

Progress Update from Mother Baby Connections, an Intensive Outpatient Program for Perinatal Women in Philadelphia

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Introduction

- **Mother Baby Connections (MBC):** An interdisciplinary, intensive outpatient perinatal mental health program to treat women with perinatal mood and anxiety disorders and their infants.
- MBC is one of 24 perinatal intensive outpatient programs in the U.S.⁸
- Employing a theoretical framework based on the Social Energy Exchange theory for postpartum depression (SEED)¹, MBC integrates several therapeutic approaches to optimize maternal functioning and promote biopsychosocial and cultural wellbeing².
- Services offered include:
 - Individual Psychotherapy
 - Mother-Baby Interaction Therapy
 - Wellness Groups
 - Mom-Me Psychotherapy Group
- Pilot data have shown improvements in maternal functioning and psychiatric symptoms over the course of treatment in the program between December 2016 and August 2018².
- The transition from in-person to telehealth sessions during the COVID-19 pandemic increased accessibility and patient attendance, particularly for underserved women³.

Objective: Present updated outcome data, inclusive of pandemic years, to further assess the efficacy of MBC in improving the health and wellbeing of mothers with perinatal mood and anxiety disorders and their infants.



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Method

Sample: $N = 52$ postpartum women who received treatment and completed an exit survey at MBC from the start of the program in 2016 through 2022.

- Self-report survey data were collected at baseline prior to starting treatment and again at discharge from the program.
- Surveys include the Edinburgh Postnatal Depression Scale (EPDS)⁴, Barkin Index of Maternal Functioning (BIMF)⁵, Parental Stress Scale⁶, and Difficulties in Emotion Regulation Scale (DERS)⁷

Statistical Analysis:

- All analyses were conducted in SPSSv28. One-tailed paired t-tests were conducted for each scale to test whether symptoms significantly improved between baseline and exit surveys.

Table 1. Sample Characteristics (N = 52)*

	n	%
Delivery Method (n = 47)		
Cesarean Section	18	38.3
Vaginal	27	57.4
Vaginal Birth After Cesarean (VBAC)	2	4.3
Infant Sex (n = 47)		
Male	24	51.1
Female	23	48.9
Employment Status		
Full-time	15	28.8
Part-time	7	13.5
Unemployed	30	57.7
Medical Coverage		
Commercial	23	44.2
Medicaid	22	42.3
Self-Pay	7	13.5

*Unless otherwise specified

Table 2. Sample Race and Ethnicity (N = 52)

	n	%
Asian	4	7.7
Black or African American	16	30.8
White	24	46.2
Mixed Race	4	7.7
Hispanic or Latina	4	7.7

Results

- The average number of weeks spent in the program was $M = 10.15$, $SD = 3.31$

Table 3. Paired t-tests Baseline to Discharge (N = 52)

Variable	Baseline M(SD)	Discharge M(SD)	t	p	Cohen's d
Depression (EPDS)	17.71(4.58)	11.02(5.99)	8.93	<.001	5.403
Maternal Functioning (BIMF)	69.88(16.97)	86.77(16.67)	-6.30	<.001	19.34
Parental Stress (PSS)	49.04(10.20)	42.63(8.60)	5.96	<.001	7.74
Emotion Regulation (DERS)	108.52(23.64)	88.75(23.32)	7.98	<.001	17.86

- EPDS scores at discharge were significantly lower than baseline scores, $t(51) = 8.93$, $p < .001$
- BIMF scores at discharge were significantly higher than baseline scores, $t(51) = -6.30$, $p < .001$
- PSS scores at discharge were significantly lower than baseline scores, $t(51) = 5.96$, $p < .001$
- DERS scores at discharge were significantly lower than baseline scores, $t(51) = 7.98$, $p < .001$

Conclusion

- With the onset of the COVID-19 pandemic, MBC has continued to provide treatment for perinatal women via telehealth services.
- Results show significant improvement in depressive symptoms, maternal functioning, parental stress, and difficulties in emotion regulation over the course of participation in MBC services from baseline to discharge.
- MBC continues to provide comprehensive and effective mental healthcare for perinatal women and their infants in the Philadelphia area.



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