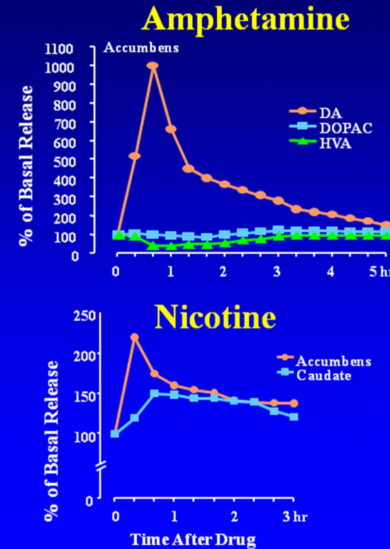


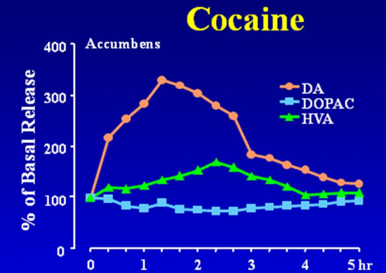


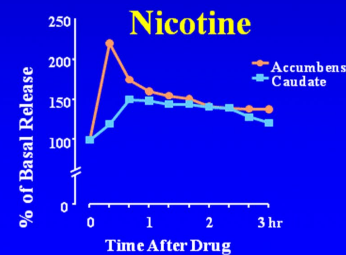
Di Chiara et al., Neuroscience, 1999.,Fiorino and Phillips, J. Neuroscience, 1997.

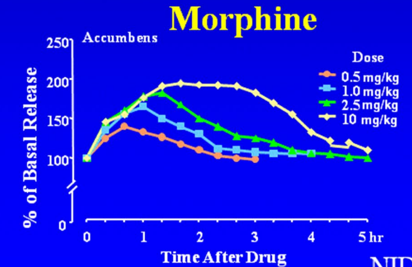
NIDA

Effects of Drugs on Dopamine Release









Di Chiara and Imperato, PNAS, 1988

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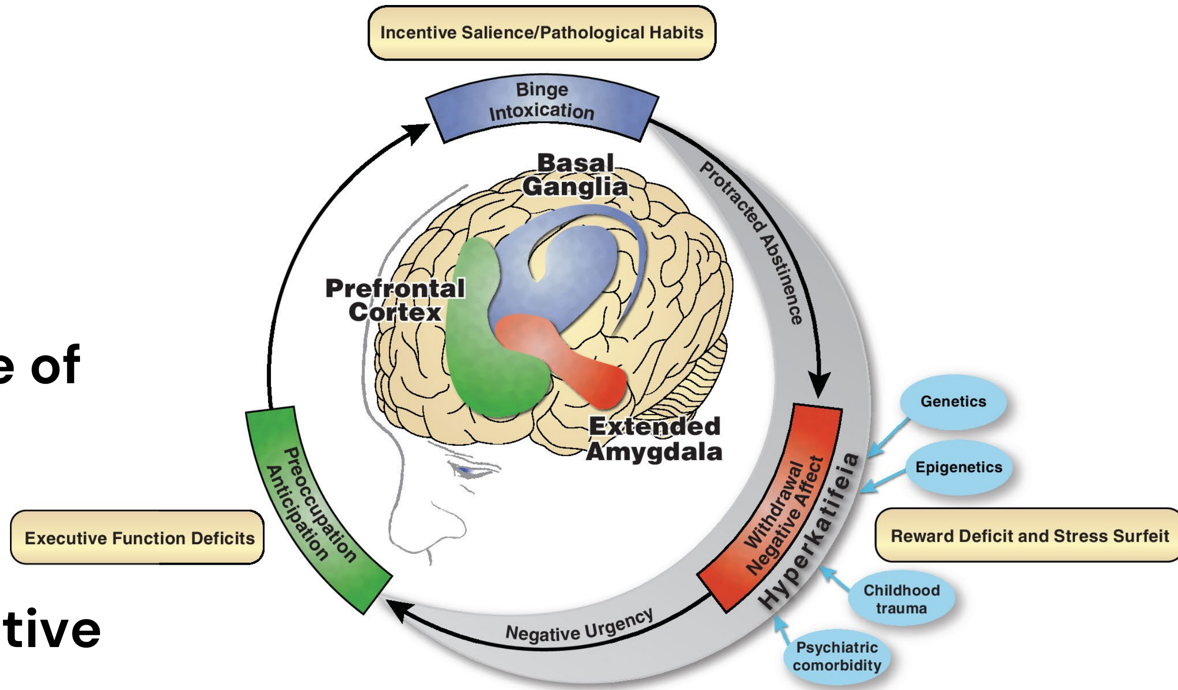
MOUD Selection
Not one size fits all

