

Treatment of Severe Postpartum Depression and Attachment Security In a Dyadically-Informed Perinatal Partial Hospitalization Program

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ABSTRACT

The Perinatal Partial Hospitalization Program (PHP) has revolutionized treatment of severe maternal mental illness by incorporating the infant into the therapeutic frame, providing an effective and time-limited model of care for treating individuals with Perinatal Mood and Anxiety Disorders (PMADs) within the family system - thereby lessening the impact of intergenerational transmission of relational trauma. The aim of this study was to assess the efficacy of the perinatal PHP in treating primary mood symptoms, adult attachment style, and mother-to-infant bonding. Between admission and discharge from the perinatal PHP, patients demonstrated significant improvement in primary depressive symptoms, maternal infant bonding and adult attachment security, as measured with the Edinburgh Postnatal Depression Scale (EPDS), Postpartum Bonding Questionnaire (PBQ) and the Adult Attachment Questionnaire (AAQ), respectively.

STUDY OBJECTIVE: To assess the efficacy of the perinatal PHP in treating primary depressive symptoms, maternal-infant bonding and adult attachment security.

BACKGROUND

Perinatal Mood and Anxiety Disorders are the most common pregnancy-related complication.

- Postpartum Depression (PPD) affects up to 20% of new and expecting mothers
- The rate of PPD has risen significantly during the COVID-19 pandemic

Maternal attachment security is central to perinatal mental illness.

- Maternal attachment insecurity is a significant risk factor for PPD
- Relational trauma is often reactivated in the role transition to motherhood
- Maternal mental illness can complicate bonding in the initial postpartum period
- PPD can lead to insecure attachment in the infant due to suboptimal caregiving experiences

Treatment for moderate-to-severe perinatal mental illness remains limited.

- Outpatient services may not account for high risk and high acuity patients
- Inpatient hospitalization usually necessitates separation of the mother and infant
- Attachment-based psychotherapies often require long-term invested care

Perinatal Partial Hospital Programs offer an alternate model of short-term treatment.

- Intensive 5-days per week therapeutic programming with average length of stay 4-10 weeks
- Medication management targets primary mood and anxiety symptoms
- Individual trauma-informed psychotherapy offers personalized support to process emotional responses in the role transition to motherhood
- Group therapy programming comprising interpersonal process, dyadic, coping skills, infant care education and expressive therapies
- Family therapy and partner support groups to address dynamics within the family system
- Mother-infant dyadic psychotherapy is available in both the individual and group settings

OUTPATIENT CARE

- Monthly medication management
- Weekly psychotherapy
- Group Support
- Optional family therapy

PERINATAL PARTIAL HOSPITALIZATION

- Rapid Medication Titration
- Daily Individual Psychotherapy
- Daily Dyadically-Informed Group Therapy
- Daily Coping Skills Group Therapy
- Daily expressive Therapies
- Weekly Family therapy
- Therapeutic Nursery Services

INPATIENT HOSPITALIZATION

- Rapid medication titration
- Individual supportive therapy
- Group psychotherapy
- Maximum safety for cases with concern for harm

METHODS

Participants included peripartum individuals referred and admitted to the Perinatal PHP at The Motherhood Center in New York.

- **70 individuals** were treated between January 2021 and January 2022
- 12 patients excluded due to incomplete admission or discharge measures

Treatment included medication management, individual and group-based psychotherapies and infant-care support as part of PHP programming.

- Treatment was delivered virtually due to the COVID-19 pandemic
- For this cohort, **the average length of stay was 54 days**

Measures were collected at admission and upon discharge.

- **Depressive symptoms were assessed using the EPDS**, a 10-item self-report measure validated for use in the perinatal population.
- **Mother-infant bonding was assessed with the PBQ**, a 15-item self-rating scale assessing feelings towards the child. Subscales included (1) Impaired bonding (2) Rejection and pathological anger (3) Infant-focused anxiety and (4) Incipient abuse. PBQs were not administered to pregnant patients.
- **Maternal attachment style was assessed with the AAQ**, a 17-item self-report questionnaire that measures two dimensions of adult attachment: avoidance and anxiety.
- Paired sample t-tests were used to compare measures obtained at intake to those obtained at discharge.

PATIENT DEMOGRAPHICS

Total	N=58 (%)
Age (mean age 34 years, SD 4.18)	
<20 years old	0 (0)
20-29 years old	10 (0.17)
30-39 years old	43 (0.74)
>40 years old	5 (0.09)
Reproductive Status	
Pregnant	4 (0.06)
Postpartum	54 (0.93)
Race/Ethnicity	
White	35 (0.60)
Hispanic	9 (0.16)
Asian	11 (0.19)
Black	2 (0.03)
Multiracial	1 (0.02)
Relationship Status	
Partnered	54 (0.93)
Single	4 (0.07)
Diagnosis	
Major Depressive Disorder (MDD)	48 (0.83)
Generalized Anxiety Disorder (GAD)	26 (0.43)
Obsessive-Compulsive Disorder (OCD)	12 (0.17)
Bipolar Spectrum Disorder	7 (0.08)
Post-Traumatic Stress Disorder (PTSD) and Trauma	6 (0.07)
Substance Use Disorder (SUD)	2 (0.03)

