Substance Use in Pregnancy: The OB/GYN Perspective

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Overview

• Natural history of substance use in pregnancy
• Screening
• Brief Interventions
• Integrating SBIRT into practice
• Treatment – when and how
• Case Examples
Terminology

• Terms I use:
  – Substance Use
  – Substance Use Disorder
  – Addiction

• Terms I avoid:
  – Substance Abuse
  – Addict

• In between terms:
  – Tolerance
  – Dependence
Substance Use in Pregnancy

- The intersection of reproductive life course and motherhood with substance use (addiction) life course
- Pregnancy is “unique”
  - Contact with social institutions
  - Universal medical coverage
  - “Window of Opportunity” for behavioral change
Case 1

- LP is a 28 year old G2P1 who presents to ED with nausea and vomiting and found to be pregnant. Unplanned but desired pregnancy. She drinks >10 drinks a week with binge almost every weekend and occasionally smokes marijuana.
Case 1

During the course of her pregnancy, we can expect her to:

- Stop smoking MJ but continue drinking
- Stop both drinking and smoking
- Stop drinking but not smoking
- Neither stop drinking nor smoking
What happens when women who use substances get pregnant?

The Natural History of Substance Use in Pregnancy: An Example of Self-Change
## Alcohol

<table>
<thead>
<tr>
<th></th>
<th>2007-8</th>
<th>2012-13</th>
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<tbody>
<tr>
<td><strong>Pregnant</strong></td>
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</tr>
<tr>
<td>Current ETOH</td>
<td>10.6</td>
<td>9.4</td>
</tr>
<tr>
<td>Binge</td>
<td>4.5</td>
<td>2.3</td>
</tr>
<tr>
<td>Heavy</td>
<td>0.8</td>
<td>0.4</td>
</tr>
<tr>
<td><strong>Not Pregnant</strong></td>
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<td></td>
</tr>
<tr>
<td>Current ETOH</td>
<td>54.0</td>
<td>55.4</td>
</tr>
<tr>
<td>Binge</td>
<td>24.2</td>
<td>24.6</td>
</tr>
<tr>
<td>Heavy</td>
<td>5.5</td>
<td>5.3</td>
</tr>
</tbody>
</table>

National Survey of Drug Use and Health (NSDUH)
Figure 4.5 Past Month Cigarette Use among Women Aged 15 to 44, by Pregnancy Status: Combined Years 2002-2003 to 2012-2013

* Difference between this estimate and the 2012-2013 estimate is statistically significant at the .05 level.
## Illicit Drugs

<table>
<thead>
<tr>
<th></th>
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<th></th>
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</thead>
<tbody>
<tr>
<td>Pregnant</td>
<td>3.3%</td>
<td>4.6%</td>
<td>4.0%</td>
<td>5.1%</td>
<td>5.0%</td>
<td>5.4%</td>
</tr>
<tr>
<td>Not pregnant</td>
<td>10.3%</td>
<td>10.2%</td>
<td>10.0%</td>
<td>9.8%</td>
<td>10.5%</td>
<td>11.4%</td>
</tr>
</tbody>
</table>

Data from: National Survey Drug Use and Health (NSDUH)
Women aged 15-44
Past month
What happens when women who use substances get pregnant?

• Compared to non-pregnant women, women drink less alcohol, smoke fewer cigarettes, and use fewer illicit drugs during pregnancy.
Does substance use change through course of pregnancy?

<table>
<thead>
<tr>
<th>Substance use by trimester</th>
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</thead>
<tbody>
<tr>
<td>Alcohol</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>First</td>
<td>19.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Second</td>
<td>5.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Third</td>
<td>4.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cigarettes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First</td>
<td>19.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Second</td>
<td>13.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Third</td>
<td>12.8</td>
<td></td>
<td></td>
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<tr>
<td>Illicit drugs</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>First</td>
<td>9.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Second</td>
<td>4.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Third</td>
<td>2.4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
What about postpartum?

Figure 1. Relative proportion of substance-using women who abstained during and after pregnancy.

What happens when women who use substances get pregnant?

