## Substance Abuse 101: Mythbusters

KRISANNA DEPPEN, MD FAMILY MEDICINE, ADDICTION MEDICINE GRANT MEDICAL CENTER-OHIOHEALTH COLUMBUS, OH







#### Some Addicts Never Had a Chance to "Just Say No."

If you think drug addicts only hurt themselves, think ugain. Everyone is at risk of becoming a tragic victim of drug-related crime, violence and bodily harm. Even a newborn baby.

This year, an estimated 362,000 drug-damaged babies will be born in the United States. They enter this world craving illegal street drugs they know nothing about. It's an emotionally deveateting addiction they inherit from their mothers.

And it is the cruelest form of abuse and neglect imaginable.

Underdeveloped, undermourished, crying, sweating and weighing only 2 to 3 pounds at birth, drugged babies suffer days of withdrawal treatment from prenatal exposure to drugs.

Some will die from blood poisoning, seizures or heart attacks. Many will be abandoned by their drug-addicted mothers. Most will have difficulty relating to their world, and will encouncer severe psychological problems later on.

It is time to halt the horror. It is time to put an end to drug abuse.

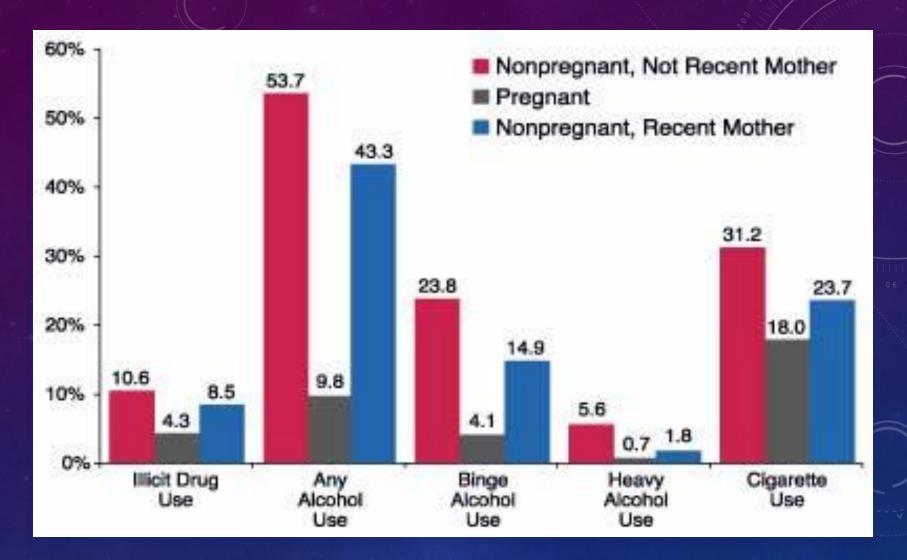
THE SERVICE THAN AND ADDRESS SERVICES SERVICE RATE SPINIS LAW. RECORDED IT 4 AD -27





## "IF THESE MOMS REALLY CARED ABOUT THEIR BABIES, THEY WOULD JUST QUIT"

- Those who can quit, often do
- Addiction has multiple effects on the brain
- Addiction is similar to other chronic medical illnesses



~SAMHSA NATIONAL SURVEY ON DRUG USE AND HEALTH, OFFICE OF APPLIED STUDIES, 2002 AND 2003

### Addiction

 A primary chronic, neurobiologic disease, with genetic, psychosocial, and environmental factors influencing its development and manifestations

### Neurobiology of addiction

- Role of dopamine
- The neurobiology of addiction encompasses more than the neurochemistry of reward
- Frontal cortex-altered impulse control, altered judgment, and the dysfunctional pursuit of rewards (Volkow, 2007)

## Relapse Rates: Similar for Drug Addiction And Other Chronic Illnesses

Percentage of patients whose symptoms reoccur

Drug addiction	60%
Type 1 diabetes	30 to 50%
Hypertension [	50 to 70%
Asthma	50 to 70%

Source: "Drug dependence, a chronic medical illness: implications for treatment, insurance and outcomes evaluation," *Journal of the American Medical Association*, 2000.