- There are options based on where patients fall in care context
  - Vivitrol
  - Buprenorphine (SL vs Sublocade)
  - Methadone
- Ideal treatment
  - Cognitive component
    - CBT, 12 step, talk therapy
  - Medication Component
  - Social Component
  - Health Component

Neurobiology of Addiction

- Dysregulation of motivational circuits
- Exaggerated salience of drug incentive
- Deficit in reward
- Increase Stress
- Compromised Executive Function



Discontinue MOUD

Patient Factors

- Consider switching to alternative that may be more appropriate
- Consider structure vs rigidity of program
- DIVERSION
- Consider higher level of care and resume MOUD when appropriate

How to Discontinue

- Slow tapers tend to work better than fast tapers
- Provide in case of emergency instructions and contingencies
- Discuss relapse not as failure but opportunity to get back in treatment
- Should be maximized in terms of CBT, social, health and economic determinants
- Tapers may tend to get harder near the end
- Maintain open and honest communication

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Thank you!

Any questions?

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BUPRENORPHINE TAPERING: APPROACHING DISCUSSIONS WITH A PATIENT
A GUIDE FOR PROVIDERS

A REALISTIC SCENARIO

- "I have an individual on prescribed buprenorphine who has been tapering off and is now down to 2mg (from 16mg). I told him to just stop taking the 2mg to finish the taper, but he has been waking up sick and ends up taking the 2mg because he can't go without it. He wants to know if there is a medication to help him get off buprenorphine."

KEY POINTS:

PROVIDERS SHOULD UNDERSTAND THEIR PATIENTS' RATIONALE FOR STOPPING BUPRENORPHINE

- Does the patient prefer not to take buprenorphine daily?
- Does the patient want to avoid pill burden?
- Consider the use of extended-release injectable buprenorphine or naltrexone as possible options after tapering to reduce the risk of overdose due to a lower opioid tolerance.

BENEFITS OF LONG-TERM THERAPY

- Patients understand benefits vs. risks and receive appropriate education, especially in the current landscape of highly potent synthetic opioids. Risks may include relapse, post-acute withdrawal syndrome that puts someone at risk of relapse, and more.
- Evidence strongly suggests MOUD be continued indefinitely unless the patient adamantly wants to stop taking MOUD and/or continued treatment is harming the patient.
- Providers NEVER advise or dictate when patients should stop or taper; it should be dictated by the patient.

EXPLAINING SUD AS A CHRONIC ILLNESS:

- Often times, patients think that MOUD are only meant for temporary use, and not for primary treatment. Providers should explain that medications are FOR opioid use disorder, rather than for "assisting" in one's road to recovery.
- Help patients understand that OUD is chronic disease like diabetes, HIV, etc. and that managing chronic diseases often requires a chronic medication.

Summary:

A thematic analysis of Reddit content by Graves and colleagues found the following:

- Tapering schedules to be longer than those in the medical literature. In Fiellin and colleagues, the duration of taper was 3 weeks and amongst those who reported in Reddit that they successfully tapered, the median type to cessation was 93 days to taper from 2mg down to 0.
- Some patients cut the 2mg buprenorphine films into “16 or 32” pieces to facilitate further tapering and the most frequent termination doses also occurred at 0.063mg (1/32 of a film) and 0.125mg (1/16 of a film)
- Only an estimated 15% were able to successfully taper
- Patients experienced fatigue, GI effects, and mood disturbances and used loperamide and vitamins/supplements to ameliorate symptoms

Summary

- There is no available evidence-based approach for tapering buprenorphine. As a provider, understanding and supporting the patient in their decision to taper, and evaluating the evidence for tapering is important. Be open with your patient and emphasize expectations so that any interventions, whether initiated by you or the patient, are done through a shared-decision making approach. Be sure to emphasize the risks of the taper, and educate the patient on the appropriate use of adjunctive medications, to minimize harms while tapering. The limited evidence available indicates that a very slow taper using “micro” doses of buprenorphine (<2mg) is the best approach.