Trauma, Childbirth & Mindfulness

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University of Washington
Child Sexual Abuse and Labor & Birth

Birth Outcomes
• PTSD after child abuse associated with lower birth weight and shorter gestation (Seng et al., 2011)

Experience of Labor and Birth
• Reenactment of abuse during maternity care (Montgomery, Pope, & Rogers, 2015)

• Increased risk of dissociation during childbirth (Choi & Seng, 2016)
Purpose

• Feasibility of modified childbirth education for women with a history of sexual trauma
  • Recruitment
  • Attendance
  • Acceptability

• Outcomes
  • Mental health measures
  • Birth satisfaction and outcomes
Mindfulness in Childbirth Education Program

**Design:** one-group repeated measures pilot study

**Inclusion Criteria:** pregnant (< 32 weeks), reported history of sexual trauma, English speaking

**Recruitment:** flyers posted at OB/Midwifery practices, prenatal yoga studios, WIC offices, mental health providers

**Intervention:** Mindfulness in Childbirth Education Program
- 6 weekly classes (2.5 hours each)
- 3 individual sessions (1 hour each)
### Class Sessions

<table>
<thead>
<tr>
<th>Class</th>
<th>Primary Topics</th>
<th>Mindfulness Practices &amp; Exercises</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Mindfulness as a skill</td>
<td>Mindful eating (raisin)</td>
</tr>
<tr>
<td></td>
<td>Relationship to stress &amp; well-being</td>
<td>Intro awareness of breathing</td>
</tr>
<tr>
<td>2</td>
<td>Importance of perception</td>
<td>Awareness of breathing</td>
</tr>
<tr>
<td></td>
<td>Physiology of normal birth, pain &amp; fear.</td>
<td>Ice “contractions”” mindfulness</td>
</tr>
<tr>
<td>3</td>
<td>The comparing and judging mind</td>
<td>Gentle yoga</td>
</tr>
<tr>
<td></td>
<td>Mechanisms of labor, positions and movement</td>
<td>Ice “contractions””</td>
</tr>
<tr>
<td>4</td>
<td>The illusion of control and all the factors at play in birth</td>
<td>Body scan meditation</td>
</tr>
<tr>
<td></td>
<td>Importance of flexibility in coping</td>
<td>Ice “contractions”” using sounding</td>
</tr>
<tr>
<td>5</td>
<td>Turning toward fear</td>
<td>Loving kindness meditation</td>
</tr>
<tr>
<td></td>
<td>Self-Compassion, self-care as parent</td>
<td>STOP technique</td>
</tr>
<tr>
<td>6</td>
<td>Newborn needs &amp; breastfeeding</td>
<td>Breath awareness with loving kindness</td>
</tr>
<tr>
<td></td>
<td>Using mindfulness to recognize needs of self and baby</td>
<td>Three minute breathing space</td>
</tr>
</tbody>
</table>
## Individual Sessions

<table>
<thead>
<tr>
<th></th>
<th>Primary Topics</th>
<th>Mindfulness Practices &amp; Exercises</th>
</tr>
</thead>
</table>
| **1** | Conceptual framing of individual sessions and mindfulness training for women with trauma histories  
Sensory Awareness through breath  
Mental intention/Attention and Mindfulness  
Interoceptive Awareness | Yogic breath exercise  
Body literacy exercise  
Softening exercise  
Mindful Body Awareness exercise and practice (self-care) |
| **2** | Mindfulness Practice and Pregnancy Check-in  
Body Scan: overview and purpose  
Mindfulness/Interoceptive Awareness Practice | Related resources if needed  
Body Scan Exercise (using hands)  
Exercise review/deepening of practice |
| **3** | Post-partum Check-in re: birth, post-partum transitions, stress & challenges  
Self-care and related needs | Practice Exploration – what is needed for integration in life  
Mindful Practices for Self-Care |
Attendance

• Two cohorts

• One participant dropped out after week 1

• 11/12 engaged in program and completed all three assessments
Demographics (n = 12)

• **Age**: 24-40 (M = 31)

• **Ethnicity**: 1 Hispanic, 11 Not Hispanic

• **Race**: Caucasian 9; African-Am/Native 1; Asian/Caucasian 1; Native/Cauc 1

• **Relationship**: 7 married, 2 living with partner, 1 single, 1 separated, 1 engaged

