Treatment of Pregnant Women with Chemical Dependency

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Disclosures

• I have no conflicts of interest to disclose.

Objectives

• We will discuss and explore the:
  • Definition of Chemical Dependency
  • Unique characteristics of women and addiction
  • Risks of chronic opioid use and abuse in pregnancy
  • Treatment options
  • Postpartum issues

Chemical Dependency

• Chemical Dependency: a normal physical reaction to an addiction chemical

  • Substance use disorder: the medical term used to describe the abuse of drugs or alcohol that continues despite physical, psychological, social or legal problems that arise from such use.

Substance use in Pregnancy

• Determine what is being taken
• Is it a substance that causes chemical dependency?
• Is it prescribed?
• Is it legal?
• What are implications for pregnancy?

NAS in TN: 1999-2010
Identification of women at risk for substance use

**Options**
- Universal Screening
- Validated screening tool
- Routine UDS (Universal Testing) as part of prenatal labs (controversial and not recommended without consent)

**Validated tools for Pregnancy**
- T-ACE (Tolerance, Annoyance, Cut down, Eye-opener)
- AUDIT-C (Alcohol Use Disorders Identification Test)
- **4P's Plus Parents, Partner, Past, Present:**
  - TWEAK (Tolerance, Worry about drinking, Eye-opener, Amnesia, K/Cut down)
  - TQDH (Ten Question Drinking History)

Universal Screening

- First ob visit and L&D
- Eliminates provider bias and assumptions
- Allows for early intervention and education

Prescribed Drugs with risk for NAS

- Opioids
- Benzodiazepines
- Antipsychotics
- Anti-depressents
- Anti-epileptics
- Barbituates

Risks vs. Benefits

- What is chronic illness that is being treated?
- Maternal health risks and benefits
- Fetal health risks and benefits
- Quality of evidence
- What amount of risk is mom willing to take?

Chronic pain in pregnancy

- Limited data
- Some studies suggest that NAS is less severe in this population.
- 11% NAS compared to 59% in methadone maintenance group.
- Case series of women maintained on opioids for pain: NAS 38% (Hadi, da Silva, et al)
- Treatment plans must be individualized and if tapering is done must be done with caution.

- Opioid use is NOT addiction.
- Opioid dependence is NOT addiction.
- MAT is not beneficial for pregnant women with chronic pain and no evidence of addiction.
010a - Treatment of Pregnant Women with a Chemical Dependency - Young

**Differentiating chronic pain vs. substance abuse disorder**

- Thorough history and physical
- Review medical records and past imaging
- Review state drug databases
- Social work or psychiatric assessment
- Screener and Opioid Assessment for Patients with Pain (SOAPP)

**Legal Drugs**

- Alcohol
- Tobacco
- Marijuana (some states)

**Risks of Alcohol use in pregnancy**

- Fetal Alcohol Spectrum Disorders
- Fetal Alcohol Syndrome
- Alcohol-related Neurodevelopmental Disorder
- Alcohol related birth defects

**Marijuana Use in Pregnancy**

- Conflicting studies
- Association w/ low birth weight, behavioral problems, preterm birth
- Closely linked with abuse of other substances
- Has legal implications w/ reporting requirements

**Illegal drugs**

- Heroin
- Prescription drugs obtained illegally (opioids, benzo’s, amphetamines, etc.)
- Cocaine
- Marijuana
- Methamphetamines
- Barbituates

**Women and Addiction**

- Initial use is frequently precipitated by stress, depression, mental illness, and relationships.
- Women are more likely to have partner’s with substance abuse disorder and are more likely to be influenced by a partner’s use.
- Women with addiction have unintended pregnancy rates > 90%
- Women with a history of abuse/violence are more likely to become addicts.
Substance Use Disorder in pregnancy

- High risk for unplanned pregnancy
- Lack of prenatal care and other resources
- Often chaotic lifestyle with subsequent maternal and fetal risks
- Higher incidence of abuse, incarceration, prostitution/bartering, exposure to STDs, IV drug use, etc.

Pregnancy Risks

Cocaine
- Miscarriage
- Stillbirth
- Medications
- Placental abruption
- Premature delivery
- Fetal growth restriction
- NAS
- Long-term neurodevelopmental effects
- SIDS

Amphetamines
- Fetal growth restriction
- Premature birth
- Placental problems
- NAS
- Unclear link to birth defects

Complications of Opioid Dependence in Pregnancy

<table>
<thead>
<tr>
<th>Complication</th>
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</thead>
<tbody>
<tr>
<td>Miscarriage</td>
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<tr>
<td>Preterm Labor</td>
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<tr>
<td>Preterm Premature Rupture of Membranes</td>
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<tr>
<td>Intrauterine Growth Restriction</td>
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<tr>
<td>Stillbirth</td>
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<tr>
<td>Neonatal Abstinence Syndrome</td>
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<tr>
<td>Infectious disease exposure e.g. HIV, Hepatitis C</td>
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<tr>
<td>Concomitant substance use</td>
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<td>Psychiatric co-morbidities</td>
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Co-use of opioids and other drugs

- Tobacco abuse is 4 times higher compared to other pregnant women. [Jones,Heil]
- Tobacco exacerbates other complications of opioid use in pregnancy.
- Alcohol abuse is seen in 14% of women with opioid dependence.
- Unclear what the long-term cognitive neurobehavioral outcomes are with concomitant use.
“It’s easier to get drugs, than treatment”

Barriers to treatment

- Fear
- Stigma
- Attempts to self-detox
- Lack of programs that accept pregnant women
- Insurance and cost
- Distance and travel
- Childcare
- Lack of family/social support

Treatment of pregnant women with addiction

- Comprehensive treatment program
- Ob, Psychiatry, Social Work, Case Managers, Anesthesiology, Nutrition, Counselors, Peer Support, Pediatrics, legal aid
- Importance and challenge of therapeutic alliance
- Improved outcomes for women who receive integrated prenatal care and substance abuse treatment (Goler, et al.)
- Importance of education of ancillary staff.

