ECHO Idaho: Perinatal Substance Use Disorder
MAT in Pregnancy
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The speaker has no relevant financial relationship(s) to disclose.

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Learning Objectives

- Discuss MAT
- Review evidence-based treatments in pregnancy
- Reduce stigma
- Dispel myths about MAT in pregnancy
What is MAT

• Medication Assisted Therapy
• For Opioids = Medication for OUD (MOUD):
  – Methadone
  – Buprenorphine (Suboxone)
  – ER Naltrexone (Vivitrol)
• For Alcohol:
  – Naltrexone (oral or IM)
  – Acamprosate
  – *Gabapentin, topiramate, disulfiram*
MOUD

Full Agonist: Methadone

Partial Agonist: Buprenorphine

Antagonist: Naltrexone
Why MOUD?

• In 2017 one person died of an opioid overdose every 11.4 minutes (2018: 1 OD in ID/35hrs)
  – MAT reduces overdose risk by more than 50%
Why MOUD?

• In 2017 one person died of an opioid overdose every 11.4 minutes
  – MAT reduces overdose risk by more than 50%
• Methadone and buprenorphine can treat withdrawal
• MAT offers stability so people can get their lives back
• Lowers the risk of transmitting or contracting HIV and Hepatitis C
Why Use MAT in Pregnancy

• All of those reasons plus:
  – Improved Fetal Outcomes:
    • Lower risk of HIV, hepatitis and STIs
    • Reduced fetal exposure to illicit drugs
    • Prevention of recurrent maternal withdrawal (erratic opioid levels) which is associated with increased risk of worse NOWS
    • Reduction in the incidence of obstetrical and fetal complications
    • Improved newborn outcomes

Methadone in Pregnancy

• First studied in pregnancy in 1973
  – 1975 Finnegan published NAS assessment tools

• What we’ve learned since then:
  – Highest retention rates of all MOUD
  – Reductions in maternal mortality/morbidity
  – Improved fetal outcomes
  – NAS is independent of methadone dose
  – Doses often need to be increased and then split later in pregnancy
Buprenorphine in Pregnancy

• First published study in 1995
• DATA 2000
• Would allow for more flexible treatment outside of OTP or in areas without OTP available
• 2005 The Promise Study showed non-inferiority of buprenorphine compared with methadone, and a few benefits too...
From 1970s-2010s, methadone was the gold standard for pregnancy
MOTHER trial

- Maternal Opioid Treatment: Human Experimental Research trial published in NEJM 2010
- Included 175 pregnant women with OUD randomly assigned to methadone or buprenorphine at 8 international sites
MOTHER Trial Results

<table>
<thead>
<tr>
<th>Primary Outcomes</th>
<th>Methadone</th>
<th>Buprenorphine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment for NAS</td>
<td>57%</td>
<td>47%</td>
</tr>
<tr>
<td>Total amount of morphine</td>
<td>10.4mg</td>
<td>1.1mg</td>
</tr>
<tr>
<td>Days of infant hospital stay</td>
<td>17.46</td>
<td>9.99</td>
</tr>
<tr>
<td>Days of treatment for NAS</td>
<td>9.9</td>
<td>4.1</td>
</tr>
<tr>
<td>Infant head circumference</td>
<td>33.03cm</td>
<td>33.81cm</td>
</tr>
</tbody>
</table>

• Compared to infants exposed to methadone, infants exposed to buprenorphine:
  • Required 89% less morphine to treat NAS
  • Spent 43% less time in the hospital
  • Spent 58% less time in the hospital being medicated for NAS
Outcomes 0-36 months

• N=96 children
• No pattern of difference in physical or behavioral development compared to suggest medication superiority
• Children born in the MOTHER study are following a normal path in terms of growth, cognitive and psychological development

Kaltenbach, K, et al., Drug and Alcohol Dependence 2018
Buprenorphine-Naloxone

• Current evidence shows that combination product buprenorphine-naloxone (Suboxone) is as safe in pregnancy as buprenorphine mono-product
  – British Columbia Centre on Substance Use, B.C. Ministry of Health, B.C. Ministry of Mental Health and Addictions, & Perinatal Services BC. A Guideline for the Clinical Management of Opioid Use Disorder—Pregnancy Supplement. Published June 1, 2018

• Given the increased rate of diversion and misuse of the mono-product, Suboxone is preferred in pregnancy.
Naltrexone

• There is limited high-quality data looking at Naltrexone in pregnancy
• The largest study prospectively compared 121 patients on naltrexone to 109 patients on methadone or buprenorphine.
  – Naltrexone was well tolerated by both mother and fetus
  – No neonatal opioid withdrawal
  – There were no congenital anomalies in the 23 infants with first-trimester exposure
• A joint workshop of the Society for Maternal-Fetal Medicine, ACOG, and American Society of Addiction Medicine concluded that data are insufficient to support the initiation of naltrexone therapy in pregnant women, but it may be continued for those patients who already are taking this medication after discussion of the risks of discontinuing naltrexone (eg, risk of relapse) and the limitations of data of its use in pregnancy (UpToDate: Overview of Managing OUD in Pregnancy)
So which MAT is right?

• First line treatment includes methadone or buprenorphine
  – Less-severe NAS, shorter hospital stay with buprenorphine
  – Slightly greater treatment retention with methadone
    • Dosing?
    • OTP support?

• What is available?

• What is patient preference?
Intrapartum Management

• Don’t stop treatment: withdrawal = pain
• Good communication with MAT provider
• Favor regional anesthesia— epidural, spinal
• Acute pain can still be managed with opioids— you may just need more/stronger (but do not give more methadone to control acute pain)
Postpartum Management

• Don’t stop treatment
• Both methadone and buprenorphine are SAFE in breastfeeding
Reachable Moment

- Screen for IPV
- Screen for AUD
- Screen for tobacco use
- Screen for depression
- Screen and re-screen for HIV, Hep C and syphilis
- Prescribe Narcan
Alcohol Use Disorder

• Remember that NAS is temporary; FAS is permanent
• Economic cost of FASD: $5.5 billion (CDC, 2010)
• Co-occuring AUD in up to 48% of patients with OUD
• Screen and treat!
• Naltrexone is first line treatment; detox with long-acting benzos
Be the solution to the stigma problem (Vital Statistics Data 1972-2013)

Pregnancy & Alcohol DO NOT MIX

Drinking alcoholic beverages, including wine, coolers and beer during pregnancy can cause birth defects

Subbaraman, MS et al. Alcoholism: Clinical and Experimental Research: volume 42, No. 8, August 2018
Key Points

• Treat OUD in pregnancy
• Choice between methadone and buprenorphine can be up to patient
• Screen for and treat AUD in pregnancy
• Reduce stigma and barriers to care; build trust and safety
References

• Thank you to Hendrée Jones, PhD, for her incredible work on MOTHER trial and many other contributions to this field—content from MOTHER slides used with Dr. Jones’ permission

• PCSS buprenorphine waiver program: pcssnow.org

• Next ECHO ID waiver training is 9/22/2020. Sign up: https://www.uidaho.edu/academics/wwami/echo/mat

• SAMHSA.gov (check out publications for handouts and brochures)

• Resource for patients: nofas.org