Substance Use in Pregnancy: Fear, Stigma, and Barriers to Care

Presented by: Kathryn Shea, LCSW
Learning Objectives

1. Recognize the fears, stigma, and barriers pregnant people face in society and identify the most effective treatment approaches available both during and after the pregnancy.

2. Review the use of validated screening instruments to better identify substance use in pregnancy.

3. Identify the adverse outcomes associated with the most commonly used substances during pregnancy.
• Substance use and substance use disorders in pregnancy are commonly linked with adverse obstetric and neonatal outcomes. All pregnant women should be screened, and those with positive screens should be diagnosed and offered treatment to avoid the morbidity and mortality associated with continued substance use during pregnancy.

• Substance use during pregnancy and motherhood needs a compassionate and evidence-based solution. An effort should be made to incorporate women’s voices, as they are the authorities on their experience; taking into consideration the whole-person and recovery supports and needs.
Fears, Stigma, and Barriers Pregnant People Face

• Fear of Detection
  • 73.3% of women in a study reported that during their pregnancies, they had been afraid of being identified as misusing substances

• Fear of Incarceration
• Fear of Removal of Child at Birth
• Fear of Being Judged
  • As immoral, bad, criminal, etc.
• Fear of Rejection
  • By family, friends, society

• Barriers
  • 66.7% of women in a study had sought substance misuse treatment at some point in the past and encountered multiple barriers to effective and consistent treatment.

Source: Stone (2015)
Fears, Stigma, and Barriers Pregnant People Face

Additional fears and/or barriers:

• Drug screens
• Anxiety about what to expect during prenatal visits
• Questions and concerns about Child Protective Services (CPS) involvement
• Isolation oneself from friends and family who might detect the substance misuse
• Hiding or denying the pregnancy, timing prenatal appointments, skipping prenatal visits, or avoiding prenatal care altogether
Fears, Stigma, and Barriers Pregnant People Face

- The role of the provider is to create a supportive role with no judgment
- Avoid perpetuating stigma of the disease for women, families, and providers
- Initiate supportive conversations versus lectures focusing on the importance of prenatal care and more positive birth outcomes
- Connect women to resources, screening, and pregnancy support groups
Validated Screening Instruments

- Currently, three separate validated tools exist that screen for the use of more than one substance among pregnant women.

Source: Comparison and validation of screening tools for substance use in pregnancy: a cross-sectional study conducted in Maryland prenatal clinics

- Victoria H Coleman-Cowger, Emmanuel A Oga, Erica N Peters, Kathleen Trocin, Bartosz Koszowski, and Katrina Mark

Validated Screening Instruments

- The 4 P’s was designed to identify drug use in pregnancy and has been validated with pregnant women.
- The 4 P’s Plus is brief but is associated with a licensing fee, which may be a hindrance to widespread use.
Validated Screening Instruments

- ASSIST – has been validated across several populations, but it has not yet been formally validated with pregnant women.
- A modified ASSIST, with items on tobacco and alcohol use removed, was incorporated by NIDA to their Quick Screen as a follow-up to the four-question prescreener; referred to as the NIDA Quick Screen/ASSIST.
Validated Screening Instruments

• The SURP-P is a validated scale composed of three questions that can differentiate between populations of pregnant women at low risk or high risk for substance use.

• The SURP-P is a simple and flexible tool for identifying possible substance use in pregnancy. However, further screening is required to identify those who would require treatment.
General Effects of Drugs and Alcohol on Fetal Development

• We DO know that all drugs cross the placenta and can affect fetal brain development, resulting in lifelong effects on learning, social relationships, employment, and behavior.

• We do NOT know how developmental timing, dosages, and genetics affect these processes.
General Effects of Drugs and Alcohol on Fetal Development

- We DO know that “of all the substances of abuse (including cocaine, heroin, and marijuana), alcohol produces by far the most serious neurobehavioral effects in the fetus.” (Institute of Medicine, 1996)

- We do NOT know specifically how each drug affects specific parts of the brain, although the areas of the brain that appear to be the most impacted by ALL drugs, including alcohol, are those responsible for Executive Functioning.
What we know:

• In a 2020 Morbidity and Mortality Weekly Report article, Centers for Disease Control (CDC) scientists found that about 10% of pregnant women reported current alcohol use. The use of other substances was common among pregnant women who reported alcohol use—about 40% reported current use of one or more other substances (CDC, 2020).

• Drugs can alter fetal development through a wide variety of mechanisms.

• Drugs can also act directly on the uterus and/or placenta, heart, lungs, and brain of the mother.
Drug Categories

**Prescription Medications:** Prescribed by a doctor and used as directed by a health care professional. All healthcare professionals should be aware of prescription medications in the developing fetus.

