

Trauma, Childbirth & Mindfulness

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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

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

Individual Sessions

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

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:

Depression:

Anxiety:

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



Baseline Characteristics

ACE Score: Mean 4.4 (0 – 9)

Traumatic Life Experiences:

Depression:

Anxiety:

PHQ-9

- Range: 0 – 13 (M = 7.3)
- 5/12 score \geq 10

EPDS

- Range: 3 – 13 (M = 8.6)
- 5/12 score \geq 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

		T1	T2		Cohen's d
Type	Variable	Mean (SD)	Mean (SD)	p	Effect Size
Depression	EPDS	8.7 (3.3)	8.8 (4.6)	.94	.02
	PHQ-9	7.5 (4.3)	7.3 (5.2)	.80	.04
Stress	PSS	5.0 (2.6)	5.0 (3.1)	1	0
Emotional Regulation	DERS-SF	34.8 (9.4)	32.8 (5.7)	.48	.26
PTSD	PSS-SR	12.4 (7.5)	9 (9.2)	.27	.40
Anxiety	GAD-7	8.1 (3.4)	6.7 (4.8)	.36	.34
	PPA	24.9 (5.1)	18.9 (3.8)	.002	1.33



Pre-Post: Mindfulness

	T1	T2		Cohen's d
Variable	Mean (SD)	Mean (SD)	p	Effect Size
FFMQ total	82.1 (16.3)	86.1 (4.1)	.43	.34
Observe	13.7 (3.4)	13.6 (2.2)	.94	.03
Describe	20 (3.1)	19.5 (1.8)	.53	.20
Act with Awareness	17.5 (4.3)	18 (1.9)	.75	.15
Nonjudging	15.9 (4.0)	18.2 (1.6)	.07	.76
Nonreacting	14.9 (4.5)	16.8 (2.0)	.23	.55

Pre-Post: Interoceptive (Body) Awareness

	T1	T2		Cohen's d
MAIA	Mean (SD)	Mean (SD)	p	Effect Size
Noticing	2.8 (1.1)	3.4 (.61)	.12	.67
Nondistracting	2.6 (1.2)	2.9 (.79)	.39	.30
Not worrying	2.9 (1.0)	3.1 (.80)	.59	.22
Attention regulation	2.7 (.65)	3.1 (.70)	.06	.59
Emotional awareness	3.1 (.96)	3.5 (.78)	.08	.46
Self regulation	2.5 (.99)	3.7 (.82)	.002	1.32
Body listening	1.9 (1.1)	2.4 (1.0)	.09	.48
Trusting	2.8 (1.3)	3.7 (.99)	.01	.78

Pre-Post: Interpersonal Reactivity

	T1	T2		Cohen's d
IRI	Mean (SD)	Mean (SD)	p	Effect Size
Perspective Taking	20.2 (3.8)	21.1 (3.2)	.37	.26
Fantasy	18.3 (5.0)	17.1 (4.1)	.24	.26
Empathic Concern	21.5 (3.4)	21.1 (2.3)	.52	.14
Personal Distress	10.6 (4.7)	10.5 (4.1)	.94	.02

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 \pm parenting skills



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