• Compared to non-pregnant women, women drink less alcohol, smoke fewer cigarettes, and use fewer illicit drugs during pregnancy
• Use decreases through the course of pregnancy by trimester
• The greatest reduction is seen earlier
• About 80% resume use postpartum
Substance Use: Risk Pyramid

- Stratify use into categories of risk
- Risk levels guide intervention
- How does the pyramid look in pregnancy?
Substance Use: Risk Pyramid

- Dependent Use: 4%
- Harmful or Risky Use: 25%
- Low Risk Use or Abstention: 71%

ONDCP 2013

- Brief Intervention and Referral to Treatment
- Brief Intervention
- Universal Screening
Substance Use: Risk Pyramid

Substance Abuse

In Treatment ~ 2,300,000

Addiction ~ 25,000,000
(Focus on Treatment)

“Harmful Use” – 68,000,000
(Focus on Early Intervention)

Little or No Use
(Focus on Prevention)
Pregnancy: A Natural Experiment in Behavioral Self-Change

- All women are concerned for their child-to-be
- All women are aware of the risks associated with substance use
- All employ a range of strategies to reduce or change intake
  - Decrease or stop use
  - Switch drugs
  - Enter prenatal care
  - Enter SUD treatment
Wow. I'm 9 months pregnant!
That went by fast...
Said no one. Ever.
Case 2: Screening

- Ms. MB is a 24 year old G3 P1 who presents for her first prenatal visit at 17 weeks. She missed her first scheduled visit a month prior because of transportation difficulties. Her last pregnancy was complicated by a preterm delivery at 30 weeks.
Case 2: Screening

• She should be screened for substance use because:
  – She is late to care
  – She is non-adherent with prior visits
  – She has a history of a preterm delivery
  – Depends what the urine toxicology shows
  – All patients should be screened
  – She shouldn’t be screened
## PNC Screening

<table>
<thead>
<tr>
<th>Condition</th>
<th>Prevalence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cystic Fibrosis (Caucasians)</td>
<td>1/2500 = 0.0004%</td>
</tr>
<tr>
<td>HIV</td>
<td>1/500 = 0.002%</td>
</tr>
<tr>
<td>Birth Defects</td>
<td>2%</td>
</tr>
<tr>
<td>Anemia</td>
<td>2-4%</td>
</tr>
<tr>
<td>Pre-eclampsia</td>
<td>2-8%</td>
</tr>
<tr>
<td>Gestational diabetes</td>
<td>2-10%</td>
</tr>
<tr>
<td>Post partum depression</td>
<td>10-15%</td>
</tr>
</tbody>
</table>

### Substance Use

<table>
<thead>
<tr>
<th>Substance</th>
<th>Prevalence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol</td>
<td>9.4%</td>
</tr>
<tr>
<td>Cigarettes</td>
<td>15.4%</td>
</tr>
<tr>
<td>Illicit drugs</td>
<td>5.4%</td>
</tr>
</tbody>
</table>
Screening for Substance Use

• Universal screening is recommended
• All pregnant women should be screened for licit and illicit substance use (ACOG 2004, 2006) including:
  – Alcohol (ACOG 2011)
  – Prescription opioids (ACOG 2012)
• Early identification of substance use allows for early intervention and treatment which minimizes potential harms to the mother and her pregnancy
• Selective screening based on “risk factors” perpetuates stigma and misses most women with problematic use
Screening: Best Practices

• Patients are usually not offended by questions about substance use if asked in caring and nonjudgmental manner.

• Normalize questions:
  – Embed them in other health behavior questions
  – Preface questions by stating that all patients are asked about substance use

• Ask permission
  – “Is it OK if I ask you some questions about smoking, alcohol and other drugs?”

• Avoid closed-ended questions
  – “You don’t smoke or use drugs, do you?”
• Substance use during pregnancy is correlated with pregnancy complications and negative health outcomes for women and their children
  – Especially for legal substances (tobacco and alcohol)
• There is much stigma of admitting to substance use during pregnancy as well as legitimate fear of legal ramifications
Screening: Instruments

• There is no single best screening instrument to identify pregnant women with substance problems

• Instruments can be either self-completed or done as part of the patient interview

• The following instruments have been developed or validated among pregnant women (partial list)
  
  - Alcohol
    • T-ACE (Sokol 1989)
    • TWEAK (Chang 1999)
  
  - Both alcohol and other substance use
    • DAST and MAST (Kemper 1993)
    • 4P’s Plus (Chasnoff 1999)
    • CRAFFT (Chang 2011) for pregnant adolescents
Do you have to use an instrument?

