



Opioid Use Disorders

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Content:

To the extent possible, the content creators sought to ensure everything presented is evidence-based (as of 2019). If the presenter shares an opinion, they will strive to note that it is their opinion based on the evidence reviewed and/or their clinical experience.

Adolescent Dental Patients 1-3

- In 2009, dentists were the top opioid prescribers for adolescents ages 10-19
- JAMA Internal Medicine 2018
 - 6%** of ~15,000 people ages 15-16 who received initial opioid prescriptions from dentists were diagnosed with opioid use disorder within 1 year
 - 0.4%** of group given ibuprofen/acetaminophen were diagnosed with opioid use disorder within 1 year

¹Volkow ND, McLellan TA, Cotto JH et al. 2009

²Schroeder AR, Dehghan M, Newman TB 2018

³Harbaugh CM, Nalliah RP, Hu HM 2018

How does heroin use begin?

Lankenau 2012: Initiation into Prescription Opioid Misuse among Young Injection Drug Users³

- 40% reported their own prescription as the source of first misuse
- Typically occurred at 15.3 years old

Jones, 2013: Heroin use and heroin use risk behavior among nonmedical users of prescription opioid pain relievers¹

- Nearly 80% of heroin users reported using prescription opioids prior to heroin

Heroin use is part of a larger substance misuse problem

People who are addicted to...

Alcohol

are

2x

Marijuana

are

3x

Cocaine

are

15x

Rx Opioid Painkillers

are

40x

...more likely to be addicted to heroin.

Nearly all people who used heroin also used at least 1 other drug

Most used **at least 3** other drugs

Once using opioids, why do people continue?

- For 40 years providers have told patients to finish their antibiotics
- Providers tell patients to stay on top of the pain... don't wait for the pain
- **Brain changes** ^{2,3}
 - Repeated drug exposure
 - Development of “memory traces for drug use”
 - Together, these affect a person's reward circuit

