Perinatal Substance Abuse, the Opiate Crisis and Improving Outcomes

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Title of Presentation: Prenatal Substance Abuse

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- Learners who wish to receive Continuing Education Credit (CME/CLE/CE) must complete and turn in evaluations to successfully complete this program

The information being provided today is generalized, and it is advised that you consult with your individual legal counsel regarding practice in your agencies
Learning Objectives

- Understand the scope of the Problem
- Identify risks of perinatal substance abuse including opiates
- Improve ability to identify affected women and infants
- Identify interventions to improve outcomes for women with addiction and their infants

What about Martha?

- Living under a bridge using heroin
- Fifth pregnancy
- HIV positive
- History of sexual abuse prior to age 12

Prevalence

- The 2016 National Survey on Drug Use and Health reported that among pregnant women:
  - 9.4% consumed alcohol
  - 6.3% used illicit substances
    - 14.6% age 15-17
    - 8.6% age 18-25
    - 3.2% age 26-44
  - 15.4% smoked cigarettes
Epidemiology

- In the United States, the rising incidence of maternal use of opioid-containing pain relievers contributes to an increased incidence of neonatal abstinence syndrome.
- Prenatal maternal opiate use increased from 1.2 to 5.63 per 1000 hospital births from 2000 to 2009.
- Increase admissions to neonatal intensive care for NAS from 7 to 27 per 1000 admissions.
Scope of the Problem

- Prenatal alcohol and drug exposure negatively affects growth and development of the fetus (Nolan et al., 2005; Thompson, Levitt, & Stanwood, 2009)
- As maternal drug use increases, so do neonatal admissions and poor health outcomes in the first year of life
- Substance uses may not seek prenatal care because of fear
- Unintended pregnancy is common in women with addiction issues

Societal Impact of Prenatal Substance Abuse

- Prenatal substance abuse is often associated with child neglect and involvement in the child welfare system
  - Physical Neglect
  - Supervisory Neglect
  - Environmental Neglect
  - Medical Neglect
Impact on Child Welfare in Wisconsin

- Drug abuse can impair parents’ ability to provide a safe environment for their children.
- The number of children removed from their home where a drug abuse by the child’s parent was a factor more than doubled from 2009 to 2016.

The Adverse Childhood Experiences Study (ACE)

- Examines the relationship between self-reported ACEs and future adverse health and psychological issues.
- ACEs include having substance-abusing parents, incarcerated parents, and childhood maltreatment.
- ACE studies show ACEs increase adult risk of alcoholism, drug abuse, depression, suicide attempts, smoking, sexual risk behavior, and poor health.
- [http://www.cdc.gov/ace/index.htm](http://www.cdc.gov/ace/index.htm)

Addiction

- Brain disease with compulsive substance use despite harmful consequences.
- Adverse consequences extend to families and communities.
- Effective treatment includes short-term, may involve medication, psycho-social treatment, family therapy, peer support, social support, legal services, child care services, and education/vocational services.
QUESTIONS?

Most Common Drugs involved in Prenatal Exposure (Pediatrics, 2013)
- Nicotine
- Alcohol
- Marijuana
- Cocaine
- Methamphetamine
- Opiates - Heroin

Mechanism of Action of Drugs on the Fetus
- Direct Effects
  - Early in pregnancy - may cause physical defects
  - After the major development - abnormal growth and changes in brain organization
- Indirect Effects
  - Vasoconstriction restricts fetal oxygen supply
  - Maternal behavior - poor nutrition, non-compliance with prenatal care, and exposure to infections and domestic violence
Nicotine

- Most commonly used drug during pregnancy
- Has a negative effect on infant neuro behavior and long-term behavior, cognition, language, and achievement
- Has been linked to low birth weight and pregnancy complications including prematurity, placental abruption and intrauterine death

Alcohol

- Prenatal exposure to alcohol is a leading cause of birth defects and developmental disabilities
- No safe amount of alcohol consumption during pregnancy
- Fetal alcohol spectrum disorder (FASD) includes the range of effects that can occur in children exposed to alcohol prenatally and includes physical, mental, behavioral and/or learning disabilities
Fetal Alcohol Syndrome is the most serious type of Fetal Alcohol Spectrum Disorder

