Welcome
Special Kids, Special Care
NICU Consortium Meeting
10-25-17

A special thank you to our grantors and sponsors
Newborn Hope for their support of our Safe Sleep Going Home Program that provides newborn wearable sleep sacs to the NICU for parents and our Family Support Grant Program.
University Hills Rotary for their support of the Safe Sleep Going Home Program.

NICU Consortium Partnership
Leadership Council
Introductions

Leadership
Chair: Petora Manetto-Spratt
Co-chair: Lisa Hymes
Secretary: Carolyn Kwerneland
Treasurer: Beth Cole

Workgroup Chairs
• Mental Health - Emily McNeil
• Capacity Building - Kristin Frank
• Program Development - Evelin Gomez
• Family Engagement – Mekida Wilson

Community Representatives
• Parents - Amber Minogue
• JFK Partners - Renee Charifou-Smith
• Physicians - Sharon Langendoerfer
• NICU Consortium Education – Paulina Erices

Vision: Families of babies discharged from the NICU will be informed about appropriate health and community resources.

Mission: To promote a coordinated system of discharge and follow up for babies transitioning from the NICU to their community

Workgroups:
• Capacity Building
• Family Awareness
• Mental Health
• Program Development and Implementation

Important Announcements
Please consider supporting the NICU Consortium Educational Programs and the work of the NICU Consortium Partnership as a NICU Fellow. For only $25.00 a year you will support our NICU family transition to home efforts and allow us to continue offering these educational events but also:

• Receive a “Certificate of Professional Development Education for 2 hours” when you attend one of the NICU Consortium Meeting/Webinars and complete the program’s evaluation survey
• Receive “Fellows” registrations fees on other Special Kids, Special Care educational offering

Agenda

9:15 am Subsance Use Disorder in Pregnancy
Kaylin A Klie, MD

10:15 am Break

10:30 am Home Follow-up for Babies with Neonatal Abstinence Syndrome (NAS)
Sharon Langendoerfer, MD

11:30 am Preemies Rock Volunteer Follow-up Meeting

Substance Use Disorder in Pregnancy
Kaylin A Klie, MD, MA
Addiction Medicine
Assistant Professor, Department of Family Medicine
University of Colorado
Financial Disclosure

I have no relevant financial relationships with any commercial interests

What is Addiction?

- Addiction is defined as a primary, chronic disease of brain reward, motivation, memory, and related circuitry.
- Perinatal Addiction is an emerging field that recognizes the biopsychosocial complexity of substance use disorder care in the setting of pregnancy
- Seeks to provide comprehensive services to the patient and family in the pre-conception, pregnancy, delivery, and post-partum periods

Neurobiology: A refresher

- We cannot talk about addiction without starting the understanding the concept of “reward”

Dopamine: The Currency

Dopamine: The Currency

Natural Rewards

Stimuli. Dopamine. Repeat.
Not the entire story

- Reward teaches us via "positive reinforcement"
  - Behavior produces positive reward
  - Dopamine
  - The positive reward makes the behavior more likely to occur
  - “Fires together, wires together”

And....

Negative Reinforcement

- Different than punishment
  - Negative reinforcement encourages the behavior
  - Punishment discourages the behavior

- Very powerful learning mechanism
  - We can fatigue (become tolerant) to receiving the same positive reinforcement, or the same punishment
  - However, use of a behavior to escape negative:
    - Physical symptoms (withdrawal)
    - Emotions (guilt, shame, depression, anxiety)
    - Trauma (either ongoing or PTSD)

  Is EXTREMELY powerful

Tolerance and Dependence

- Tolerance: Needing and increasing amount of a substance to achieve the desired effect
- Dependence: physiological adaptation to presence of substance such that substance is now required to maintain homeostasis
- Withdrawal: substance specific set of symptoms related to absence of substance of dependence