¹Carr T. 2017

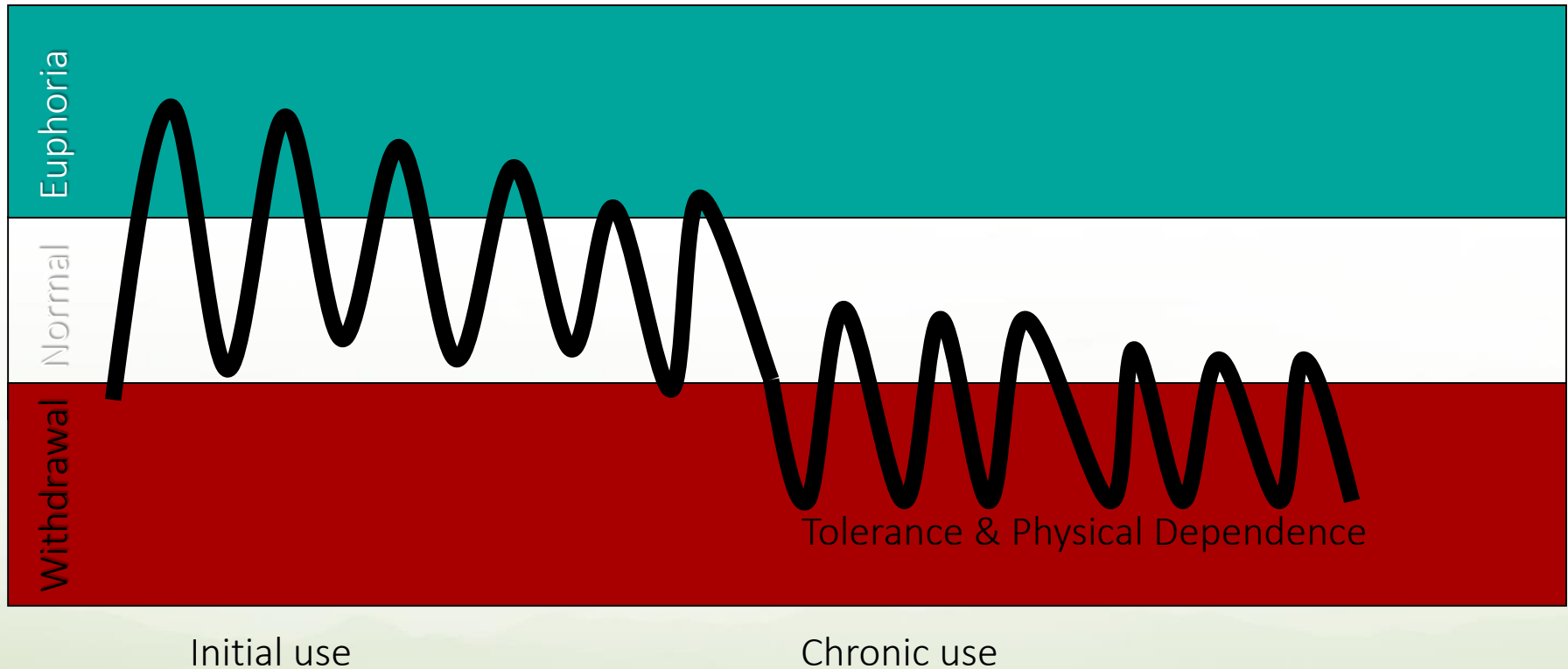
²National Institute on Drug Abuse 2018

³ Wise RA, Koob GF 2013

Once misusing opioids, why do people continue?

- Cravings ¹
- Desire to alleviate symptoms of withdrawal
 - Severe flu-like symptoms¹

Natural History of Opioid Use Disorder



Alford DP. <http://www.bumc.bu.edu/care/>

Medication-Assisted Treatment (MAT)

- The use of medications in combination with counseling and behavioral therapies for the treatment of substance use disorders. - SAMHSA
- Other Terminology
 - Medications for Opioid Use Disorder (MOUD)
 - Medication for Addiction Treatment

Medication-Assisted Treatment

Goals

- Block cravings
- Manage withdrawal
- Block the effects of illicit opioids
- Help maintain recovery
- Allow person to function while brain “re-sets”

Opioid Use Disorder

Treatment Approaches & Rates of Adherence

- Buprenorphine:
 - **≈ 46-54%** (Weiss et al., 2017; Mintzer et al., 2007; Potter et al., 2013)
- Methadone
 - **≈ 43 -53%** (Strain et al., 1993; Potter et al., 2013)
- Naltrexone
 - **≈ 35%** (Lee et al., 2018)
- Detox then abstinence:
 - **≈ 7-13%** (Weiss et al., 2017; Tuten et al., 2012)

Medication-Assisted Treatment

Benefits of MAT


- Reduces death, HIV/HCV transmission, illicit drug use, criminal behavior
- Improves retention in treatment, employment rates
- Every \$1 invested in addiction treatment returns a yield of \$4 to \$7 in reducing drug related crimes, criminal justice and theft

Medication-Assisted Treatment

MAT has better outcomes than abstinence-only programs

- 90% of patient on abstinence only therapy will relapse
- 40-60% of patients on MAT will relapse

MAT is standard of care per:

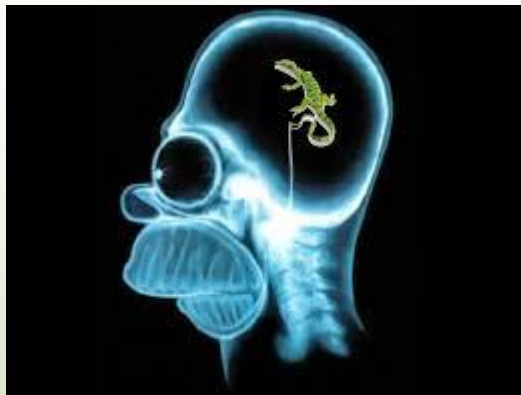
- World Health Organization
 - National Institute on Drug Abuse
 - American Society of Addiction Medicine
 - Centers for Disease Control and Prevention
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Why do people with SUD do what they do?