• **Income**: 5 > 100K; 1 58-75K; 3 29-39 K; 3 < 18K

• **Pregnancy**: 8 – 32 weeks (M = 23); 9 nulliparous; all singleton
Baseline Characteristics

**ACE Score:** Mean 4.4 (0 – 9)

**Traumatic Life Experiences:**

**Depression:**

**Anxiety:**
Baseline Characteristics

**ACE Score:** Mean 4.4 (0 – 9)

**Traumatic Life Experiences:**
- Sudden death loved one/friend 10
- Uninvited sexual attention 9
- Stalking 8
- Witness family violence as child 7
- Unwanted sexual contact (age >18) 7
- Natural Disaster 6
- Unwanted sexual contact (age 13-18) 6
- Threatened with death/injury 5
- Sexual contact < age 13 5
- IPV (physical) 5
- Child physical abuse 4

**Depression:**

**Anxiety:**
Baseline Characteristics

**ACE Score:** Mean 4.4 (0 – 9)

**Traumatic Life Experiences:**

**Depression:**

**Anxiety:**

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**PHQ-9**
- Range: 0 – 13 (M = 7.3)
- 5/12 score ≥ 10

**EPDS**
- Range: 3 – 13 (M = 8.6)
- 5/12 score ≥ 10
Baseline Characteristics

ACE Score: Mean 4.4 (0 – 9)

Traumatic Life Experiences:

Depression:

Anxiety:

GAD-7

- Range 4 -13 (M = 8.1)
- 6/12 5-9 (mild anxiety)
- 4/12 ≥ 10 (moderate anxiety)
## Pre-Post: Mood

<table>
<thead>
<tr>
<th>Type</th>
<th>Variable</th>
<th>T1</th>
<th>T2</th>
<th>p</th>
<th>Cohen’s d</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression</td>
<td>EPDS</td>
<td>8.7 (3.3)</td>
<td>8.8 (4.6)</td>
<td>.94</td>
<td>.02</td>
</tr>
<tr>
<td></td>
<td>PHQ-9</td>
<td>7.5 (4.3)</td>
<td>7.3 (5.2)</td>
<td>.80</td>
<td>.04</td>
</tr>
<tr>
<td>Stress</td>
<td>PSS</td>
<td>5.0 (2.6)</td>
<td>5.0 (3.1)</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Emotional Regulation</td>
<td>DERS-SF</td>
<td>34.8 (9.4)</td>
<td>32.8 (5.7)</td>
<td>.48</td>
<td>.26</td>
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<tr>
<td>PTSD</td>
<td>PSS-SR</td>
<td>12.4 (7.5)</td>
<td>9 (9.2)</td>
<td>.27</td>
<td>.40</td>
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<tr>
<td>Anxiety</td>
<td>GAD-7</td>
<td>8.1 (3.4)</td>
<td>6.7 (4.8)</td>
<td>.36</td>
<td>.34</td>
</tr>
<tr>
<td></td>
<td>PPA</td>
<td>24.9 (5.1)</td>
<td>18.9 (3.8)</td>
<td>.002</td>
<td>1.33</td>
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</table>
### Pre-Post: Mindfulness

<table>
<thead>
<tr>
<th>Variable</th>
<th>T1</th>
<th>T2</th>
<th>p</th>
<th>Cohen’s d</th>
</tr>
</thead>
<tbody>
<tr>
<td>FFMQ total</td>
<td>82.1 (16.3)</td>
<td>86.1 (4.1)</td>
<td>.43</td>
<td>.34</td>
</tr>
<tr>
<td>Observe</td>
<td>13.7 (3.4)</td>
<td>13.6 (2.2)</td>
<td>.94</td>
<td>.03</td>
</tr>
<tr>
<td>Describe</td>
<td>20 (3.1)</td>
<td>19.5 (1.8)</td>
<td>.53</td>
<td>.20</td>
</tr>
<tr>
<td>Act with Awareness</td>
<td>17.5 (4.3)</td>
<td>18 (1.9)</td>
<td>.75</td>
<td>.15</td>
</tr>
<tr>
<td>Nonjudging</td>
<td>15.9 (4.0)</td>
<td>18.2 (1.6)</td>
<td>.07</td>
<td>.76</td>
</tr>
<tr>
<td>Nonreacting</td>
<td>14.9 (4.5)</td>
<td>16.8 (2.0)</td>
<td>.23</td>
<td>.55</td>
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</table>
## Pre-Post: Interoceptive (Body) Awareness

