USING TRAUMA-SENSITIVE OBSTETRIC CARE TO REDUCE PTSD SYMPTOMS AMONG PREGNANT SURVIVORS OF ABUSE AND VIOLENCE

A Multilevel Intervention Approach

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Sponsored By:
Department of Behavioral Sciences
Department of Obstetrics and Gynecology
RUSH UNIVERSITY MEDICAL CENTER
and by the Charles J. and Margaret Roberts Fund and a grant from
the NIH-NHLBI 1P50HL105189-
Rush Center for Urban Health Equity
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1. Prevalence and impact of trauma on pregnancy outcomes
2. Multilevel (psychological and medical) intervention development
3. Preliminary pilot data
Nationally, one in THREE women is assaulted in her lifetime
HALF of OB/GYN patients at Rush have been violently assaulted or raped
OB/GYN Resident’s Clinic:
- 100% Medicaid-Insured
- 80% African-American
- Average # lifetime interpersonal traumas = 3
- Percent affected by childhood abuse = 44%
- Percent with PTSD symptoms = 25%

Roberts et al., 2012 In Psych Med; Stevens et al., 2013 In Beh Ther
Compared to White women, African-American women experience:
- HIGHER rates of child abuse
- HIGHER rates of PTSD in pregnancy
- LOWER rates of mental health treatment in pregnancy

Schumm, Stines, Hobfoll, & Jackson, 2005 In J Trauma Stress; Schumm, Briggs-Phillips, & Hobfoll, 2006 In J Trauma Stress; Seng, Kohn-Wood, McPherson, & Sperlich, 2011 In Arch Women’s Ment Health
PTSD INCREASES RISK OF PRETERM BIRTH AND LOW BIRTHWEIGHT

PTSD → Maternal-Fetal HPA Dysregulation/ Cortisol → Immune Dysfunction & Inflammation → Preterm Birth
PTSD → Maternal-Fetal HPA Dysregulation/ Cortisol → Impaired Fetal Growth → Low birthweight

Orr, Reiter, Blazer, & James. 2007 In Psychosom Med; Schetter, 2010 In Annu Rev Psychol; Schetter & Tanner, 2012 In Curr Opin Psychiatry; Seng, Low, Sperlich, Ronis, & Liberzon, 2011 In BJOG
CURRENT PTSD TREATMENTS ...

- Evoke aversive physiological arousal that is poorly tolerated in pregnancy
- Do not address pregnancy-focused coping
- Do not involve obstetric providers

Seng, Sparbel, Low, & Killion, 2002 In J Midwifery Womens Health
WHY TO-CARE?
Women with PTSD who have been abused:

- Feel that they do not have control over what is done to their bodies
- Cannot calm themselves when anxious or fearful
- Experience difficulty communicating their fears and needs
- Are sensitive to situations that remind them of their traumas or abuse
- Avoid medical care and procedures