...Drowning



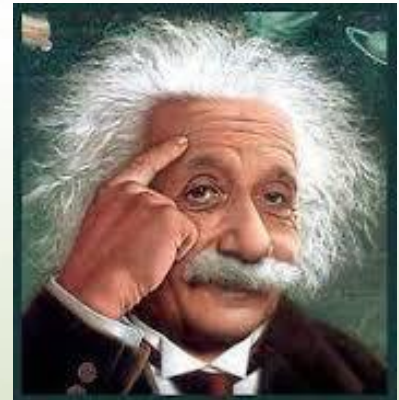
Primitive Brain



You need to breathe!

vs.

Thinking Brain



Don't breathe water!

Neuroadaptations

- Brain can take years to “re-set”



Stigma and Bias

around Substance Use Disorders

and the medications used to stabilize the
brain



Common Concerns Associated with MAT

"You are just substituting one addiction for another"

"Addicts are hiding in MAT programs"

"Is my loved one going to be on this medication forever"

"Patients are abusing methadone/suboxone"

Stigma & Bias in Treating Substance Use Disorder (SUD)

- Stigma and bias restrict access to care and negatively impact the health of patients

“Attrition from MAT is fueled by negative interactions between physicians or program staff and patients”

Stigma and Bias Associated with MAT

Four Factors leading to MAT stigma

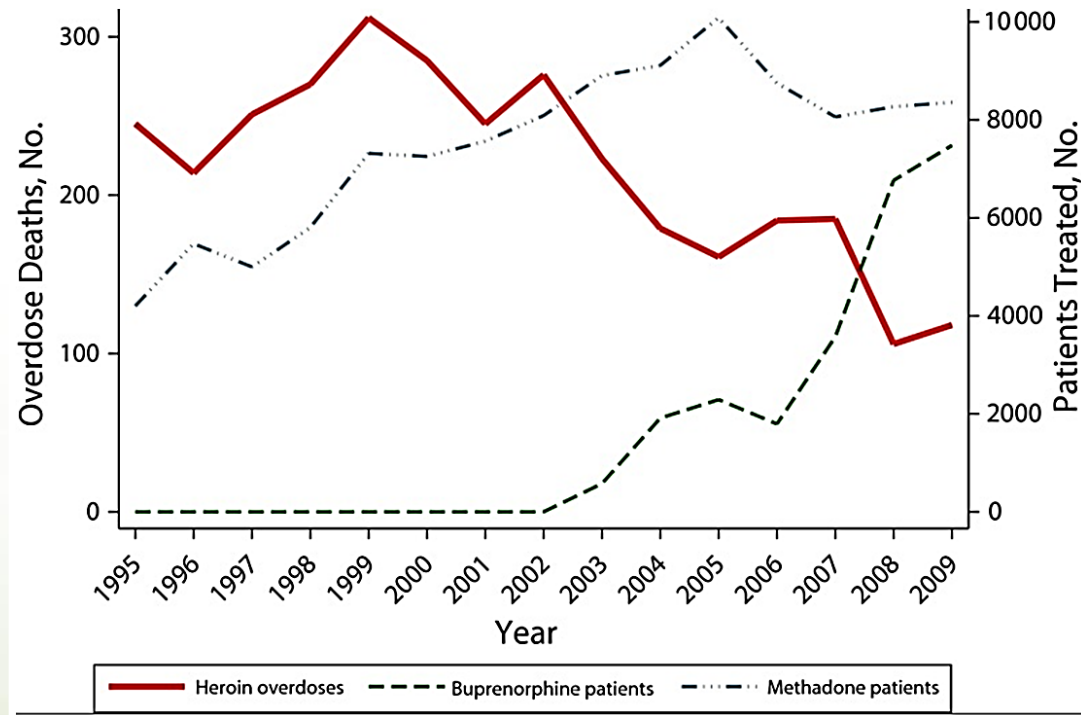
1. Framing of SUDs as a 'willful choice,' not a disease
2. Separation of SUDs treatment from primary care
3. Stigmatizing language associated with SUDs
4. Justice system's lack of recognition of MAT as an option for medical treatment for individuals with SUD

Increase in MAT – Decrease Opioid Overdose Deaths

Examined the association between expansion of methadone and buprenorphine treatment and the prevalence of heroin overdose deaths

Conclusions

- Increased access to opioid agonist treatment was associated with a reduction in heroin overdose deaths
- Evidence-based medication treatment of OUD may decrease heroin overdose deaths



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