<table>
<thead>
<tr>
<th>MAIA</th>
<th>T1 Mean (SD)</th>
<th>T2 Mean (SD)</th>
<th>p</th>
<th>Cohen’s d</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noticing</td>
<td>2.8 (1.1)</td>
<td>3.4 (.61)</td>
<td>.12</td>
<td>.67</td>
</tr>
<tr>
<td>Nondistracting</td>
<td>2.6 (1.2)</td>
<td>2.9 (.79)</td>
<td>.39</td>
<td>.30</td>
</tr>
<tr>
<td>Not worrying</td>
<td>2.9 (1.0)</td>
<td>3.1 (.80)</td>
<td>.59</td>
<td>.22</td>
</tr>
<tr>
<td>Attention regulation</td>
<td>2.7 (.65)</td>
<td>3.1 (.70)</td>
<td>.06</td>
<td>.59</td>
</tr>
<tr>
<td>Emotional awareness</td>
<td>3.1 (.96)</td>
<td>3.5 (.78)</td>
<td>.08</td>
<td>.46</td>
</tr>
<tr>
<td>Self regulation</td>
<td>2.5 (.99)</td>
<td>3.7 (.82)</td>
<td>.002</td>
<td>1.32</td>
</tr>
<tr>
<td>Body listening</td>
<td>1.9 (1.1)</td>
<td>2.4 (1.0)</td>
<td>.09</td>
<td>.48</td>
</tr>
<tr>
<td>Trusting</td>
<td>2.8 (1.3)</td>
<td>3.7 (.99)</td>
<td>.01</td>
<td>.78</td>
</tr>
</tbody>
</table>
## Pre-Post: Interpersonal Reactivity

<table>
<thead>
<tr>
<th>IRI</th>
<th>T1</th>
<th>T2</th>
<th>Cohen’s d</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Perspective Taking</strong></td>
<td>20.2 (3.8)</td>
<td>21.1 (3.2)</td>
<td>.37</td>
</tr>
<tr>
<td><strong>Fantasy</strong></td>
<td>18.3 (5.0)</td>
<td>17.1 (4.1)</td>
<td>.24</td>
</tr>
<tr>
<td><strong>Empathic Concern</strong></td>
<td>21.5 (3.4)</td>
<td>21.1 (2.3)</td>
<td>.52</td>
</tr>
<tr>
<td><strong>Personal Distress</strong></td>
<td>10.6 (4.7)</td>
<td>10.5 (4.1)</td>
<td>.94</td>
</tr>
</tbody>
</table>
Response to Program

**High Acceptability**
- All indicated overall satisfaction - mean of 5 (very satisfied) on a 6 point scale

Participants learned information that helped prepare for labor and delivery
- Mean of 3.6 on 5 point scale

Participants learned skills to manage stressors related to pregnancy, delivery and parenting
- Mean of 3.8 on a 5 point scale

**Qualitative Themes re: Program Helpfulness**
- Class most helpful for learning mindfulness skills to manage pain and anxiety during labor and delivery
- Individual sessions most helpful for one-on-one coaching practice of mindfulness skills
- Primary improvement suggestion was to increase time for discussion and social connections
Quote Examples

• The mindfulness tools have been a great help in managing my anxiety in general, not just around childbirth.

• I think the overall takeaway was confidence. I feel much more informed and prepared for childbirth, and I feel knowledgeable enough to be an advocate for myself.

• The class was very helpful and wonderful thing for me was being surrounded by like minded same situation (pregnant and afraid).

• I got my VBAC!! This birth experience was so amazing. I felt empowered and in control. I felt safe with my care providers and in my body. Pushing was hard work, but pulling him up on my chest myself was magical. I'm so grateful.
Next steps

- Using lessons learned in the next study
- Recruitment for trauma populations difficult (but expect trauma present in Low income mothers)
- Timing issues with pregnancy recruitment
- Building on community connections for recruitment
- Same basic curriculum (6 group sessions + 2 individual)
- Incorporating feedback into implementation of curriculum
  - more small group discussion, social connection
- Using similar measures
- Three groups: prenatal, postpartum mindfulness ± parenting skills
Acknowledgements

• Anna Treadway, Research Coordinator
• Funding from CCFW