Havig, 2008 In Trauma Violence & Abuse; Weitlauf et al., 2008 In Obstet & Gynecol; Weitlauf et al., 2010 In J Women’s Health
OBSTETRIC CARE IS A TRAUMATIC STIMULUS FOR ABUSE SURVIVORS
Routine exams can provoke anxiety, fear, vulnerability, and lack of control. Even the most sensitive physician performing the most routine exam can trigger feelings of fear and shame.
Invasive procedures are an overt stimulus that parallels sexual trauma.
WHAT WOULD TRAUMA-SENSITIVE OBSTETRIC CARE LOOK LIKE?
A senior obstetric resident comes into the exam room with a first-year resident and a medical student to perform a speculum exam and a transvaginal ultrasound on a patient who is 20 weeks pregnant. The first-year resident is performing the exams, with guidance from the senior resident. The patient’s boyfriend is sitting in the corner, trying to stay out of the way of the two residents and the student who are circled around the exam table. The senior resident is rushed, focused on teaching, and speaks only to the first year resident and medical student to provide feedback on the exams. No one acknowledges the patient’s history of PTSD from her medical chart. During the speculum exam, the patient winces and says, “That hurts!” The resident replies, “Okay, I’m almost finished. If you can relax it won’t hurt as much. I need you to scoot back down to the edge of the table.” The patient complies. During the ultrasound the patient starts to cry and covers her face with her hands.
The first-year resident says, “Does it hurt still? What’s wrong?” The patient keeps her face covered and mumbles, “It’s fine.” The resident replies, “I know. It sucks being a woman sometimes.” The residents and student discuss the procedure, pointing out findings along the way. After the procedure, the first-year resident says, “If that hurt, it should go away soon. It’s only a minor procedure so there should be no long-term effects to worry about. Do you want me to print out the picture of the ultrasound for you?” The resident leaves the room thinking she may need more practice before being able to perform exams without causing so much discomfort for the patient.
<table>
<thead>
<tr>
<th>STANDARD OBSTETRIC CARE</th>
<th>TRAUMA-SENSITIVE CARE</th>
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</thead>
<tbody>
<tr>
<td>A senior obstetric resident comes into the exam room with a first-year resident and a medical student to perform a speculum exam and a transvaginal ultrasound on a patient who is 20 weeks pregnant. The first-year resident is performing the exams, with guidance from the senior resident. The patient’s boyfriend is sitting in the corner, trying to stay out of the way of the two residents and the student who are circled around the exam table. The senior resident is rushed, focused on teaching, and speaks only to the first-year resident and medical student to provide feedback on the exams. During the speculum exam, the patient winces and says, “That hurts!” The resident replies, “Okay, I’m almost finished. If you can relax it won’t hurt as much. I need you to scoot back down to the edge of the table.” The patient complies. During the ultrasound the patient starts to cry and covers her face with her hands.</td>
<td>A senior obstetric resident enters the exam room with a first-year resident and a medical student. The first-year resident introduces herself as the physician who will be performing the exams, asks permission for the medical student to be present, and waits for a reply. She says, “I understand you have some difficulties with anxiety related to stressful experiences you have had. How are you coping right now?” The patient says she is doing fine. The resident replies, “Okay. Let me know if there is anything you’d like to discuss. I know these exams are uncomfortable because they are pretty invasive. Are there any techniques that I can help you with to feel more comfortable?” When the patient shrugs, “I’m fine,” the resident replies, “It is really important for me to know that you are comfortable. How about you just stop me anytime you feel discomfort? You can say ‘Stop’ or ‘Hold on please’” During the speculum exam, the patient winces and recoils and the resident says, “I am stopping what I am doing now. Why don’t we take a few deep breaths and I will not begin again until I know you are ready.”</td>
</tr>
</tbody>
</table>
The first-year resident says, “Does it hurt still? What’s wrong?” The patient keeps her face covered and mumbles, “It’s fine.” The resident replies, “I know. It sucks being a woman sometimes.” The residents and student discuss the procedure, pointing out findings along the way. After the procedure, the first-year resident says, “If that hurt, it should go away soon. It’s only a minor procedure so there should be no long-term effects to worry about. Do you want me to print out the picture of the ultrasound for you?” The resident leaves the room thinking she may need more practice before being able to perform exams without causing so much discomfort for the patient.

The patient indicates she is ready and the resident proceeds, encouraging her to take slow, deep breaths, and speaking directly to her before directing any comments to the others. The senior resident says, “Is it okay if I give some feedback to our medical student for her training?” The patient nods and the residents and student talk briefly. Before beginning the transvaginal ultrasound, the first-year resident says, “Let’s practice some more deep breaths and each time you exhale, let go of any tension in your legs and hips. During the exam, I’ll ask you to keep taking breaths and releasing tension.” The patient says, “I’m fine, I just hate that speculum.” The resident says, “I know. It can be really painful when it pinches. My goal is for you to feel as comfortable as possible, even if the ultrasound doesn’t hurt. This helps you to calm any tension you feel and it’s good for you and the baby. How does that sound?” The resident completes the ultrasound and asks the patient how she feels, reassuring her.
Cognitive Processing Therapy (CPT)