• Validated instruments are more sound from research and public health perspective
• However the most important thing is having a nonjudgmental conversation with your patient
Reasons Patients Don’t Share With Us

- Fear of stigma or judgment
- Previous bad experience with health care provider
- Fear of Child Protective Services
- They don’t consider their use problematic
Screening: Urine

- What about urine toxicology?
- Should not be used as sole assessment of substance problems (ACOG 2012)
  - Short detection window (substance dependent)
  - Might not capture binge or intermittent use
  - Rarely detects alcohol
  - Doesn’t capture prescription opioids (without confirmation testing)
- Useful adjunct primarily for individuals during or after treatment (ASAM 2010)
- Ethical issues – patient needs to give consent prior to specimen collection
Screening: Summary

- Drug use is associated with many diseases
- Drug use is costly
- Drug use is common among women
- In pregnancy drug use is more common than many other conditions routinely screened for
- Although universal screening recommended by ACOG (also AAP, IOM, ASAM, NIAAA, etc.), rarely performed
  - Only 70% of PNC pts report being asked about smoking and alcohol (PRAMS 2009)
Screening: Provider barriers

• Reasons not to talk about substance use:
  – “No time” – Too many other things to do in short clinic visit
  – Don’t know how to ask
  – “Not my job” – Not trained as a therapist/counselor
  – No one to refer to
  – Lack of reimbursement
  – My patients don’t have drug problems
  – Patients won’t change anyway
Screening: Barriers

• Knowledge
• Skills
• Attitude

“I don’t need your attitude, I have one of my own.”

“Yes, I think I have good people skills. What kind of idiot question is that?”
SBIRT

• “SBIRT is a comprehensive, integrated, public health approach to the delivery of early intervention and treatment services for persons with substance use disorders, as well as those who are at risk of developing these disorders.” (CSAT, 2009)

• This is the definition used by SAMHSA

• However SBIRT can be used for any behavioral intervention or as the treatment process for any health behavior change
• **Screening** – quickly assess severity of substance use and identify the appropriate level of treatment
  - Patient administered instrument
  - Provider questions

• **Brief Intervention** – increase insight and awareness of substance use; motivation towards behavioral change
  - Brief – 3 minutes
  - Based on motivational interviewing

• **Referral and Treatment** – provide those identified as needing more treatment with access to specialty care
  - Systems of care

**Screening → Brief Intervention → Referral and Treatment**
• SBIRT at
  – Annual Exams
  – New OB visits

• For those with identified problems
  – Follow-up at subsequent visits

Screening: Identify patients who need further assessment or treatment

Brief Intervention

Referral to Treatment
• Not all use is problematic use
• Most people don’t have drug/alcohol problems
• Risk depends on patient population and substance
• Goal of Screening is to identify who is at risk

SBIRT Process

Screening stratifies patients into zones of misuse

High Risk

Medium Risk

Low Risk

Zones act as diagnostic aid and inform intervention
What You Can Expect

• After the screening results are available, you can expect that only a small proportion will be in need of a brief intervention.

• The goal of Brief Intervention (BI):
  – Not to “cure” the patient of the problem, simply instill some level awareness and possible referral to specialized treatment if necessary.