Natural History of Dependence

Substance Use Disorder

- The five Cs:
  - Craving
  - Compulsive use
  - Continued use despite harm (consequences)
  - Impaired control over drug use
  - Chronicity
  - Inability to fulfill work and social obligations
  - Use in dangerous situations
  - Legal problems
  - Interpersonal problems

Mild (1-3), Moderate(4-5), Severe (6+)

A Different Perspective

- Addiction as an adaptive response to environment
  - Trauma/Loss
  - Systematic/Generational oppression, racism
  - Mental Anguish (depression, anxiety)
  - Social insecurity, phobia
  - Isolation
  - Boredom
A Different Perspective

- Johann Hari “Chasing the Scream”, TedTalk
  - “The opposite of addiction is not sobriety. The opposite of addiction is connection”
- Maia Szalavitz “Unbroken Brain”
  - Learning and Developmental approach
- Gabor Mate “In the Realm of Hungry Ghosts”
  - Need for community, social and criminal justice policy reform

Epidemiology

- A difficult number to nail down!
- Depends on patient self-report
- Toxicology screenings
- Only known data of women who present for care.
  - Movement towards out-of-hospital birthing to avoid toxicology testing, particularly for THC
- Depends on what is “socially acceptable”
  - Alcohol, tobacco, marijuana?

Epidemiology

- Estimates vary between 2-24%, depending on screening tool used:
  - Illicit Substances 5-7%
  - Alcohol 8-10%
  - Nicotine 15-16% (nicotine alone)
- Highest rate of substance use in women is in years of childbearing (ages 15-35yrs)
- Many of these urine toxicology reports do not account for prescription substances
- Biased information: minority women (particularly black women) over-represented in toxicology testing and reporting

Starting the Conversation

- 4 “P”s
  - Parents?
  - Partner/Peers?
  - Past?
  - Present?
- Asking about peer/partner substance use is more highly associated with individual’s risk of use the younger the individual is

Screening Tools

- SBIRT
- AUDIT-C/AUDIT
- T-ACE
- DAST
- Adolescents:
  - Ages 12-17: S2BI
  - Ages 14-21: CRAFFT

Maternal Risks

- Lack of prenatal care can lead to missed diagnoses, which can be life threatening
  - Pre-eclampsia/Eclampsia
  - Miscarriage, premature ROM, premature labor
  - Placenta previa, accreta
  - Bacteremia, endocarditis
  - Infectious disease, STIs (HIV, Hep C, Hep B)

The most common reason for women not presenting for prenatal care is not lack of care for themselves or their unborn, it is fear: being “found out”, being reported to social services, and losing custody of infant (or other children)
Fetal Risks

- Pre-term delivery
- Intra-uterine growth restriction
- Low birth weight (SGA)
- Placental insufficiency/abruption
- Amnionitis
- Birth defects
- Fetal Alcohol Effects/Spectrum Disorders
- Neurocognitive impairment
- Neonatal Abstinence Syndrome

Maternal Deaths in CO

Post-Partum Deaths in CO

The War on Drugs


Incarceration Rate
In most cases when a woman is imprisoned, a child is displaced. 28% of women (18yo+) provide support and care to chronically ill, disabled, or aged family members or friends.

Options for opioid dependence during pregnancy

- Detoxification
- Methadone
- Buprenorphine
- Naltrexone/Vivitrol?

Why was detoxification from opioids during pregnancy traditionally discouraged?

Narcotic withdrawal in pregnancy: Stillbirth incidence with a case report

JOSÉ LUIS REMEDIOS, M.D.
NEMESIO N. NUÑEZ, M.D.
Bronx, New York

A stillborn infant was born to a drug-addicted mother who had withdrawn symptoms shortly before delivery. Medications are prescribed to help explain the possible relationship between the maternal withdrawal and the fetal death. Statistics are also presented to show an increased stillbirth and neonatal mortality rate in the overall pregnant drug-addicted population.

