Methamphetamines, mamas and munchkins – the drug epidemic we aren’t talking about

Marcela Smid, MD
Maternal Fetal Medicine
Addiction Medicine
Medical advisory committee for Gilead (I believe in universal Hepatitis C screening for all pregnant and reproductive age women)
WHO AM I?
MEDICAL DIRECTOR OF SUPERAD CLINIC –
(SUBSTANCE USE & PREGNANCY: RECOVERY, ADDICTION AND DEPENDENCE)

• **Specialty prenatal care** for women with substance use disorders
• Co-located services:
  – MFM including ultrasound
  – Addiction fellows
  – Pharmacotherapy buprenorphine/suboxone
  – Addiction peer support
  – Case management from health plan
  – Resource management
  – Social work
  – On-site child care
  – Peer support
  – NOT a methadone clinic

  – **Motto:** “beg borrow and steal for services”
LEARNING OBJECTIVES

• **The problem:** Understand the “new epidemic” of methamphetamine use among pregnant women

• **Sex, gender and drugs:** Describe why methamphetamine is a compelling drug for women

• **Mamas and munchkins:** Discuss perinatal impact of methamphetamine use including maternal, fetal and infant outcomes

• **What do we do:** evidence-based interventions for pregnant/postpartum women using methamphetamines and the gaps in care
MOST IMPORTANT OBJECTIVE
HUMANIZE THE ISSUE – MEET DONELLE GOINGS

Meth addiction takes toll on South Dakota women

By: Bart Pfankuch | November 15, 2018
In 2015, approximately 1.7 million Americans used methamphetamine in the past year
  - Past month use 897,000
  - Population of North and South Dakota 1.64 million

South Dakota:
  - Meth-related crimes increased 625% increased past 15 years
    • 2002 467 → 3390 in 2017 15 years
  - 64% of women and 27% of men in prison for drug-related crimes
Nearly 100 percent pure and about $5 a hit, the new meth is all the more difficult for users to resist.
Methamphetamine highly purified derivative of amphetamine.

Meth, ice, crank, speed, glass, crystal, tina, glass, poor man’s cocaine, biker’s coffee

More potent than amphetamine

Smoked, snorted, injected or ingested orally or anally
METHAMPHETAMINE LABS

Reduced to hydrogen

Pseudoephedrine

Methamphetamine (1-Phenyl-2-aminopropane)

Cannot be reduced to hydrogen

Phenylephrine

meta-Hydroxy-1-phenyl-2-aminopropane
Meth Seizures Are on the Rise Across the Nation

The amount of methamphetamine seized by U.S. authorities has been increasing, especially in Southwest field offices.

By Sahil Chinoy | Source: U.S. Customs and Border Protection
Donelle: “I talk to my oldest kids but they don’t really know me and I really don’t know them,” she said. “I feel like I let them down and I feel guilty for not being there for them. After losing my first three children, I felt like a failure and it intensified my drug use to numb my feelings and not care about anything.”

BACK TO DONELLE’S STORY

- Started using cocaine at age 14
- At age 18, left for Denver and had three children with a man who dealt cocaine
- In 2000, she was arrested and sent to prison and lost custody of her three children
EFFECTS OF METHAMPHETAMINE

• Prolonged euphoria from release of dopamine, norepinephrine and serotonin.
  – World’s best anti-depressant until……. neurotransmitters are depleted.
• Prolonged use results in permanent depletions of NT, including serotonin, and likely neuronal death which can lead to depression/anxiety.
• Can regenerate-6 months to 1 year.
• Women may be at particular risk of grey matter damage.

BRAIN RECOVERY WITH PROLONGED ABSTINENCE

Healthy Person  METH Abuser 1 month abstinence  METH Abuser 14 months abstinence
Addiction – A primary, chronic disease of brain of the reward, motivation, memory, and related circuitry.

Dysfunction in these circuits leads to characteristic biological, psychological, social and spiritual manifestations. This is reflected in an individual pathologically pursuing reward and/or relief by substance use and other behaviors.