- **Theory**: Distress is perpetuated by faulty beliefs related to self-blame, safety, trust, and power/control
- **Intervention GOAL**: Enhance sense of control, safety, and trust through encounters with obstetric providers

Stress Inoculation Training (SIT)

- **Theory**: Distress is perpetuated by behavioral avoidance
- **Intervention GOAL**: Eliminate avoidant coping through rehearsal and *in vivo practice* of adaptive coping skills during obstetric encounters

Resick & Schnicke, 1993 Sage Publications; Meichenbaum, 1996 In *Clin Psychol*
### TO CARE Level 1 – Coping Skills Training for Patients:

<table>
<thead>
<tr>
<th>Weeks</th>
<th>TO-CARE Coping Skills Groups</th>
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<tbody>
<tr>
<td>0-14</td>
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<tr>
<td>16</td>
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<td>36</td>
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<td>37-42</td>
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</tbody>
</table>

- 1. PTSD education
- 2. Relaxation training
- 3. Empowered communication
- 4. Self-care

### TO CARE Level 2 – Trauma-sensitive Care:

1. Physicians acknowledge distress
2. Discuss patients’ coping and how skill practice is progressing
3. DIRECTLY reinforce coping skills during exams and procedures
4. Modify medical environment to facilitate coping
# Examples from Trauma-Sensitive Obstetric Care Physician’s Manual

## Trauma-Sensitive Behaviors:

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<table>
<thead>
<tr>
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<tbody>
<tr>
<td>1</td>
<td>Elicit, identify, and acknowledge patients’ trauma history and current distress</td>
</tr>
<tr>
<td>2</td>
<td>Explain full purpose of medical encounter</td>
</tr>
<tr>
<td>3</td>
<td>Close doors, curtains, reduce # people for privacy</td>
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<tr>
<td>4</td>
<td>Elicit patients’ concerns about the medical encounter</td>
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<tr>
<td>5</td>
<td>Speak directly to patient, using eye contact when possible</td>
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<tr>
<td>6</td>
<td>Minimize distractions and conversations not pertinent to patient</td>
</tr>
<tr>
<td>7</td>
<td>Elicit patients’ preferred method of coping to make invasive exams more comfortable and guide “practice”</td>
</tr>
<tr>
<td>8</td>
<td>Explain each step of exam or procedure before it occurs</td>
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<tr>
<td>9</td>
<td>Elicit verbal permission from patient to proceed BEFORE continuing with invasive parts of an exam or procedure</td>
</tr>
<tr>
<td>10</td>
<td>Directly verbally reinforce patients’ preferred coping method during exam or procedure</td>
</tr>
<tr>
<td>11</td>
<td>Provide verbal feedback and reassurance regarding coping</td>
</tr>
<tr>
<td>12</td>
<td>Reassess or debrief by discussing patients’ comfort level following exams or procedures</td>
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</tbody>
</table>
OPEN PILOT STUDY
Reduce PTSD, pregnancy-related anxiety, and depression
• Increase patient-physician partnership
• Increase self-efficacy and sense of empowerment
• Increase self-care and engagement in prenatal care
Aim 1: To examine preliminary efficacy
- PTSD symptoms
- Depression symptoms

Aim 2: To examine preliminary feasibility
- Obstetric physicians’ performance of trauma-sensitive care
OB/GYN residents’ training clinic

Inclusion Criteria:
- >18 years old
- <30 weeks gestation
- English-speaking
- History of sexual or physical abuse or violence
- At least 3 symptoms of PTSD

Exclusion Criteria:
- Current SI/HI
- History of psychosis, mania, or psychiatric hospitalizations
- Pregnancy complications requiring intensive medical treatment
PILOT STUDY MEASURES

- PTSD Symptom Checklist - Civilian Version (PCL-C)
- Patient Health Questionnaire (PHQ-9)
- Pregnancy-Related Anxiety Questionnaire (PRAQ)
- Acceptance and Action Questionnaire (AAQ): Assesses degree of acceptance or avoidance of emotional distress
- Pregnancy Self-Efficacy Questionnaire (PSEQ): Assesses confidence and ability to engage in self-care and assertive communication