- Small head
- A smooth ridge between the upper lip and nose, small eyes, a very thin upper lip, or other abnormal facial features
- Below-average height and weight
- Hyperactivity
- Lack of focus
- Poor coordination
- Delayed development and problems in thinking, speech, movement, and social skills
- Problems seeing or hearing
- Learning disabilities and cognitive delays
- Heart problems
- Kidney defects and abnormalities
- Deformed limbs or fingers
- Mood swings

Marijuana

- Sleep problems through first 3 years of life
- May alter brain neurotransmitters and brain biochemistry and cause abnormalities in infant’s neurobehavior
- Associated with deficits in school achievement, problem solving and attention
Cocaine

- Addictive, stimulant that crosses the placenta and the blood-brain barrier
- Potent vasoconstrictor affecting growth of the fetus
- Exposure during development of the nervous system may result in permanent changes in the brain causing changes in cognition, language, and behavior

Methamphetamines

- Addictive central nervous system stimulant that crosses the placenta causing vasoconstriction which leads to negative effects on the mother and the fetus
- Fetal and newborn risks include abruption, preterm birth, intrauterine growth restriction, low birth weight, small head circumference and learning difficulties

Opiates

- In the United States, heroin and methadone are the most common opioids used during pregnancy
- Neonatal Abstinence Syndrome is the most significant effect of prenatal opioid exposure
- Long-term effects on behavior
- No consensus on the effects on cognition, language and achievement
Heroin

- Rapidly passes through the placenta and accumulates in the amniotic fluid
- Symptoms of withdrawal include restlessness, insomnia, bone pain, vomiting, stomach cramps and diarrhea
- Changes in the pregnant woman’s daily heroin use can cause fetal abstinence syndrome increasing the risk of premature delivery and stillbirth

Chronic untreated heroin use in pregnancy is associated with:
- Poor fetal growth
- Premature rupture of membranes
- Preterm birth
- Still birth
- Neonatal Abstinence Syndrome
- Increased rates of infections such as HIV and Hepatitis

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Questions?

Maternal and Neonatal Screening for Substance Abuse

Screening for Drug Use During Pregnancy

- Self report
  - Inexpensive
  - May be issues with accurate history and recall

- Biological specimens – no biological specimen when obtained randomly identifies prenatal drug use with 100% accuracy
  - Most common specimen to establish drug use during pregnancy
    - Urine – identifies recent drug use (longer with marijuana)
    - Hair – can reflect drug use over a long period of time, controversial
    - Meconium – reflects exposure during the second and third trimester
Screening for Drug Use During Pregnancy

- The American College of Obstetricians and Gynecologists (ACOG) recommend screening all pregnant women for alcohol and illicit drug use as part of routine obstetrical care.
- Screening should be repeated during pregnancy.
- Denial, fear, and guilt are barriers to self-report.
- Use of a validated screening tool is recommended.

CRAFFT Substance Abuse Screen for Adolescents and Young Adults

- C: Have you ever ridden in a CAR driven by someone (including yourself) who was high or had been using alcohol or drugs?
- R: Do you ever use alcohol or drugs to RELAX, feel better about yourself, or fit in?
- A: Do you ever use alcohol or drugs while you are by yourself or ALONE?
- F: Do you ever FORGET things you did while using alcohol or drugs?
- F: Do your FAMILY or friends ever tell you that you should cut down on your drinking or drug use?
- T: Have you ever gotten in TROUBLE while you were using alcohol or drugs?