Genetic component: 50% of addiction is hereditary.
• **Stimulant use disorder** is "the continued use of amphetamine-type substances, cocaine, or other stimulants leading to **clinically significant impairment or distress**, from mild to severe."
WHAT’S WITH METH AND WOMEN?

- Other substance use disorders favor men
  - Alcohol 3:1
  - Cocaine 2:1
  - Methamphetamine 0.2% of both men and women have used (NSDUH, 2009)
  - Women 45% of meth-related treatment admissions (TEDS, 2012)
METHAMPHETAMINE AND YOUTH - NATIVE POPULATIONS

- National Longitudinal Study of Adolescent Health (N=14,332; 18–26-year-olds)
- **12.8% of Native American youth** had used methamphetamine in the past year
  - 3.3% White
  - 0.6% African American
  - 1.9% Hispanic
  - 1.8% Asian

Iritani, Hallfors et al., 2007
Hormonal sensitivity
- Women may be more vulnerable to the reinforcing effects with estrogen possibly being one factor for this increased sensitivity.

Telescoping
- Once exposed, women move to use to addiction faster than men.
SEX/GENDER AND METHAMPHETAMINE

- Earlier age at initiation
- Shorter time from first use to regular use
- Initiate with sexual partner

Methamphetamine use behaviors and gender differences

Mary-Lynn Brecht\textsuperscript{a,*}, Ann O’Brien\textsuperscript{a}, Christina von Mayrhauser\textsuperscript{b}, M. Douglas Anglin\textsuperscript{a}

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Total\textsuperscript{a} [% or mean (S.D.)]</th>
<th>Males [% or mean (S.D.)]</th>
<th>Females [% or mean (S.D.)]</th>
<th>$\chi^2$ or $t$ test ($df$, if not 1)\textsuperscript{b}</th>
<th>$P$ (unadjusted)\textsuperscript{b}</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age of first MA use</td>
<td>18.98 (5.58)</td>
<td>19.34 (5.73)</td>
<td>18.54 (5.36)</td>
<td>NS</td>
<td>NS</td>
</tr>
<tr>
<td>Years from first MA use to regular MA use</td>
<td>2.14 (4.15)</td>
<td>2.56 (4.66)</td>
<td>1.60 (3.33)</td>
<td>2.21 (335)</td>
<td>.036</td>
</tr>
<tr>
<td>Means of MA initiation</td>
<td></td>
<td></td>
<td></td>
<td>9.35 (2)</td>
<td>.009</td>
</tr>
<tr>
<td>Friend</td>
<td>59</td>
<td>63</td>
<td>53</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spouse or boy/girlfriend</td>
<td>13</td>
<td>9</td>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>28</td>
<td>28</td>
<td>27</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SEX/GENDER AND METHAMPHETAMINE

• **Weight Loss**
  – 36% of women use meth to lose weight
  – vs. 7% of men
  – Big trigger for relapse postpartum

• **Energy**
  – 52% of women use meth to lose weight
  vs. 38% of men
  – Caregiver roles

Methamphetamine use behaviors and gender differences


Motivators for Methamphetamine Use

- Work more
- Weight loss
- Better sex
- Replace drug
- Escape
- Stay awake
- Experiment
- Energy
- Friends use
- For fun
- Get high

Percent
SEX/GENDER AND METHAMPHETAMINE

• Trauma informed understanding
  – Interpersonal Violence
    • 55% history childhood abuse or neglect
    • 62.5% history domestic violence

• High rates of co-occurring mental health disorders (44%)
  – Depression (36%)
  – Anxiety (11%)
  – PTSD (14%)
  – Eating Disorders/Bipolar disorder /Personality disorder

• Infectious Disease
  – HIV, Hepatitis C, Hepatitis B, chlamydia, gonorrhea
  – More likely to share needs or straws with partner as sign of shared intimacy
DONELLE IS A WOMAN WITH A STIMULANT SUE DISORDER

• Released on probation before her term was up, but she re-offended.
• In 2003 violated probation, she was pregnant and didn’t know it. While serving her sentence, she gave birth and was separated from her daughter after just a few minutes.
• Later, after another release and brief re-imprisonment, Donelle delivered her youngest daughter just two days after being released.

