SBIRT: A Population Health Approach to Perinatal Substance Use

Daisy Goodman, CNM, DNP, MPH
Perinatal Addiction Treatment Program
Dartmouth-Hitchcock Medical Center
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Objectives

• Briefly explore the rationale for integrating SBIRT in maternity care
• Describe SBIRT implementation at Dartmouth Hitchcock
• Explore unique issues associated with screening pregnant and parenting women
Impact of Untreated Substance Use Disorders During Pregnancy

For mother
Alcohol use: major preventable cause of birth defects
Lack of prenatal care:
  – Poor nutrition, self care
  – Increased complication rates
Injection drug use
  – Deep vein thrombosis
  – Endocarditis
  – Acute/Chronic hepatitis
  – Overdose

For baby
• Preterm Birth
• Low birth weight
• Fluctuating opioid concentrations ➔ unstable fetal environment
  – Tobacco use disorder
  – Impact of maternal stress
• Higher rates of NICU admission
• Long term effects associated with polysubstance use
  – Attention Problems
  – Developmental delays
<table>
<thead>
<tr>
<th>Study Group</th>
<th>Adjusted OR</th>
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<tbody>
<tr>
<td>Low birth weight (&lt;2,500g)</td>
<td>1.8 (1.1-3.1)</td>
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<tr>
<td>Preterm delivery</td>
<td>2.1 (1.3-3.2)</td>
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<tr>
<td>Placental abruption</td>
<td>6.8 (3.0-15.5)</td>
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<td>Fetal demise</td>
<td>16.2 (6.0-43.8)</td>
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*(Goler, et al 2008)*
National Recommendations for SBIRT in Prenatal Care

“Obstetrician-Gynecologists have an ethical obligation to learn and use techniques for universal screening questions, brief intervention, and referral to treatment.”

“Screening for substance abuse is a part of complete obstetric care and should be done in partnership with the pregnant woman.”

ACOG Committee Opinion Number 524 • (May 2012)

What does “partnership” mean?
Taking a Population Health Approach to Substance Use and Substance Use Disorders

**Primary**
- No SUD
- Screening only
- Prevent onset of disease
- Education

**Secondary**
- Behavioral Health
- Brief Intervention
- Brief Treatment
- Prevent Disease Progression

**Tertiary**
- Mod/Severe SUD
- Refer to treatment
- Prevent Morbidity & Mortality

**Screening**
- No SUD
- Screening only
- Prevent onset of disease
- Education

**Brief Intervention**
- Behavioral Health
- Brief Intervention
- Brief Treatment
- Prevent Disease Progression

**Referral**
- Mod/Severe SUD
- Refer to treatment
- Prevent Morbidity & Mortality
What is known about the effectiveness of SBIRT during pregnancy?

• Asking about alcohol and other substance use can result in behavior change during pregnancy too!
• Asking about details increases awareness of actual consumption level
• Brief intervention reduces the risks of alcohol-exposed pregnancy
  • Reduces number of drinks in past 4 weeks
  • Reduces the number of heavy drinking days during postpartum,
• Pregnant adolescents with substance use disorders reduce use after a single-session, standardized brief intervention
• Concern about legal risk and child protective service involvement may limit disclosure

Is BI important during Pregnancy?

Comparison of SBI vs Screening alone during pregnancy:
• Nonsignificant difference in drug use in last 4 weeks
• Significant change in total number of drinks in past 28 days
S*B*I*R*T in Obstetrics and Gynecology
Implementing Universal SBIRT in the D-H Ob/Gyn Clinic

MFM  CNM  Ob-Gyn  Adolescent SBIRT grant  BH  MFM  CNM  OB-GYN  Continual Improvement


PAPER FORMAT  ELECTRONIC

Dartmouth-Hitchcock MEDICAL CENTER
Tablet-based Screening

Welcome Screen

AUDIT-C

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Two-step Screening Made Easy

**Pre-screening:** 4 questions about past year use (AUDIT-C)

- How often did you have a drink containing alcohol in the past year?
- How many drinks did you have on a typical day when you were drinking in the past year?
- How often did you have 6 or more drinks on one occasion in the past year?

(NIDA)

- How many times in the past year have you used an illegal drug or used a prescription medication for nonmedical reasons?