Possible Indicators of Maternal Substance Abuse - General

- Young women, especially adolescents
- Lack of or inadequate prenatal care
- Multiple missed appointments for prenatal care
- Presentation to an emergency room (especially as a result of motor vehicle accidents, falls, burns, or fights)
Possible Indicators of Maternal Substance Abuse – Psych/Soc

- Current enrollment in a drug treatment program
- History of delivery of a prenatally drug exposed infant
- Family history of addiction
- History of abuse
- Loss of custody of children

Possible Indicators of Maternal Substance Abuse - Physical

- Premature labor
- Abruptio placenta or still birth
- History of gastrointestinal bleeds, peptic ulcers, or pancreatitis, or hepatitis
- Cellulitis, skin abscess, endocarditis, or osteomyelitis
- Poor dentition
- Suspicious trauma
- Symptoms of withdrawal: dilatation or constriction of pupils, tachycardia, sweating, slurred speech

146.0255(2) Testing infants for controlled substances or controlled substance analogs.

- Physician may test infant or expectant mother to determine if positive test for controlled substances IF physician determines serious risk for a positive results due to use while pregnant
- If infant positive then MUST report to child welfare agency
- If mother positive then MAY report to child welfare agency
- Cannot test mother under this section without informed consent
Substance abuse in pregnancy: Is this a form of child abuse

- APSAC Advisor November 2019
- Contested Issues
- 23 states consider substance use in pregnancy to be child abuse
- Some argue this deters women from seeking prenatal care
- Others argue that CPS should consistently substantiate child maltreatment to ensure parents and children receive necessary treatment and services
- Opioid epidemic driving more children into contact with CPS

Interventions during pregnancy

- Prenatal care
- Drug treatment and mental health
- Basic needs – housing, nutrition, transportation, safety, education on infant care and family planning
- Education on caring for infant
The Importance of Prenatal Care

- Prenatal care improves the health of the substance abusing woman and unborn child even if the mother continues to use.
- Screening women for substance abuse can lead to interventions that encourage and educate women, minimizing poor birth outcomes.

Treatment of Opioid Use Disorder during Pregnancy – Medication Assisted Treatment (MAT)

- The standard of care for opiate use disorder (OUD) during pregnancy is medication assisted treatment (MAT).
- MAT for OUD during pregnancy with either buprenorphine (subutex) or methadone results in improved maternal and neonatal outcomes.
- MAT should be combined with therapy, treatment of comorbid conditions, case management, parenting support and education, and employment training.

Medication Assisted Treatment

- Can stabilize patients who are spending most of their time trying to obtain heroin or prescription narcotics and is more effective for long term success.
- Heroin-addicted women using MAT including methadone and buprenorphine have infants with higher birth weights and lower rates of intrauterine growth retardation.
Neonatal Screening

- Urine screening - recent exposure for most substances will test positive
- Meconium
  - Testing not usually available on-site at hospitals, and results often take days or weeks
  - Analysis of meconium may indicate drug use during the second and third trimester and not reflect periods of drug abstinence closer to delivery

Terminology

- Neonatal Abstinence Syndrome (NAS)
  - Commonly associated with opioid exposure, but other substances have been associated with NAS
  - Not defined by need for pharmacology
- Neonatal opioid withdrawal syndrome (NOWS)
  - NAS describes neonates at-risk for poly-substance exposure including opioids
  - NAS and NOWS often used interchangeably

Signs and Symptoms of NAS

- Central Nervous System – Irritability, fussiness, High-pitched cry, hypersensitivity to stimuli, tremors, seizures, skin excoriation, changes in muscle tone, sleep problems
- Gastrointestinal – Dehydration, poor feeding, regurgitation, diarrhea, skin excoriation on buttock, excessive sucking
- Metabolic, Vasomotor, Respiratory – Nasal stuffiness, sneezing, frequent yawning, frequent hiccups, fever, sweating, tachypnea, apnea
Breastfeeding is encouraged in some opioid-dependent mothers

- In drug treatment and not using illicit substances
- The American Academy of Pediatrics considers the use of illicit drugs including marijuana, opiates, cocaine and methamphetamines a contraindication
- Breastfeeding is safe with maternal medication-assisted treatment and reduces NAS
- No contraindications such as HIV