Donelle: “When I got pregnant with my fourth and fifth daughters, I felt like God was giving me another chance to be a mother, and I wanted to make the right choices”
Methamphetamine Use Among Pregnant Women

Mishka Terplan, MD, MPH, Erica J. Smith, MPH, Michael J. Kozloski, MA, MS, and Harold A. Pollack, PhD

Fig. 1. Primary substance among pregnant women in substance treatment. Terplan. Methamphetamine Treatment Among Pregnant Women. Obstet Gynecol 2009.
PREGNANCY AND AMPHETAMINES


Lindsay K. Admon, MD, MS; Gavin Bart, MD, PhD, Katy B. Kozhimannil, PhD, MPA; Caroline R. Richardson, MD; Vanessa K. Dalton, MD, MPH, and Tyler N. A. Winkelman, MD, MS

Note: The sample size was n = 47 164 263. All data are survey-weighted and represented as rate per 1000 delivery hospitalizations. Whiskers indicate 95% confidence intervals.

FIGURE 1—National Trends in Amphetamine and Opioid Use Among Delivering Women: National Inpatient Sample, United States, 2004–2015
• Severe preeclampsia
• IUGR
• Maternal cardiac problems/pulmonary edema
• Abruptio-placental separation-more with cocaine
• Preterm Labor
• Complicated by poor prenatal care/poor pregnancy dating

Table 1. Maternal Demographics

<table>
<thead>
<tr>
<th></th>
<th>Methamphetamine Users (n=276)</th>
<th>Control Patients (n=34,055)</th>
<th>P*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age younger than 20 y</td>
<td>25 (9)</td>
<td>5,449 (16)</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>Obstetric visits fewer than 5</td>
<td>190 (69)</td>
<td>3,324 (10)</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Hispanic ethnicity</td>
<td>152 (55)</td>
<td>24,179 (71)</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Married</td>
<td>34 (12)</td>
<td>15,686 (46)</td>
<td>&lt;.001</td>
</tr>
</tbody>
</table>

Data are n (%) unless otherwise specified. * P from χ² test.
## Characteristics of Women Using Methamphetamine

