REDUCING THE STIGMA OF OPIOID ADDICTION

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ORGANIZATION

- The Opioid Crisis
- Barriers to Treatment
- Genetics of Opioid Addiction
- Neurobiology of Opioid Addiction
- Treatment of Opioid Addiction
- Questions
OPIOID OVERDOSE DEATHS

CDC DATA

heroin

opioid analgesics


0 5000 10000 15000 20000 25000 30000 35000
THE COUNTDOWN CONTINUES

Opioid overdose deaths:

- 2014 – one person every 19 minutes
- 2015 – one person every 16 minutes
- 2016 – one person every 13 minutes
- 2017 – on track for one person every 10 minutes

WHY ARE WE FAILING TO SLOW/REVERSE THE CLOCK?
NIH CONSENSUS STATEMENT

“Many of the barriers to effective use of MMT (methadone maintenance treatment) in the treatment of opiate dependence stem from misperceptions and stigmas attached to opiate dependence, the people who are addicted, the people who treat them, and the settings in which services are provided…”
Among the recommendations:

“Vigorous and effective leadership is needed within the Office of National Drug Control (ONDC)(and related Federal and State agencies) to inform the public that dependence is a medical disorder that can be effectively treated with significant benefits for the patient and society.”

OPIOID OVERDOSE DEATHS

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BARRIERS TO TREATMENT

- Adherence to stereotypes about opioid “addicts”
- Stigma from almost everywhere
- Failure of the medical community to recognize the knowledge deficit
- Poor dissemination of information
- Shame on the part of the patient
Like umbrellas, minds work best when they are open.

It can be easier to tell when an umbrella is closed than when a mind is closed.
BREAKING STEREOTYPES, REMOVING BARRIERS

• When we are deeply invested in our framework/belief, we will work to keep that structure rather than change it.

• When we are deeply invested in our framework/belief, we may not recognize/”hear” information that contradicts it.

• Knowing this about ourselves can help us be more open to accommodation = changes in our framework for understanding the world.
BUILDING COGNITIVE FRAMEWORKS

• Assimilation vs Accommodation

• Framework – Horse

• Assimilation - horses
BUILDING COGNITIVE FRAMEWORKS

• Accommodation
  • Horses

• Zebra
IF THIS IS A COGNITIVE STRUCTURE FOR ADDICTION
THESE FOLKS DON’T FIT THE FRAMEWORK
NOR DO THESE FOLKS. INDEED, THEY MAY BE ASSIMILATED INTO A "CELEBRITY" GROUP WHICH EXEMPTS THEM FROM STEREOTYPES ABOUT ADDICTS (BUT NOT TO THOSE ABOUT CELEBRITIES).
DISCOVERING A PERSON YOU LIKE IS ADDICTED MEANS YOU NEED TO ACCOMMODATE/ADJUST EITHER YOUR VIEW OF THE PERSON OR YOUR VIEW OF ADDICTION.
KEY POINTS TO UNDERSTANDING OPIOID ADDICTION

1. There is a strong genetic component to opioid addiction.
2. Addiction is not under voluntary control.
3. The addicted brain is not a rational brain.
4. Opioid addiction is a treatable medical condition.
How much risk for addiction when exposed to opioids is due to genetics?

A. 10%
B. 30%
C. 50%
D. 70%
E. 90%
THERE IS A STRONG GENETIC COMPONENT TO OPIOID ADDICTION (CONT.)

• Those who feel energized by hydrocodone do not realize this is not what most people experience.

• This response suggests that they may carry a genetic variant that produces a magnified chemical signal that initiates neurological changes in the brain.

• Physicians do not know to warn patients that feeling energized is not normal and can indicate predisposition to neurological changes/addiction.
ADDICTION IS NOT UNDER VOLUNTARY CONTROL

• Neural restructuring is not under voluntary control, but it is what drives addictive behavior.

• Neural restructuring is not hypothetical.
Addictive drugs + genetic variations lead to changes in genetic expression = neurons, neurotransmitters, and other substances are changed.

This is not under voluntary control.
Dopamine D2 Receptors Are Lower in Addiction

Cocaine
Meth
Alcohol
Heroin
Control
Addicted

DA D2 Receptor Availability
THE ADDICTED BRAIN IS NOT A RATIONAL BRAIN

- Limbic pathways are activated
- Impulse control is limited
- This is not under voluntary control
It is not appropriate to expect the brains on the right to respond like the brain on the left.
Addiction is Like Other Diseases...

- It is preventable
- It is treatable
- It changes biology
- If untreated, it can last a lifetime

Decreased Brain Metabolism in *Drug Abuser*

Healthy Brain  
Diseased Brain/Cocaine Abuser

Decreased Heart Metabolism in *Heart Disease Patient*

Healthy Heart  
Diseased Heart

Research supported by NIDA addresses all of these components of addiction.
Once medication has been started, when compared to high blood pressure or diabetes, the relapse rate for addiction is:

- a. much higher
- b. higher
- c. about the same
- d. lower
- e. much lower
ADDITION IS A TREATABLE MEDICAL CONDITION

Percentage of patients who relapse:

- Type 1 diabetes: 30-50%
- Drug addiction: 40-60%
- Hypertension: 50-70%
- Asthma: 50-70%

How long has methadone been the medical standard of care for the treatment of opioid use disorder?