Babor & Higgins-Biddle, 2009
Screening: Most Individuals Won’t Need an Intervention

KEY
- Black: Only require screening
- Gray: Require brief intervention
- Red: Require referral to treatment

Source: SAMHSA funded MABIR program, N=173,714
How to Increase Uptake of SBIRT

• Embed it in standard of care
  – Staff-wide trainings
  – EMR
  – Routine part of QA evaluation

• Don’t rely exclusively on physicians
  – Physicians (esp PCP) are overburdened by time and an increasing load of screenings etc
  – Think creatively about staff, screening and brief interventions
How to Increase Uptake of SBIRT

• Screening
  – Patient completed
  – Nurse/staff administered
  – Computer-assisted

• Intervention
  – Computer-based
  – Peer-based
  – Other staff
There is Nothing About Brief Interventions that Require a Physician

- Ultrasound feedback and motivational interviewing targeting smoking cessation in the second and third trimesters of pregnancy
Think Creatively About Staff

• Everyone is invested in improving the health of the patients
• Division of labor – and – empowerment
• Alternative staff
  – Peer networks
  – Volunteers
• Don’t be afraid of consultants
# How to Increase Uptake of SBIRT: Reimbursement

## Codes for Reimbursable SBIRT Services

The chart below lists codes approved by the American Medical Association (CPT Codes) and the Centers for Medicare and Medicaid Services (G and H Codes) to be used by healthcare practitioners for reimbursable SBIRT services.¹³

<table>
<thead>
<tr>
<th>Payer</th>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td><strong>Commercial Insurance</strong></td>
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</tr>
<tr>
<td></td>
<td>CPT 99408</td>
<td>Alcohol and/or substance abuse structured screening and brief intervention services; 15 to 30 minutes.</td>
</tr>
<tr>
<td></td>
<td>CPT 99409</td>
<td>Alcohol and/or substance abuse structured screening and brief intervention services; greater than 30 minutes.</td>
</tr>
<tr>
<td><strong>Medicare</strong></td>
<td>G0396</td>
<td>Alcohol and/or substance abuse structured screening and brief intervention services; 15 to 30 minutes.</td>
</tr>
<tr>
<td></td>
<td>G0397</td>
<td>Alcohol and/or substance abuse structured screening and brief intervention services; greater than 30 minutes.</td>
</tr>
<tr>
<td><strong>Medicaid</strong></td>
<td>H0049</td>
<td>Alcohol and/or drug screening</td>
</tr>
<tr>
<td></td>
<td>H0050</td>
<td>Alcohol and/or drug service, brief intervention, per 15 minutes</td>
</tr>
<tr>
<td>Code</td>
<td>Definition</td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>---------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>99406</td>
<td>Smoking and tobacco use cessation counseling visit; 3-10 minutes</td>
<td></td>
</tr>
<tr>
<td>99407</td>
<td>Smoking and tobacco use cessation counseling visit; greater than 10 minutes</td>
<td></td>
</tr>
<tr>
<td>S9453</td>
<td>Smoking and tobacco use cessation classes; non-physician provider, per session</td>
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</table>
## ICD-9 Codes

### Common ICD-9 Codes Used for SBIRT

<table>
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<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>V82.9</td>
<td>Screening for Unspecified Condition</td>
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<tr>
<td>V28.9</td>
<td>Unspecified Antenatal Screening</td>
</tr>
<tr>
<td>V65.40</td>
<td>Other Counseling, Not Otherwise Specified (NOS)</td>
</tr>
<tr>
<td>V65.42</td>
<td>Other Counseling, Substance Use and Abuse</td>
</tr>
<tr>
<td>V65.49</td>
<td>Other Specified Counseling</td>
</tr>
</tbody>
</table>
Resources for Codes for Reimbursable SBIRT Services

• Private insurance

• Medicare and Medicaid
  – More information on Codes for Reimbursable SBIRT Services is available from the Medicare Learning Network at http://www.cms.gov/MLNgeninfo/

• Physicians
  – AMA Healthier Life Steps™: Coding for Routine Adult Lifestyle Screening, Early Intervention, and Motivational Interviewing, published in cpt Assistant: Your practical guide to current coding (2009), is available online from the AMA at http://www.ama-assn.org/ama1/pub/upload/mm/433/cpt-assistant.pdf
Other SBIRT Resources

- To learn more about substance use and SBIRT, visit the websites for SAMHSA ([www.samhsa.gov](http://www.samhsa.gov)) and the National Institute on Alcohol Abuse and Alcoholism (NIAAA) at [www.niaaa.nih.gov](http://www.niaaa.nih.gov)