# "METHADONE (OR BUPRENORPHINE) IS JUST ANOTHER ADDICTION"

- Dependence is different than addiction
- Legal, safe, monitored dose
- Studies on improved outcomes on methadone

## DEPENDENCE IS DIFFERENT THAN ADDICTION

- Physical dependence
  - Tolerance and withdrawal can develop with appropriate use of prescription medications (pain or addiction treatment)
- Addiction
  - Characterized by behaviors that include one or more of the following: impaired <u>control</u> over drug use, <u>continued</u> use despite harm, and <u>craving</u> ("3 C's")

### **BUPRENORPHINE**

- Trade names Suboxone (buprenorphine/naloxone),
   Zubsolv (buprenorphine/naloxone), Subutex
   (buprenorphine only)
- Partial opioid agonist/antagonist
- Risk of precipitating withdrawal (Must wait until patient is in mild to moderate opioid withdrawal prior to giving this medication the first time)
- Can be prescribed in office with special license (8 hour CME)

### **METHADONE**

- Full opioid agonist
- Long half-life
- Must be prescribed for addiction treatment from a methadone clinic (opioid treatment program)

## OPIOID MAINTENANCE THERAPY (SPECIFICALLY METHADONE)

- Began in 1967 by Dole and Nyswander
- Improved outcomes
  - Decreased mortality, reduced illicit drug use, reduced seroconversion of HIV, decreased criminal activity, increased socially productive activities (Martin 2009)
- Only 10-20% of patients who discontinue maintenance therapy are able to remain abstinent (Nosyk 2012)
- PET scans suggest that methadone maintenance at least partly normalizes cerebral glucose metabolism, as compared with patients withdrawn from methadone and in sustained remission (Galynker 2000)



# "MAINTENANCE THERAPY IS HELPFUL FOR MOM, BUT THIS CAN'T BE GOOD FOR THE BABY."

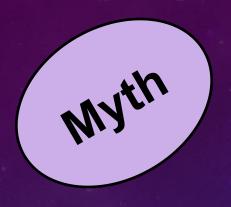
- Improved maternal outcomes
- Improved obstetrical outcomes
- Improved neonatal outcomes

### **Maternal improvements**

- Decreased risk of relapse
- Improved prenatal care
- Higher likelihood of abstinence from concomitant drug use
- Untreated heroin use in pregnancy linked to growth restriction, placental abruption, fetal demise, preterm labor (ACOG, 2012. Minnes, 2011)

### Fetal improvements

- Higher birth weights
- Higher gestational age (Peles, 2012)



### "THESE MOMS ARE SO MUCH WORK, THIS ISN'T WORTH IT."

- Improving care of these families is valuable to infant care and development
- Improving care is valuable to the substance using family
- Improving care may be valuable to your staff
- Improving care could be valuable to you

## Benefits of Improved Care for Infants and Families

### **Infants**

- After delivery, long-term outcomes improved with safe, sober environment to grow up in
- Facilitated by early bonding

### Mother/families

- Recovery from addiction is lifechanging
- Recovery occurs at similar rates to treatment of many other chronic, medical diseases
- Delivery of infant affected by drug use could be a teachable moment

### IMPORTANCE TO MEDICAL PROVIDERS

- Providing substance-using families a different experience of the health care system may help facilitate better bonding and care for infants
- Creating an environment where moms are welcome, can create a better environment for us to work in
- Understanding addiction and learning skills to communicate effectively with these families could lessen caregiver burnout/stress

### IMPROVING COMMUNICATION SKILLS: INTRO TO MOTIVATIONAL INTERVIEWING

- "Motivational interviewing is a collaborative, personcentered form of guiding to elicit and strengthen motivation for change." (Miller & Rollnick, 2009)
- Five components of motivational interviewing
  - Express empathy
  - Develop discrepancy
  - Support self-efficacy
  - Roll with resistance
  - Eliciting change talk and commitment language

### **CONCLUSION**

- Addiction is a chronic and treatable disease
- Opioid maintenance therapy with methadone or buprenorphine may play an important role in treatment of pregnant women struggling with addiction
- Opioid maintenance therapy improves outcomes for both pregnant women and their infants
- Providing non-judgmental, compassionate care can be rewarding and beneficial for the patients and the providers