**Nonprescription Medications:** Over-the-counter drugs that can be purchased at grocery and drug stores without a prescription.
Source Online: http://dxline.info/diseases/fetal-development
What is a Teratogen?

Teratogen: An agent that causes physical or developmental defects in an unborn child

Most common teratogens:

• Alcohol
• Mercury
• Isotretinoin (brand name Accutane, a treatment for severe acne)
• Nicotine
• Phenytoin (Dilantin, a treatment for epilepsy)
Combining Substances

• The greater the amount of the drug(s) and the longer the duration and frequency used during pregnancy, the greater the risk to the unborn child.

• The risks are significantly higher when mothers have used a combination of drugs during pregnancy.

• A combination of smoking and drinking alcohol during pregnancy adds additional high risks.
Who is Most at Risk?

• Research indicates “the age groups (18-34) with the highest birth rates are also the age groups most likely to use legal and illegal drugs. *Obstet Gynecol Clin North Am.* 2014 Jun; 41(2): 177–189. 10.1016/j.ogc.2014.02.001


• There is no safe amount of alcohol or drugs, and no safe time during the period of fetal development. [https://www.cdc.gov/ncbddd/fasd/alcohol-use.html#:~:text=There%20is%20no%20safe%20time,to%20have%20abnormal%20facial%20features](https://www.cdc.gov/ncbddd/fasd/alcohol-use.html#:~:text=There%20is%20no%20safe%20time,to%20have%20abnormal%20facial%20features).
Risk Factors

- Dose of alcohol or drugs
- Timing of moderate or high usage during pregnancy
- Pattern of exposure - binge versus chronic
- Developmental timing of exposure
- Genetic variation
- Maternal characteristics
- Synergistic reactions with other drugs
- Interaction with nutritional variables
How Do Drugs and Alcohol Reach a Fetus?

• When a pregnant person uses a drug or alcohol, it readily moves across the placenta into the fetus’s bloodstream through the umbilical cord. The alcohol level of the mother is equal to the alcohol in the fetus.
Use of Drugs and Alcohol Increases Risk for Mother and Fetus

A pregnant person’s use of drugs and alcohol can increase the risk for the following:

• Prenatal death
• Premature birth
• Miscarriage
• Birth defects
• Low birth weight
• Small size for gestational age
• Neurobehavioral symptoms
• Smaller head circumference
• Faster than normal heart rate
The Effect of Alcohol on Brain Development

- As a fetus develops, cells that will become the brain and nervous system attach to each other.
- Alcohol interferes with this process of brain development.
- The baby’s brain may be smaller, structurally or functionally damaged, with right/left hemisphere abnormalities.

Source: Dr. Edward Riley, Ph.D., San Diego State Univ.,
Brain Abnormalities (structural) Related to Prenatal Alcohol Exposure

Online Source: courtesy of Clarren, S,K.

fetal-brain.jpg (253×199) (weebly.com)
It appears that all, or nearly all, of the drugs impact the developing brain, causing neurobehavioral effects in the fetus that can be life-long.

The effects can be physical, emotional, cognitive, social, and behavioral, and usually are a combination of all of the above.

Opioids and Poly-Substance Exposure-Research shows behavior and attention problems and lower cognitive functioning in eight-year-old children. (Nygarrd, Slinning, Moe, & Walhovd, 2016)
Impact of Prenatal Fetal Exposure to Drugs and Alcohol

• PAUSE

• GROUP QUESTIONS OR COMMENTS

• WHAT WAS AN AHA! MOMENT FOR YOU?
Withdrawal from substance-exposed newborns can be physically distressing. A newborn exposed to alcohol or drugs before birth can demonstrate several typical signs of withdrawal from mild to severe:

- Tremors
- Sleeplessness
- High-pitched crying and agitation
- Muscle Spasms
- Seizures
- Feeding difficulties
Benefits of Breastfeeding While on Medication Assisted Treatment for Substance Use Disorder

• Baby receives all the benefits of breast milk
• Enhances maternal-infant bonding
• It is safe to breast or chest feed while taking medications for opioid use disorder such as methadone and buprenorphine, regardless of the dose of medication that you take.
• Consult the LactMed database to learn more about the evidence on the use of the medications while lactating:
  • methadone
  • buprenorphine
  • naloxone
Benefits of Breastfeeding While on Medication Assisted Treatment for Substance Use Disorder

Breast or chest feeding can make the baby’s withdrawal symptoms less severe. Studies suggest that skin-to-skin contact and attachment formation help the baby feel better while breast or chest feeding. When other opioids like methadone were studied, it was found that only about 2% of the total dose made it into human milk. For buprenorphine, there are negligible amounts of buprenorphine/norbuprenorphine in human milk, and infants absorb even less of this because of how buprenorphine is broken down and metabolized (not absorbed well in the stomach).
Cautions of Breastfeeding When Using Illicit Substances

• With heroin and other unregulated opioids, it is best not to breast or chest feed, since you can’t know the exact dose, and it may be cut with other unknown substances and contaminants that aren’t safe for the baby.