Detoxification: Just because something can be done…

- Earlier reports associated withdrawal with fetal demise
- Recent case series data do not support this association
- However, detox does not reduce rates of NAS compared with MAT
- Detox significantly increases risk of maternal relapse

Acute Intervention for Chronic Disease is a Clinical Mismatch

Benefits of Opioid Agonist Therapy (Methadone/Buprenorphine)

Maternal Benefits
- 70% reduction in overdose related deaths
- Decrease in risk of HIV, HBV, HCV
- Increased engagement in prenatal care and recovery treatment

Fetal Benefits
- Reduces fluctuations in maternal opioid levels; reducing fetal stress
- Decrease in intrauterine fetal demise
- Decrease in intrauterine growth restriction
- Decrease in preterm delivery

Medication-Assisted Treatment

- Methadone:

- Buprenorphine:
MAT Remains the Standard of Care

- Methadone and buprenorphine are safe and effective treatment options in pregnancy
- The decision of which therapy to start is complex and should be individualized for each woman
- Based on available options, patient preference, patients’ previous treatment experiences, disease severity, social supports, and intensity of treatment needed


Support Pharmacotherapy in Pregnancy

- ASAM
- ACOG
- AAFP
- AAP
- SAMHSA
- CDC
- WHO
- (partial list)

Pharmacotherapy: Priority

Don’t Support Pharmacotherapy

Neonatal Abstinence Syndrome

- NAS is expected, temporary, and treatable
  - Not unique to opiates
  - Several medications can place infant at risk for withdrawal symptoms after birth
  - Like many treatments in medicine, there is a balance of risk and benefit
  - NAS risk not related to maternal methadone or buprenorphine dose
  - NAS directly related to how much time baby spends separated from mom
  - Babies are not born “addicted”
  - Best “treatment” for babies is their mom, not necessarily medicine

Doctor, is there ANY way to reduce the chance my baby will have withdrawal?

Breastfeeding

- Methadone, buprenorphine (and naltrexone) are considered safe, and without presence of any other contraindication, women receiving MAT are encouraged to breastfeed their infant, regardless of dose of medication
- Breastfeeding decreases rates of NAS
  - It’s not the medicine in the milk, it’s the presence and bonding with the mother
  - Significant reduction is days in the hospital, medication required, and medical cost when moms and babies are able to stay together (rooming in)

Take Home Message:

- Substance use may be an adaptive response to a person’s environment
- The most evidenced-based treatment to prevent overdose death and infectious disease is MAT
- Methadone or buprenorphine may be used during pregnancy
- Breastfeeding is recommended
- NAS occurring in an infant is an expected, temporary, and treatable event
If all else fails…

- "I will still take care of you"
- "You are not alone"

Contact Info

Prenatal Care:
- Denver Health OB AM clinic
  - Mandy Langer, Care Coordinator: amanda.langer@dhha.org
  - pager: 303-234-2643
  - office: 303-602-4865
- University OB
  - Referral in Epic: "AMB REF TO ADDICTION OBSTETRICS-AMC OB/GYN"
  - Contact Jen Wolff (jennifer.wolff@uchealth.org)

Kaylin.Klie@dhha.org
Kaylin.Klie@uchealth.edu
NICU Consortium Educational Meeting

2018 NICU Consortium Educational Meetings
9:00 am to 11:30 am

January 31, 2018
April 25, 2018
July 25, 2018
October 31, 2018

www.specialkids-specialcare.org
specialkids@sk-sc.org

Special Kids, Special Care Sign Up

- For info about either of these program send Barbara an e-mail at: specialcare@sk-sc.org
- NICU Outreach: Safe Sleep Going Home Program: Wearable Sleep Sac Blanket Requests
- Family Support Grant - Applications for newborn cribs, respite care, lactation consultation, or other health support services needed by families

- To receive announcement about future NICU Consortium Meetings, the newsletter, or other information, please sign up on the website
- Website: www.specialkids-specialcare.org