A. It isn’t the medical standard of care
B. 10 years
C. 30 years
D. 50 years
E. 70 years
OPIOID ADDICTION IS A TREATABLE MEDICAL CONDITION

For over 50 years, medication-assisted treatment (MAT) programs (counseling plus medication) have been the medical standard of care for treating opioid addiction. Methadone treatment started in the 1960s, buprenorphine is a slightly more recent addition.

OPIOID ADDICTION IS A TREATABLE MEDICAL CONDITION

• Treatment of opioid use disorder with long-acting opioids (methadone, buprenorphine) stabilizes the areas driving addictive behavior. Under appropriate treatment, the person is dependent, but no longer addicted.
OPIOID ADDICTION IS A TREATABLE MEDICAL CONDITION

• With continued treatment, the neural changes in the brain begin to return towards the pre-exposed state. This does not happen with short-acting opioids.
OPIOID ADDICTION IS A TREATABLE MEDICAL CONDITION

- Methadone and buprenorphine are not substitutes for short acting opioids. They produce a different neurobiological response and are the medications of choice to treat opioid use disorder.
OPIOID ADDICTION IS A TREATABLE MEDICAL CONDITION

• As with depression, medication may be required for a few years, or a lifetime.

• Research indicates that medication combined with counseling (MAT) is clearly superior to either alone. Medication only has better outcomes than abstinence only.
WHAT ABOUT THE PREGNANT PATIENT?

• Medication-assisted treatment with methadone or buprenorphine is the standard of care for opioid use disorder in pregnancy.
WHY MAT DURING PREGNANCY?

Compared to those in MAT, untreated opioid addiction in pregnancy results in increases in: non-opioid illicit drug use by the mother, poor prenatal care, spontaneous abortion, preterm complications, infant mortality, NAS, and developmental problems. It also results in a six-fold increase in maternal obstetric complications, and a 74-fold increased risk of sudden infant death syndrome.

Minozzi, S, Amato, L & Davoli, M  Maintenance agonist treatments for opiate dependent pregnant women . 2008 Cochrane Database of Systematic Reviews  Issue 2., Art. No.: CD006318. DOI: 10.1002/14651858.CD006318.pub2
WHAT ABOUT THE PREGNANT PATIENT?

What percentage of pregnant women with OUD receive the medical standard of care during pregnancy?

A. 10%
B. 30%
C. 50%
D. 70%
E. 90%
WHAT ABOUT THE PREGNANT PATIENT?

• Most admissions of pregnant women for opioid addiction treatment (66-76%) did not include medication-assisted-treatment.


• Why Not?
BARRIERS TO MAT & SEEKING MAT IN PREGNANCY

- Lack of education/understanding re MAT
- Lack of support
- Lack of access
- Fear of losing child
- Stigma/judgement
  - About being addicted
  - About methadone/NAS
WHY DO SOME BABIES HAVE WORSE NAS THAN OTHERS?

- There are genetic variants that protect against NAS.

- There are genetic variants and other factors that increase the severity and intensity of NAS.
HOW DOES MOM’S DOSE INFLUENCE THE BABY/NAS?

- If mom is in withdrawal, baby is in withdrawal.
- Mom’s methadone dose does not predict the duration or severity of baby’s NAS.


- CYP2B6 can become more active during pregnancy, increasing the metabolic clearance of methadone, necessitating dose increases.

Ren, ZY et al. The impact of genetic variation on sensitivity to opioid analgesics in patients with postoperative pain: A systematic review and meta-analysis. 2015, 18; 131-152.
WHY WAS THE NIH RECOMMENDATION INEFFECTIVE?

Among the recommendations:

“Vigorous and effective leadership is needed within the Office of National Drug Control (ONDC) (and related Federal and State agencies) to inform the public that dependence is a medical disorder that can be effectively treated with significant benefits for the patient and society.”

THE NIH CONSENSUS STATEMENT TARGETED THE WRONG LEVEL

You are the leadership needed to slow and reverse the opioid crisis.
A DIFFERENT FRAMEWORK FOR ADDICTION

• Addiction is not a moral failing, it is:
  • A neurobiological process
  • A medical disorder
  • Treatable
A DIFFERENT FRAMEWORK FOR ADDICTION

• Methadone and buprenorphine:
  • Are medications, not drugs
  • They allow the brain to restructure/recover
YOU HAVE THE POWER TO:

- Share Knowledge & understanding
- Break down the barriers
- Reverse the countdown clock
- Save babies
- Save lives
KEY RESOURCES

- National Institute on Drug Abuse (NIDA) website https://www.drugabuse.gov
- Corey Waller, M.D., Addiction 101, U̗tube https://www.youtube.com/watch?v=umA-3KcJaxk
- Substance Abuse and Mental Health Services Agency website https://www.samhsa.gov
- National Center on Substance Abuse and Child Welfare website https://ncsacw.samhsa.gov (Dr. Grossman’s Webinar on Yale’s approach to NAS is excellent)
RESOURCES

“Advancing the Care of Pregnant and Parenting Women With Opioid Use Disorder and Their Infants: A Foundation for Clinical Guidance”

• Provides a summary of expert opinion used to create the Substance Abuse and Mental Health Services Agency (SAMHSA) document “Clinical Guidance for Treating Pregnant and Parenting Women With Opioid Use Disorder and Their Infants”.

• Download by going to http://www.regulations.gov and then search “advancing the care of pregnant”
QUESTIONS