• Most drugs a mother takes are present in her breast milk in a small amount

• Safety risks for an infant when the mother is falling asleep or not fully functional while nursing
Areas of the brain most impacted by alcohol and drugs negatively affect the development of Executive Functioning.

Executive Functions involve:

- Focus—concentrating on a task;
- Cognitive flexibility—thinking outside of the box or adjusting to changing priorities;
- Working memory—holding information in your mind and working with it; for example, doing mental arithmetic or understanding a story; and
- Inhibitory control—the ability to go off “auto-pilot” and do what is appropriate, even though you want to do something else.
Developmental Consequences of Fetal Exposure to Drugs and Alcohol

Areas of the Brain involved in Executive Functions include:

- The prefrontal cortex works in concert with other parts of the brain, including the anterior cingulate, parietal cortex, and hippocampus.

- The executive functions are a set of processes that involve managing oneself and one’s resources to achieve a goal. It is an umbrella term for the neurologically-based skills involving mental control and self-regulation.
<table>
<thead>
<tr>
<th>Layers or Levels of Self-Regulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Executive Control&quot;</td>
</tr>
<tr>
<td>Behavior Regulation</td>
</tr>
<tr>
<td>Emotion Regulation</td>
</tr>
<tr>
<td>Attention Regulation</td>
</tr>
<tr>
<td>Basic Physiological Regulation</td>
</tr>
</tbody>
</table>
Executive Functioning

Frontal lobe is responsible for much of the executive functioning of the brain.

These functions include:
- Attention
- Working memory
- Planning, organizing
- Forethought
- Impulse control
When a Parent or Caregiver Should Seek Help

• If the infant or child is demonstrating behaviors that are atypical for a stage of development
• If the caregiver is worried about behaviors the infant or child is demonstrating
• When a parent or caregiver needs reassurance that their infant or child is meeting developmental milestones
• The child’s pediatrician is your first “go-to.” They have prenatal, birth, and neonatal history and can refer to early intervention services.
• Early identification and intervention can significantly improve long-term outcomes for these children.
Impact of Substance Use on Infant and Parent Relationship

Moms with behavioral health needs + Babies in withdrawal with compromised brains
How Substance Use Affects Mother-Infant Attachment—The Parent Part

- Addiction is associated with a dysregulation of the balance between reward and stress neurobiological systems, which undergo significant changes during the transition to parenthood.

- Drug use can affect these neuro-circuits and “high jack” the same reward processing systems in the brain, making mothers less responsive to more “natural” reward cues, such as their infant’s behaviors and facial expressions.

- If the mother did not have a secure attachment with a primary caregiver as a child, she may not have the “internal working model” to create that for her baby. And thus, the cycle repeats itself.
Prenatal Exposure to Opioids, Alcohol and Other Drugs—The Baby Part

• Nearly all drugs affect the neurobehavioral systems of the baby’s brain, sometimes for a lifetime.

• Many of these infants exhibit symptoms of a regulatory disorder, which include dysfunction in autonomic regulation, sleep/wake control, motor, attentional/interaction, and self-regulatory systems.

• Dysregulation in any one or more of these domains may interfere with basic neonatal functions such as feeding, sleeping, growth, emotional regulation, attachment, or social interaction.
The Impact of Prenatal Exposure to Drugs and Alcohol—The Dyad Part

- Separation of the infant from the mother during the withdrawal period impacts attachment and bonding.
- Guilt, substance misuse, and mental health issues (including trauma) impact attachment and bonding.
- Infant issues (poor sleep patterns, difficulty feeding, fussy or irritable temperament, prolonged crying, poor eye contact, difficulty to soothe or comfort, over/under reactive to stimuli) impact attachment and bonding.
Attachment is a Two-Way Street

• Each individual (mom, dad, family, caretaker) must be able to read the other’s cues and each individual must be able to respond appropriately to the other’s cues.

• When an infant’s neurobehavioral functioning is disrupted by the effects of prenatal drug and alcohol exposure, that infant may not be able to participate in the give-and-take dynamic required for attachment to occur.

• When the caregiver does not receive positive feedback and reinforcement from the infant, she or he may back off; the dance of attunement is disrupted, and stress for both parent and infant increases.
Impact On Infant and Parent Relationship
The Vicious Cycle

Both mother and infant disengage, secure attachment at risk

Dysregulated Infant

Mother’s negative response increases infant stress

Mother feels rejected and inadequate (increasing risk for relapse and misuse)
VIDEO

Involving Mothers in the Care of Their Substance Use Dependent Babies

https://www.youtube.com/watch?v=-8Qby7XDkNo
Effective Attachment-Based Parenting Training Programs for Parents with Substance Use Disorder

Circle of Security (COS-P) Goals:

• Increase security of attachment of the child to the parent
• Increase parent’s ability to read child’s cues
• Increase empathy in the parent for the child
• Decrease negative attributions of the parent regarding the child’s motivations
CIRCLE OF SECURITY®
PARENT ATTENDING TO THE CHILD'S NEEDS

- Watch over me
- Delight in me
- Help me
- Enjoy with me

I need you to...