### Table 3. Substance Use Characteristics of Pregnant Methamphetamine Admissions

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Polysubstance use</td>
<td>1,020 (70.0)</td>
<td>1,310 (68.4)</td>
<td>2,209 (65.7)</td>
<td>3,293 (61.9)</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>No. of substances reported</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>437 (30.0)</td>
<td>606 (31.6)</td>
<td>1,153 (34.3)</td>
<td>2,019 (38.0)</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>2</td>
<td>504 (34.6)</td>
<td>648 (33.8)</td>
<td>1,213 (36.1)</td>
<td>2,451 (46.1)</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>516 (35.4)</td>
<td>662 (34.6)</td>
<td>996 (29.6)</td>
<td>842 (15.9)</td>
<td></td>
</tr>
<tr>
<td>Criminal justice referral</td>
<td>426 (29.4)</td>
<td>683 (36.8)</td>
<td>1,360 (41.9)</td>
<td>2,157 (40.6)</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Type of treatment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Detoxification</td>
<td>67 (4.6)</td>
<td>138 (7.2)</td>
<td>195 (5.8)</td>
<td>282 (5.31)</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Residential</td>
<td>311 (21.4)</td>
<td>534 (27.9)</td>
<td>1,028 (30.6)</td>
<td>1,685 (31.7)</td>
<td></td>
</tr>
<tr>
<td>Ambulatory</td>
<td>1,079 (74.1)</td>
<td>1,244 (64.9)</td>
<td>2,139 (63.6)</td>
<td>3,345 (63.0)</td>
<td></td>
</tr>
<tr>
<td>Route of use</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Smoke</td>
<td>1,057 (73.5)</td>
<td>1,357 (73.2)</td>
<td>2,417 (73.8)</td>
<td>4,129 (78.3)</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Intravenous</td>
<td>279 (19.4)</td>
<td>411 (22.2)</td>
<td>665 (20.3)</td>
<td>914 (17.3)</td>
<td></td>
</tr>
<tr>
<td>Oral/other</td>
<td>102 (7.1)</td>
<td>87 (4.7)</td>
<td>194 (5.9)</td>
<td>229 (4.3)</td>
<td></td>
</tr>
<tr>
<td>Prior treatments</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>778 (55.7)</td>
<td>846 (49.5)</td>
<td>1,542 (50.4)</td>
<td>2,567 (49.9)</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>1–4</td>
<td>596 (42.6)</td>
<td>817 (47.8)</td>
<td>1,396 (45.7)</td>
<td>2,397 (46.6)</td>
<td></td>
</tr>
<tr>
<td>5 or more</td>
<td>24 (1.7)</td>
<td>47 (2.8)</td>
<td>119 (4.0)</td>
<td>182 (3.5)</td>
<td></td>
</tr>
<tr>
<td>Age at first use (y)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 or younger</td>
<td>1,089 (75.6)</td>
<td>1,392 (73.1)</td>
<td>999 (73.5)</td>
<td>4,045 (76.7)</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>21–29</td>
<td>306 (21.2)</td>
<td>422 (22.2)</td>
<td>310 (22.8)</td>
<td>1,008 (19.1)</td>
<td></td>
</tr>
<tr>
<td>30–39</td>
<td>45 (3.1)</td>
<td>43 (4.9)</td>
<td>45 (3.3)</td>
<td>211 (4.0)</td>
<td></td>
</tr>
<tr>
<td>40 or older</td>
<td>1 (0.1)</td>
<td>4 (0.5)</td>
<td>6 (0.4)</td>
<td>7 (0.1)</td>
<td></td>
</tr>
</tbody>
</table>

Data are n (%).
BIRTH OUTCOMES—METHAMPHETAMINES (WITH GOOD PRENATAL CARE)

<table>
<thead>
<tr>
<th>Outcome</th>
<th>All Women (n = 251)</th>
<th>Women With No Other Drug Use (n = 119)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Any MA Use During Pregnancy (n = 144)</td>
<td>No MA Use During Pregnancy (n = 107)</td>
</tr>
<tr>
<td></td>
<td>Mean ± SD</td>
<td>Mean ± SD</td>
</tr>
<tr>
<td>Gestational age, wk</td>
<td>38.5 ± 2.0</td>
<td>39.1 ± 2.1</td>
</tr>
<tr>
<td>Birth weight, g</td>
<td>3159 ± 561</td>
<td>3168 ± 533</td>
</tr>
<tr>
<td>Head circumference, cm</td>
<td>33.5 ± 3.2</td>
<td>33.9 ± 2.9</td>
</tr>
<tr>
<td>Length, cm</td>
<td>50.3 ± 3.0</td>
<td>50.6 ± 3.4</td>
</tr>
<tr>
<td>Cord pH</td>
<td>7.25 ± 0.1</td>
<td>7.27 ± 0.1</td>
</tr>
<tr>
<td>Maternal LOS, d</td>
<td>2.7 ± 1.3</td>
<td>2.4 ± 1.2</td>
</tr>
<tr>
<td>Infant LOS, d</td>
<td>3.9 ± 7.0</td>
<td>3.5 ± 4.7</td>
</tr>
<tr>
<td>First prenatal visit, wk</td>
<td>23.3 ± 9.5</td>
<td>17.7 ± 9.5</td>
</tr>
<tr>
<td>Number of prenatal visits</td>
<td>7 ± 4.3</td>
<td>8.4 ± 3.9</td>
</tr>
</tbody>
</table>