Interventions for Newborns

- Many newborns need special care and have prolonged hospital stays – consider rooming with mother and breastfeeding as appropriate
- Medications as needed
- Education that symptoms may persist after medication weaned
- Home-based interventions and early intervention programs enhance child development

Post partum period

- Potential for relapse and concerns for child safety
- Need for additional support and safety plan
Postpartum goals

- Continued drug treatment/mental health for mother
- Follow-up medical care/family planning for mother
- Mother understands NAS, growth and development, infant nutrition, infant safety, crying
- Support bonding
- Safety plan
- Appropriate medical follow-up and developmental follow-up for infant

Challenges for new moms with Substance Use Disorder (SUD)

- NAS symptoms often continue after hospital discharge making infants challenging to care for
- Many lack a social support system during this stressful time
- Many lack basic baby care items, stable housing, transportation, other resources
- Poor preparation for parenting and lack of role models
- High risk of relapse now that baby is born

Gunderkids

- A program for infants and their parents with substance use disorder located in the general pediatric clinic
- A means of support for families with multiple challenges
- An opportunity to provide continued care to infants with NAS
- A way to provide education on parenting and child development
Program Goals

- Grow healthy babies
- Help moms and dads be the most successful parents they can be
- Keep moms, dads, and babies together by creating a safe healthy environment
- Prevent child abuse

Program Structure

- 17 clinic visits in the first year of life
- Weekly visits for the first month
- Visits every other week until 4 months
- Monthly visits until 6 months
- Visits every 6 weeks until 12 months
- Routine well-child schedule thereafter

A GunderKids Visit

- Nurse led visits: history, developmental assessment, and teaching
- Every visit includes an inventory of social determinants of health
- Physician joins visits for the first month and at routine well-child age visits
- Social worker meets with families at many visits
- Integrated behavioral health specialist meets with families at least twice in first year of life
- Pediatric O.T. meets with all families at 1 month and 6 months, more if needed
Encourage use of the medical home

- The GunderKids nurse carries a direct line phone and we encourage parents to call us with any questions
- We encourage families to see us instead of urgent care or ER if at all possible

Lessons Learned

- 1. It's all about building relationships
- 2. It's critical to treat patients with respect and be non-judgmental
- 3. Most of our parents have a past history of trauma
- 4. They have a strong desire to be good parents
- 5. Addiction is a chronic disease

Wisconsin Association for Perinatal Care – Perinatal Substance Abuse

- WAPC - where individuals and organizations come together to improve perinatal care and outcomes

www.perinatalweb.org

Go to Major Initiatives: Perinatal Substance Use; Resources Newborn Withdrawal Project: A Guide for Parents also Assessment and intervention in the Home
Considerations

- What public policies should be implemented to reduce the use of alcohol and drugs by pregnant women and to protect children?
- What services can be provided to pregnant women?
- Labor and Delivery
  - What are the protocols for responding to referrals made by hospitals on substance exposed infants?
- Postpartum
  - How are cases screened by Child Protection?
  - How is progress in treatment monitored?
  - How are decisions on reunification or case closure made?

Key Points

- Health and Safety outcomes for women with addiction and their exposed infants can be improved with
  - Medical care - prenatal, pediatric, specialty
  - Drug/mental health treatment
  - Social support
  - Housing
  - Nutrition
  - DV screening
  - Parenting education
  - Home visitation/support programs

Statutes and Policy

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<tr>
<td>WI Statute  s. 48.133</td>
<td>Unborn Child in Need of Protection or Services</td>
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<td>Federal Child Abuse Prevention and Treatment Act</td>
<td>Substance Affected Infants and Infants Diagnosed with Fetal Alcohol Spectrum Disorder</td>
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<td>Testing Expectant Mothers and Infants for Controlled Substances/Analogs</td>
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<td>WI Statute s. 146.0257</td>
<td>Evaluation of Infants for Fetal Alcohol Spectrum Disorders</td>
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<td>Child Protective Services Access and Initial Assessment Standards</td>
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References


Thank-you for Attending!

Jennifer Yates, Certified Family Nurse Practitioner, Child Advocacy and Protection Services Program
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