**Follow up:** if positive, AUDIT and DAST provide additional questions populate about current use patterns
Process Map for SBIRT at Initial OB Visit

Patient arrives for initial prenatal visit

Support staff rooming patient loads electronic screening tool on laptop or tablet

Patient roomed by nursing staff

Patient instructed by nurse to complete electronic screening tool on tablet / laptop

Support staff leaves clinic room during electronic screening

Patient takes brief screen

Nursing staff uploads result in electronic medical record

Screen negative

Screen positive

Patient takes brief screen

Nursing staff uploads result in electronic medical record

Electronic screening tool automatically administers full screen

Nurse leaves clinic room during electronic screening

Referral to perinatal addiction treatment program

Referral to behavioral health

Continue routine prenatal care

Best practice alert generated and prenatal visit with provider begins

Prenatal visit with provider begins; no BI or RT indicated

Substance use severity

AUDIT ≥ substantial level and/or DAST ≥ moderate level

AUDIT moderate level and/or DAST low level

AUDIT moderate level and/or DAST low level

AUDIT moderate level and/or DAST low level

Substance use severity

BI by provider

Audits

AUDIT ≥ substantial level and/or DAST ≥ moderate level

AUDIT moderate level and/or DAST low level

AUDIT moderate level and/or DAST low level

AUDIT moderate level and/or DAST low level

AUDIT moderate level and/or DAST low level
Electronic screening is integrated in the visit note
Proportion of New OB Patients Screened after launching Tablet-based SBIRT

OB % Screened

% Patients Screened

MFM    CNM    General OB    ALL
Proportion of New OB Patients Screening Positive for At-Risk Substance Use in Past Year

% Positive NIDA/AUDIT Of Screened Patients

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<tr>
<td>Of Screened, % Positive</td>
<td>53.3%</td>
<td>60.0%</td>
<td>41.9%</td>
<td>50.0%</td>
<td>47.6%</td>
<td>38.0%</td>
<td>34.1%</td>
<td>44.2%</td>
<td>33.7%</td>
<td>42.7%</td>
<td>47.6%</td>
<td>46.7%</td>
<td>35.6%</td>
<td>40.4%</td>
<td>67.7%</td>
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Challenges

Creation of additional work flow took time
Providers less confident about BI than screening
Additional cost in terms of staff time are minimal— but “brief” intervention can be time consuming!
• Need for ongoing staff training
• Need to streamline a plan for follow up
• Billing is difficult to operationalize

Ethical issues make screening for substance use more complicated during pregnancy
Can SBIRT Cause Harm?
Since Substance Use in Pregnancy Is So Bad: Why Not Do Drug Testing?

Not recommended as a screening approach by ACOG and WHO

Problems with accuracy:
- Does not detect alcohol
- Short detection window
- High false positive rates

Logistical problems:
- Easy to falsify unless observed
- Expensive if confirmation required

Limited scope of substances detected

Limits access to care
- 73% of women surveyed support drug testing for all pregnant women
- 86% support verbal screening
- 14% said this would be a deterrent to attending prenatal care

(ACOG, 2012; WHO, 2013; Edmonds, 2016; Roberts, 2010; Stone, 2015)
169-C:12-e Rebuttable Presumption of Harm. Evidence of a custodial parent's opioid drug abuse or opioid drug dependence, as defined in RSA 318-B:1, I or RSA 318-B:1, IX, shall create a rebuttable presumption that the child's health has suffered or is very likely to suffer serious impairment. The presumption may be rebutted by evidence of the parent's compliance with treatment for such use or dependence.
Ethical Considerations in the Current National and State Context

Maternity care providers should:

• Protect patient autonomy, confidentiality, and the integrity of the patient-physician relationship to the extent allowable by laws

• Familiarize themselves with resources available through their local hospital, community, or state in order to effectively refer patients for treatment

• Be familiar with the legal requirements within their state or community

American College of Obstetricians and Gynecologists, Committee on Ethics, 2015
Summary

• All prenatal patients should be screened for harmful substance use at the first encounter and subsequent visits
• SBIRT is arguably the most therapeutic approach to screening for SUD during pregnancy
• More research is needed to determine sensitivity and specificity of different approaches to screening and BI during pregnancy
• Pregnant and parenting women deserve transparency about the possible impact of disclosing substance use
Questions?

A Helping Hand Can Change the World

daisy.j.goodman@dartmouth.edu
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