Bond et al., 2011 In Beh Ther; Kroenke et al., 2001 In J Gen Int Med; Rini et al., 1999 In Health Psych; Weathers et al., 1994
CBT Coping Skills Topics by Session:

Session 1: Restructuring self-blame and relaxation skills
Session 2: Assertive communication skills
Session 3: Establishing safety through self-care
Session 4: Coping with triggers in pregnancy
Session 5: Preparing for triggers in childbirth
Session 6: Preparing for triggers in early postpartum

Trauma-sensitive Care – Physician Behaviors at Prenatal Visits:

1. Acknowledge anxiety and reinforce coping skills
2. Reinforce assertive communication, assess and respond to patient readiness during procedures
3. Explain procedures and elicit concerns
4. Maximize patient control in the medical environment (e.g., privacy, focus conversations on patient only)
PRELIMINARY OUTCOME DATA
78 patients screened

36 (46%) eligible

19 (52%) completed baseline

13 completed at least 1 CBT session

9 completed at least 3 CBT sessions

5 completed postpartum assessment

6 did not return for CBT
3 were lost to follow-up
1 withdrew
PARTICIPANT DEMOGRAPHICS AT BASELINE (N=19)

- Age ranged from 18-40 (M=28.94, SD=6.04)
- 52.6% African American
- 31.6% Hispanic
- 15.8% White
- 36.9% employed full-time or part-time
- 52.6% no income
- 57.9% married or in committed relationship
Participants reported problems with abuse, PTSD, anxiety, and depression.

**Trauma-Related Risk Factors at Baseline**

- PTSD (PCL-C > 30)
- Pregnancy Anxiety (PRAQ > 15)
- Depression (PHQ-9 > 10)
- Physical Abuse (at least 1 occurrence)
- Sexual Abuse (at least 1 occurrence)
TO-CARE Reduces PTSD (n=9)

$t(8) = 2.751, p<.05, d=1.07$
**Aim 1: Preliminary Efficacy (Depression)**

Depression Symptoms (n=9)

\[ t(8) = 7.341, \ p < .01, \ d = 3.62 \]
Participants (N=9) received 47% of prenatal visits with trained obstetric residents

- Physician Training
  1) Read the TO-CARE manual
  2) Discuss and role-play skills
  3) Real-time evaluation of patient encounters
  4) Feedback

- Results of performance assessments were compiled from six OB/GYN encounters
<table>
<thead>
<tr>
<th>Behavior: 0=absent; 1=present</th>
<th>Pelvic Exam</th>
<th>Postpartum Exam</th>
<th>Pelvic Exam</th>
<th>Pelvic Exam</th>
<th>Pelvic Exam</th>
<th>Transvaginal Ultrasound</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Acknowledge Trauma/Distress</td>
<td>1</td>
<td>0</td>
<td>0</td>
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<td>1</td>
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<td>2. Purpose of Encounter</td>
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<td>3. Ensures Privacy</td>
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<tr>
<td>4. Elicits Concerns</td>
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<td>0</td>
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<td>5. Communicates Directly</td>
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<td>0</td>
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<td>6. Minimizes Distraction</td>
<td>1</td>
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<td>1</td>
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<tr>
<td>7. Elicits Coping Method</td>
<td>0</td>
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<td>8. Provides Step-by-Step Guidance</td>
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<td>9. Asks Permission Before Proceeding</td>
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<td>10. Provides Coping Reinforcement</td>
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<tr>
<td>11. Provides Feedback</td>
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<td>12. Debriefing</td>
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<tr>
<td><strong>TOTAL %</strong></td>
<td><strong>75%</strong></td>
<td><strong>33%</strong></td>
<td><strong>33%</strong></td>
<td><strong>58%</strong></td>
<td><strong>75%</strong></td>
<td><strong>50%</strong></td>
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</tbody>
</table>
TO-CARE shows promising results for reducing psychological distress
Need strategies to improve retention
Address obstetric clinic barriers to maximize access to trained physicians
Improve obstetric physician training and competency
QUESTIONS