Integrated ob/addiction treatment

- Weekly or biweekly visits
- Individual counseling
- Group meetings
- Availability of Intensive Outpatient Programs
- Urine drug testing
- Serial growth scans
- Twice weekly testing as needed

Benefits of Combined Care

- One stop
- Requires less travel
- Improves care coordination
- Fewer missed visits
- Allows integration of support and counseling services

Treatment of opioid dependence

- Opioid maintenance is standard of care. (ACOG)
- Detoxification is often not successful with 29% resuming use of street drugs. (outpatient setting)
- 12% opted for methadone maintenance after detoxification. (Kaltenbach)
- 25% of detox patients had withdrawal which precipitated active labor. (Kaltenbach)
## Opioid Detoxification

- **Inpatient**
- Taper with methadone or buprenorphine (Methadone or Buprenorphine assisted withdrawal)
- Outcomes are better for women in a residential treatment program. (Haabrecke, 2014)

## The obstetrical and neonatal impact of maternal opioid detoxification in pregnancy

- Retrospective study, AJOG 2013
- 95 women
- 53 women successfully detoxed
- 5% vs. 33% treated for withdrawal (p 0.001)
- Average LOS for success -> 25 days
- Exclusion criteria: prior unsuccessful detox, IUGR, oligohydramnios, significant maternal psychiatric illness

## Detoxification from Opiate Drugs During Pregnancy

- Bell, Towers, et al; AJOG 2016
- Retrospective
- 301 patients
- All detoxed in varied settings
- No stillbirths
- Rates of NAS varied from 17.2-70%

## Benefits of Detoxification

- Reduces risk of NAS
- Theoretically reduces long-term effects of opioid exposure
- Considered by many to be “true recovery”
- Decreases risk of child protective services and legal action

## Disadvantages of Detoxification

- Lack of evidence based protocols
- Risk of relapse
- Shortage of drug treatment programs
- Risk of withdrawal symptoms including miscarriage, preterm labor, fetal demise
- Requires large degree of financial and institutional commitment

## Barriers to Residential Programs

- Lack of programs/ waiting lists
- Cost
- Lack of insurance coverage
- Few programs allow children
- Few programs allow families
Methadone Maintenance

- Gold standard with decades of experience
- Increases adherence to prenatal care
- Improves pregnancy outcomes
- Decreases severity of NAS
- Decreased foster home placement

(Winklebaur et al.; Kaltenback, et al.)

Methadone Maintenance

- For women on methadone prior to pregnancy, continue current dosing. May need increase dose in 3rd trimester due to increased plasma volume.
- Initiation of methadone: Start at 10-20mg and titrate to eliminate withdrawal symptoms without producing intoxication.
- Preferably done as inpatient

Methadone disadvantages

- Daily visit to treatment center
- Cost
- Stigma
- Continued exposure to others who are using
- Incidence of NAS is still 50-66%

Buprenorphine maintenance

- Partial mu opioid agonist and full kappa opioid agonist
- Neonatal outcomes similar to methadone (MOTHER trial)
- Less severe NAS with shorter hospitalization and less morphine requirement.
- Office-based treatment
- More insurance coverage
- Feels less like being “on something.”

Buprenorphine Maintenance

- If on buprenorphine prior to pregnancy, continue at current dose.
- Little data on appropriate way to initiate buprenorphine during pregnancy.
- Must be in moderate withdrawal which is risky in pregnancy. Great care must be taken not to precipitate severe withdrawal.
- Must be at least 6 hours since last dose of short-acting opioid.
- Start with (2-4mg) and titrate for relief of withdrawal symptoms.

Buprenorphine Disadvantages

- No rigorous studies on initiation during pregnancy
- Often not effective for women using high doses of IV opiates.
- Higher drop out rate than methadone in MOTHER trial (33% vs. 18%; P<0.05)
- Higher relapse rate
- Physician must obtain waiver to write rx.
Opioid addiction and relapse

Relapse

- Does relapse to drug abuse mean treatment has failed?
- No. The chronic nature of the disease means that relapsing to drug abuse at some point is not only possible, but likely.

Drug, brain, and behavior, the science of addiction. NIDA

Relapse

- Indication that treatment needs to be reinstated, adjusted, or changed.
- Increase behavioral therapy
- Increase support
- Look at underlying stressors and triggers

Model Treatment Program

- Integrated prenatal and addiction care
- Seamless Transition from inpatient to outpatient
- Collaborative care
- Social Services
- Peer Support
- Weekly MD visits until stabilization
- Addiction groups
- Counseling
- Integration of maternal care with pediatric care
- Long-term recovery plan
- Collaboration with community resources and organizations.

“"The best time to plant a tree was 20 years ago, the second best time is now".
Chinese proverb

References

References


Questions?