LOS, length of stay; MA, methamphetamine.
## PREGNANCY COMPLICATIONS—METHAMPHETAMINE USE

<table>
<thead>
<tr>
<th>Pregnancy Complications</th>
<th>All Women (n = 251)</th>
<th>Women With No Other Drug Use (n = 119)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Any MA Use During Pregnancy (n = 144)</td>
<td>No MA Use During Pregnancy (n = 107)</td>
</tr>
<tr>
<td></td>
<td>n (%)</td>
<td>n (%)</td>
</tr>
<tr>
<td>Preterm delivery</td>
<td>18 (12.6)</td>
<td>13 (12.0)</td>
</tr>
<tr>
<td>Low birth weight</td>
<td>15 (10.7)</td>
<td>10 (9.4)</td>
</tr>
<tr>
<td>Chronic hypertension</td>
<td>11 (7.7)</td>
<td>2 (1.9)</td>
</tr>
<tr>
<td>Preeclampsia</td>
<td>10 (7.0)</td>
<td>4 (3.7)</td>
</tr>
<tr>
<td>Cesarean delivery</td>
<td>46 (32.2)</td>
<td>15 (12.0)</td>
</tr>
<tr>
<td>NICU admission</td>
<td>10 (7.3)</td>
<td>10 (9.6)</td>
</tr>
<tr>
<td>Small for gestational age</td>
<td>15 (10.5)</td>
<td>15 (14.0)</td>
</tr>
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</table>

n and percentages may differ by column because of lack of data on outcome. CI, confidence interval; MA, methamphetamine; NICU, newborn intensive care unit; OR, odds ratio.
# Pregnancy and Drug Related Deaths in Utah 2005-2014

<table>
<thead>
<tr>
<th>Substance</th>
<th>Count</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>Opioids</td>
<td>26</td>
<td>74%</td>
</tr>
<tr>
<td>Benzodiazepines</td>
<td>11</td>
<td>31%</td>
</tr>
<tr>
<td>Amphetamines</td>
<td>10</td>
<td>29%</td>
</tr>
<tr>
<td>Antidepressants</td>
<td>9</td>
<td>26%</td>
</tr>
<tr>
<td>Sedative/hypnotics</td>
<td>8</td>
<td>23%</td>
</tr>
<tr>
<td>Muscle relaxants</td>
<td>7</td>
<td>20%</td>
</tr>
<tr>
<td>APAP</td>
<td>5</td>
<td>14%</td>
</tr>
<tr>
<td>Alcohol</td>
<td>4</td>
<td>11%</td>
</tr>
<tr>
<td>Cocaine</td>
<td>3</td>
<td>9%</td>
</tr>
<tr>
<td>Cannabinoid</td>
<td>1</td>
<td>3%</td>
</tr>
<tr>
<td>Other</td>
<td>7</td>
<td>20%</td>
</tr>
</tbody>
</table>
FETAL AND INFANT OUTCOMES

• Methamphetamines are neurotoxic
  – Preferential concentration of metabolites in the fetal brain.
  – Earlier exposure is associated with longer lasting alteration in the serotonergic pathways.
  – Sex differences in methamphetamine exposure may start in the fetal period.
• Male offspring increased risk of drug-induced neurotoxicity as adults.
• While not correlated with functional differences, methamphetamine-exposed female children had changes in frontal white matter suggestive of altered neuronal and glial development.
IDEAL STUDY

- Infant Development, Environment and Lifestyle study (IDEAL)
- 412 maternal-child pairs (204 methamphetamine exposed versus 208 unexposed pairs) from the United States and New Zealand.
• Neonatal outcomes
  – Increased likelihood of admission to the NICU, decreased arousal and increased physiological stress, which subsequently improved at one month of age.