Support My Exploration

Welcome My Coming To You

Always be BIGGER, STRONGER, WISER, and KIND. Whenever possible, follow my child's need. If you ever necessary, take charge.

- Protect me
- Comfort me
- Delight in me
- Organize my feelings

Circle of Security ©2009
For copyright information go to www.circleofsecurity.net
Promoting Family-Centered Care for Pregnant and Postpartum Women with Substance Use Disorders

What is Family-Centered Treatment?

• Family-centered treatment assures that pregnant women, moms, infants, and families receive an array of coordinated services to support them during a mother’s recovery.

• A family-centered framework involves children, partners, and other family members in the treatment process. It assures that family members receive the health care and community-based support that can help them thrive.
Promoting Family-Centered Care for Pregnant and Postpartum Women with Substance Use Disorders

• For example, a family-centered approach may integrate Screening, Brief Intervention, Referral and Treatment (SBIRT) in maternity care clinics, coupled with long-term follow-up and home visits to ensure that mom and baby receive necessary resources. At the time of birth, a family-centered inpatient approach co-locates mothers and infants after delivery, a best practice known to improve maternal and infant outcomes.
Supportive Plans of Care Needed

Plan of Care for Baby

Plan of Care for Mom

Plan of Care for Dyad
Group Discussion on Parent Child Attachment and Family-centered Care

- What 3 possible strategies could support family-centered care?
- From a systems perspective, what are the main barriers to supporting family-centered care?
Group Question - What Will You Do Differently?

• What will you do differently in your practice with the knowledge gained from today’s presentation?
With the right interventions and coordination of services and supports, we can change a family’s trajectory to help build resilient, healthier families.
Webinar Summary

• It is important to focus on women’s voice and choice, address fear and stigma, and provide evidence-based interventions.

• There is no safe time or safe number of drugs and substances that can be used during pregnancy.

• All women and fetuses metabolize drugs and alcohol differently, so predicting short- or long-term outcomes of pre-natal substance use is not possible.

• The risk can be high for both short- and long-term developmental problems for the exposed fetus and can be life-long.

• Supportive interventions are necessary for parent and child to negate adverse effects and promote optimal outcomes for mom, dad, child, and relationships.
Questions or Comments
THANK YOU!
Resources

• The American College of Obstetrics and Gynecology (ACOG)
• Data & Statistics on Fetal Alcohol Spectrum Disorders (FASD). Centers for Disease Control (CDC)
• Morbidity and Mortality Weekly Report. Alcohol Use and Co-Use of Other Substances Among Pregnant Females. Centers for Disease Control (CDC)
• Alcohol Use During Pregnancy. Centers for Disease Control (CDC)
• National Library of Medicine. Drugs and Lactation Database (LactMed)
• Early Childhood Technical Assistance Center
• Engagement in Early Intervention Services Among Mothers in Recovery From Opioid Use Disorders. American Academy of Pediatrics.
• FASD United (formally NOFAS)
• Florida Perinatal Quality Collaborative NAS Toolbox
• National Center on Substance Abuse and Child Welfare
Resources

- Obstetrics and Gynecology Clinics of North America
- Pregnancy and Substance Use: A Harm Reduction Toolkit

Medications, Pregnancy and Lactation
If you are looking for reliable information on medications and evidence-based guidance for their use during pregnancy and lactation, please see:

- MotherToBaby
- Parenting interventions for drug-dependent mothers and their young children: the case for an attachment-based approach
- Substance Use in Pregnancy: Identifying Stigma and Improving Care
- Treating Babies Who Were Exposed to Opioids Before Birth (samhsa.gov)
Free Pediatric Primary Care Trauma Course

A new online training course developed by the Child Health and Development Institute in collaboration with families and national experts is now available at no cost to child-serving professionals. Trauma ScreenTIME covers how to screen children for trauma in pediatric primary care settings and connect families with supports and services to help them recover.
Resources

Videos

• [Prenatal Opiate Exposure: Impact on Early Childhood Learning and Behavior](#)
• [Pediatric Effects of Parental Substance Use](#)
• [IM 8 - Behavior - Prenatal Substance Exposure](#)
References


Contact Information

• KATHRYN SHEA, LCSW
• K Shea Consulting
• Email: ksheaconsulting@outlook.com
• (941) 650-6592