- The Alcohol, Smoking, and Substance Involvement Screening Test (ASSIST), developed by the World Health Organization (WHO), is designed to help healthcare providers detect and manage substance use and related problems in primary and general medical care settings. More information about this screening tool is available on WHO’s website at [http://www.who.int/substance_abuse/activities/assist/en/](http://www.who.int/substance_abuse/activities/assist/en/)

Web-Based Trainings

- [www.smokingcessationandpregnancy.org](http://www.smokingcessationandpregnancy.org)
  - Excellent web-based virtual clinic with actual and simulated patients.
  - $25 access for 1 year. Free for residents.
  - CDC, Dartmouth, ACOG

  - Developed by ACOG
  - Free, includes 3 hours CME

  - Free CME

- [http://www.sbirttraining.com](http://www.sbirttraining.com)
  - Developed by ASAM (American Society for Addiction Medicine)
  - $50 includes 4 hours CME
Case 3

• Ms. AL, a 34 year old, delivered term infant one day prior. Her urine toxicology was positive for opiates and morphine. Her baby is exhibiting symptoms of NAS. After talking with you she discloses that she has been using opioids daily since before her pregnancy. She was originally prescribed opioids after a MVA – then doctor shopped – then purchased them illicitly.
• Ms. AL should have been referred to treatment during pregnancy because:
  – She used opioids (all opioid use requires treatment)
  – She meets criteria for a substance use disorder
  – Treatment during pregnancy would have prevented NAS
• For patients needing more extensive treatment than SBIRT, referral to specialized treatment provider may be necessary.

• Referral to treatment is integral component of SBIRT and necessitates strong collaboration between SBIRT provider or team and substance abuse treatment providers in your agency or in community.

• When is this the case?
  – Detox or needs more intensive treatment setting
  – Problem too severe for BI
  – You want further assessment
  – Patient wants more assistance
Referral Process: Know your community resources!

Steps involved in a Referral

1. Assess client referral needs
2. Plan the referral
3. Help client access referral services
4. Document Referral
5. Feedback and Follow-up
   – Continue Brief Interventions

Although this may be done by someone else in your setting, it is important that you remain involved and updated.
Community Resources

• National
  – SAMHSA Behavioral Health Treatment Services Locator
  – https://findtreatment.samhsa.gov/
  – 24/7 treatment referral line 1-800-662-HELP

• Local
  – Public Health Authorities
  – Community Based Organizations
  – State medical groups – ASAM
Case 4

• HG is a 24 year old G3P2 whose first prenatal visit is at 26 weeks. She has history of sexual abuse, prior psychiatric hospitalizations, prior SUD treatment (heroin) currently using opioids, benzos, cigarettes and MJ.
High-degree of overlap between mental health and substance use disorders

Behavioral health disorders may exacerbate or be related to other health problems and chronic medical conditions.

- For example, individuals with serious mental illness die on average 25 years earlier than the general population, largely due to untreated medical conditions.

COD = Co-occurring Disorders
SUD = Substance Use Disorder

36.7 Million Mental Illness Only
9.2 Million COD
11.2 Million SUD Only

(NSDUH, 2010; SAMHSA, 2013)
The Need for Integrated Care

It is likely that individuals who seek behavioral health services have concerns across many health domains.
Reproductive Education and Counseling

• Women in drug treatment are at increased risk of sexually transmitted infections (STIs) especially HIV (Armstrong 1999)

• Women in drug treatment are at increased risk of unintended pregnancy
  – Higher lifetime parity (Weber 2003)
  – Higher unintended pregnancy rates (Heil 2011)
  – Higher abortion rates (Martino 2006)

• Women in drug treatment are less likely to use effective contraception (Black 2012) (Sharpe 2008)
Contraception – SES Gradient

Brookings – “Sex, contraception, or abortion? Class gaps in unintended childbearing
http://www.brookings.edu/research/interactives/2015/unintended-childbearing-class-gaps
Preconception Counseling and Well Woman Care

- Prevent substance-exposed pregnancies by increasing proportion of planned pregnancies
- Increasing access to reproductive health and contraception for women with SUDs
- Identification at the time of delivery is 9 months too late
Thank you!

- Questions and Discussion
Contact Information

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Email: mishka.terplan@bhsbaltimore.org