• Early childhood outcomes,
  – At age 3 years, differences in cognitive, behavioral, language and emotional outcomes between exposed and unexposed children were correlated with adverse social environments and not prenatal methamphetamine exposure.
  – At age 3 and 5 years, heavy prenatal methamphetamine exposure (> 3 days per week), increased anxiety/depression and attention problems after controlling for other substances and caregiver/environmental risk factors.

• Childhood outcomes
  – At age 7.5 years had poorer cognitive function on the Conner’s Parent Rating Scale, but not behavioral problems
INFANTS CANNOT HAVE AN ADDICTION

ADICTED AT BIRTH

sky NEWS Special Report
ETHICAL QUESTION

♦ Should we punish women who cause their babies harm by using drugs?
  ♦ Should we punish women who do not control blood sugars or take hypertensive medications?

♦ Should we routinely take away babies of mothers who test positive for drugs?
  ♦ Should we routinely take away babies of mothers who smoke?
TRADITIONAL APPROACHES TO ADDICTION IN PREGNANT WOMEN

• Approach #1: Call Child Protective services - women with addiction not fit to parent.

• Approach #2: Arrest her. Then she’ll stay clean at least while she’s in jail. Baby won’t be affected.

• Approach #3: Arrest her. Make enrollment in drug treatment a condition of discharge.
MULTI-GENERATIONAL ISSUE

- Period of abstinence (6 years)
- **Romantic relationship** with a Sioux Falls man who sold drugs.
- Her **youngest daughter** lived with Donelle’s **grandmother** in Rapid City, who was sick with cancer.
- In 2014, felony ingestion, drawing two concurrent 5-year prison terms.
- In 2017, violated probation and became an escapee by fleeing to Rapid City to see her ailing grandmother.
THE QUESTION – IS MY BABY GOING TO GET TAKEN AWAY?

• Fear
  – Discovery, prosecution
  – Losing children
  – Treatment
  – Disapproval, stigma

• Other Barriers
  – Transportation
  – Childcare

• Increase subsequent pregnancy rates
  – “I have a hole in my heart from missing those two months with my son. It makes me want to have another baby to fill it.”
Percentage Change in Reasons for Removal in the United States, 2009 to 2015

Parental Alcohol and Other Drug Use (AOD)
- Neglect
- Parent Incarceration
- Inadequate Housing
- Abandonment
- Relinquishment
- Sexual Abuse
- Physical Abuse
- Caretaker Unable to Cope
- Child AOD
- Parent Death
- Child Behavior
- Child Disability

Source: AFCARS Data.

Parental Alcohol or Other Drug Use as Reason for Removal by State, 2015

National Average 34.4%

Note: Estimates are based on all children in out-of-home care at some point during Fiscal Year.

Source: AFCARS Data, 2016
PROBLEMS WITH CPS REMOVAL

- Every child with “threatened harm” was removed from household.
- “Threatened harm” included exposure to drugs.
- CPS system is overburdened
- **More children raised by grandparents**
- 17 states consider illicit drug use during pregnancy child abuse

“Removing a child from his/her family may cause serious psychological damage—damage more serious than the harm intervention was supposed to prevent.” Michael Wald, 2000.
3 states (Minnesota, **South Dakota**, Wisconsin) consider drug use during pregnancy grounds for civil commitment.

TN explicitly criminalized drug use during pregnancy in 2014 (later allowed to sunset.)

Several studies have demonstrated that legal substance (tobacco and alcohol) are more harmful to infants than illicit drugs.
LESSONS LEARNED FROM SOUTH CAROLINA

• In 1997, Cornelia Witner was prosecuted for child abuse for using crack-cocaine during pregnancy.
• State Supreme Court upheld her conviction.
• Tested without her knowledge or consent.
• After her prosecution:
  – Admissions to drug-treatment dropped by 80%.
  – Increase in infant mortality.
  – 20% increase in abandoned infants

Whitner v. State

Supreme Court of South Carolina. Cornelia WHITNER, Respondent, v. STATE of South Carolina, Petitioner. No. 24468.
RACIAL DISPARITIES

• Paltrow and Flavin (2013) found 348 cases (1973-2005) where women were arrested solely for being pregnant and using drugs and another 380 cases since 2005.