RESULTS

Depressive Symptoms

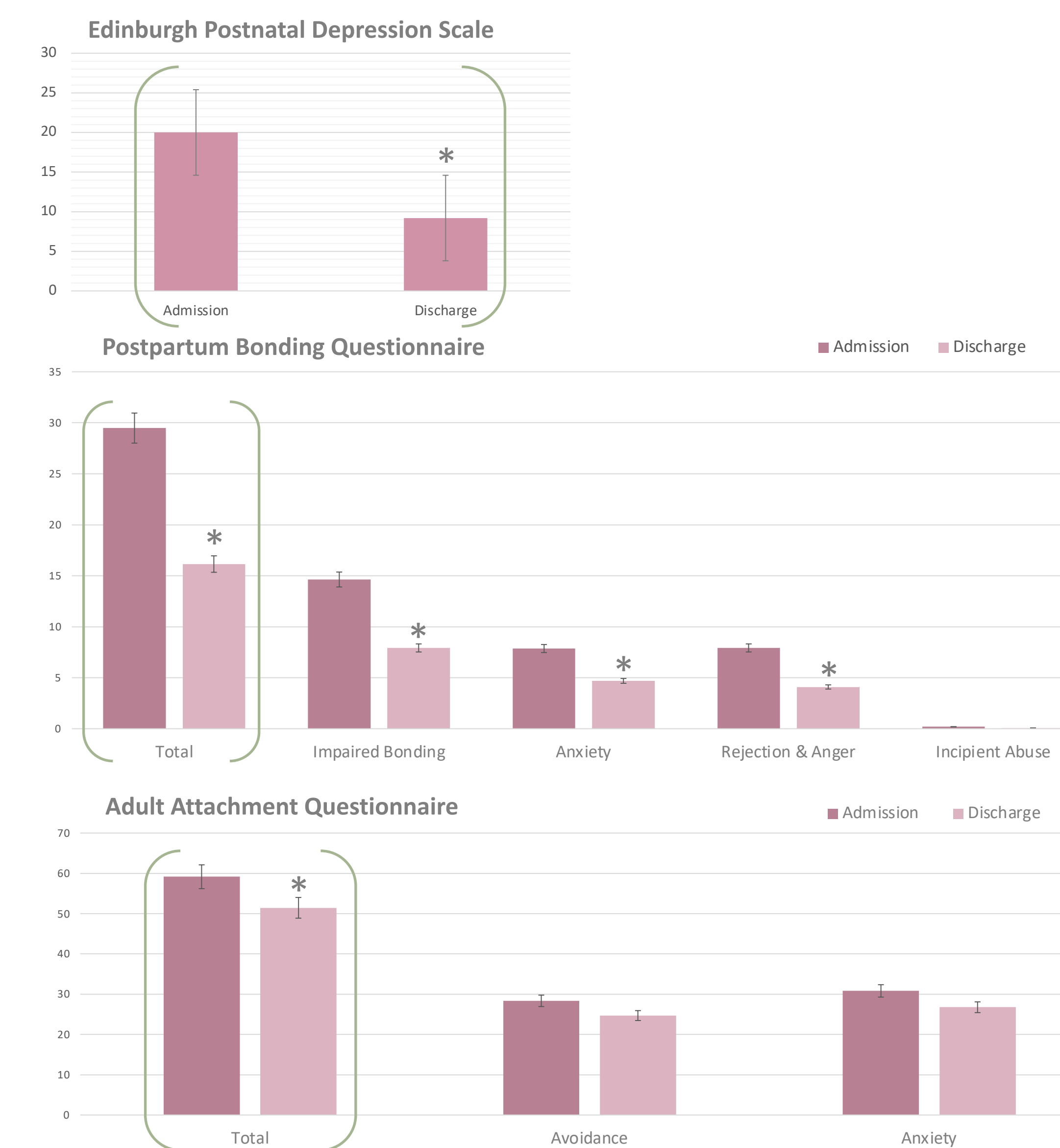
- Mean Admission EPDS: **20** (SD 4.197)
- Mean Discharge EPDS: **9.2** (SD 4.20)
- Significance: $t(58): 10.79 (p < .001)$

Infant Bonding

- Mean admission PBQ: **30.6** (SD 19.4)
- Mean Discharge PBQ: **16.8** (SD 10.8)
- Significance: $t(51) = 6.54 (p < .001)$
- Large Effect Size: **$d = 0.90$**
- Improvements in subscale scores (Impaired Bonding, Infant-Focused Anxiety, Rejection and Pathological Anger) were observed

Adult Attachment Security

- Mean Admission AAQ: **59.5** (SD 20.71)
- Mean Discharge AAQ: **51.4** (SD 18.10)
- Significance: $t(56): 4.21 (p < .001)$
- Moderate Effect Size: **$d = 0.56$**
- Improvements in subscale scores (avoidance and anxiety) were observed



CONCLUSIONS

Patients with PMADs demonstrated meaningful improvement over the course of perinatal PHP treatment.

- Acute depressive symptoms were significantly reduced
- Increased maternally-reported postnatal bonding with infant
- Moderate reductions in attachment insecurity

Greater improvement was observed with the PBQ as compared AAQ, which suggests that improvements in mother-infant bonding were more achievable in the context of a time-limited intervention than changes in mothers' adult attachment styles.

While the need for longitudinal treatment remains critical to recovery, this study provides evidence that a short-term intervention can facilitate bonding and offer meaningful improvements in attachment security.

LIMITATIONS: This study provides preliminary data. Further research is needed to better qualify the efficacy of perinatal PHP treatment. The lack of a distinct control group limits our ability to draw conclusions as to how the perinatal PHP compares to other treatment settings. Additionally, the use of self-report measures introduces inconsistencies among users such as bias and misinterpretation.

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