• More white women use substances during pregnancy, especially opioids, methamphetamine alcohol and tobacco.

• Of the 42 women arrested under South Carolina law, 41 were African American.

• South Carolina only tested indigent women, not women in private practice settings.

• Of the 384 women found by Paltrow and Flavin, 59% were women of color.

TRADITIONAL APPROACH #2: ARREST HER. THEN SHE CAN’T USE

- In most prison, **less than 5% of women** get mental health care, including substance abuse treatment.
  - Women in prison often don’t get adequate prenatal care.
- Women in prison are subjected to abuse, inadequate nutrition, and increased stress, all of which increase pregnancy complications.
- Treatment is **much cheaper** than prison.

Beck & Maruschak, 2001
TRADITIONAL APPROACH #3:
ARREST HER. MAKE HER GET TREATMENT

- Compelling treatment can work well, particularly with men with substance abuse problems
- **Woman-specific treatment** works much better.
- Not enough treatment facilities ANYWHERE
NOVEL APPROACH

- Co-located prenatal and postpartum services
- CTSA’s Pregnancy and Opioids Models of Care (PROMO) study models
- UNC’s Horizons Clinic
- University of Hawaii’s Path
• **Trauma-centered care**
  – Extremely high rates of childhood sexual trauma in these women
• **Because women are much more relationship oriented, may not want residential treatment if separated from children.**
  – Needs to provide childcare/transportation

• **Behavioral treatment**
  – Cognitive-behavioral therapy (CBT)
  – Contingency management, or motivational incentives
  – The Matrix Model
  – 12-Step facilitation therapy
  – Mobile medical application: reSET®
NOVEL TREATMENTS

- Micronized progesterone
- Postpartum treatment??

*Progesterone Reduces Cocaine Use in Postpartum Women with a Cocaine Use Disorder: A Randomized, Double-Blind Study*

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POSTPARTUM

• Grief and support counseling for non-parenting mothers
  – Acknowledgement of loss
• Peer support
• Non-judgmental language
  – Person centered language
  – NOT clean or dirty – expected or unexpected
  – Discuss relapse and safety plans
• Harm reduction
  – Peer support
  – Relapse prevention
  – Relapse discussion
  – Extremely high suicide risk
POSTPARTUM

• Watch for postpartum relapse triggers
  – Postpartum depression
  – Fatigue
  – Weight gain
  – Child welfare issues

• Encourage breastfeeding
  – Relapse prevention
  – Lower estrogen?
  – Bonding
  – Weight Loss
  – Infection control
  – Can breast feed with Hepatitis C
    • Contraindicated in HIV or active tuberculosis
    • Active drug use
POST PARTUM

• Long-term developmental care for children
  – Slight increase behavioral problems
  – Increased rates of depression, anxiety in the children

• Parenting classes
  – Tremendous guilt and shame
  – Lack of good role models
  – Family disease of addiction
  – Preventative for the next generation
POST PARTUM

• Contraception
  – Long-acting reversible contraception (LARC) in reproductive justice model
  – Access to full spectrum of reproductive health including safe abortion care
  – Some evidence that progesterone decreases stimulant related cravings
NALOXONE
• Eligible for release in October 2019
• Works making quilts, taking prison parenting class
• Moments
  • Her family
  • Age 14, age 18
  • Incarceration

“My actions will speak louder than my words because I’ve said so much in the past and let them down,” Goings said of her children. “I have to deal with my addiction on my own, and if I’m going to do it, I’m going to do it and if I’m not, I’m not.”
SUMMING IT UP

• Addiction hijacks the brain. Pregnancy can hijack it back.
• Stimulant use disorder is a **chronic treatable medical condition** and most infants with exposure have normal neurological outcomes.
• **Postpartum period** is the most critical time for maternal relapse.
• **Your words** are therapy. Remind women that they are a person first.
QUESTIONS

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