Online Peer-Delivered 1-Day Cognitive Behavioral Therapy–Based Workshops for Postpartum Depression: A Pilot Study

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Postpartum depression (PPD) affects up to 20% of mothers and birthing parents, yet only 1 in 10 receive evidence-based treatment.1 Barriers include time limitations, long waitlists, and concerns about stigma and judgment by health care providers.

Peer-administered interventions, those delivered by recovered former sufferers, can reduce stigma and convey valuable experiential knowledge, promote normalization, and provide role models for recovery for those with PPD.2 Group delivery of peer-administered interventions may also be capable of cost-effectively treating PPD.3

This study examined the feasibility of training individuals who have recovered from PPD to deliver an online 1-day cognitive behavioral therapy (CBT)-based workshop for PPD, assessed the acceptability of these workshops to those with current PPD, and estimated the intervention’s clinical effects.

Methods

This study utilized a single-arm pre-post design with no control group and was conducted from January–February 2021. Participants self-referred in response to social media advertisements and were eligible if they lived in Ontario, Canada; were ≥ 18 years old; had an infant < 12 months old; and scored ≥10 on the Edinburgh Postnatal Depression Scale (EPDS). No other exclusionary criteria were applied.

After completing pre-training readings; participating in a 2-day classroom program consisting of didactic teaching, skills practice, and role plays; and delivering a psychiatrist-supervised 7-hour mock workshop, peers were randomly assigned to deliver the workshops in pairs on Zoom (from 9:00 AM to 4:00 PM). Workshop modules reviewed PPD etiology, cognitive skills, behavioral skills, goal-setting, and action planning.4 Peers were recruited by word of mouth or via social media, were free of major depressive disorder for a minimum of 12 months, and scored below clinical cutoff on the Beck Depression Inventory-II5 (≤14). This measure was also completed post-workshop to ensure the peers’ mental health was not adversely affected.

The feasibility of training peers was defined by completion of the training program. The feasibility and acceptability of the intervention to participants were assessed by examining recruitment, retention, compliance, attendance rates, and participant satisfaction (Client Satisfaction Questionnaire6). After providing consent, participants reported sociodemographic characteristics and clinical data within 3 days of their workshop and 12 weeks post-workshop. Peers and participants had no contact post-workshop. This study was approved by Hamilton Integrated Research Ethics Board (13119).

Participants provided clinical data on the EPDS,7 7-item Generalized Anxiety Disorder Questionnaire,8 Social Provisions Scale,9 Postpartum Bonding Questionnaire,10 and Infant Behavior Questionnaire-Revised (Very-Short Form).11 We compared pre- to post-test differences using Wilcoxon rank sum tests and expressed effect sizes with Cohen d.

Results

All 4 peers completed training. They ranged from 29 to 60 years of age, had been free of PPD for 3–20 years, identified as white females, and held a range of occupations (eg, administrative assistant, early childhood educator, doula).

On average, mothers/birthing parents (n = 64) were 30.8 (SD = 5.0) years old, infants were 4.6 (2.9) months old, and most (n = 53) identified as white.

Forty-seven participants (73.4%) attended workshops and provided data, suggesting that the intervention and data collection procedures were feasible and acceptable. The mean satisfaction rating of the workshop was 24.48 (4.78), indicating adequate satisfaction.6
Participants reported large effect size reductions in depression and anxiety. Medium effect size improvements were seen in social support, mother-infant bonding, rejection and pathological anger, infant-focused anxiety, and infant surgency/positive affect (Table 1).

**Discussion**

Peer-delivered online 1-day CBT-based workshops for PPD, our peer training package, and data collection procedures were both feasible and acceptable. However, our sample was relatively small, was mainly white, faced little socioeconomic disadvantage, and lived in Canada where health care is universally available, and our study lacked a control group.

The results of this study support the conduct of a full-scale randomized controlled trial to determine if these workshops are a potentially cost-effective intervention that can be integrated into stepped care models with benefits for mothers, birthing parents, and offspring.

Table 1. Changes Before and 12 Weeks After Online Peer-Administered 1-Day CBT-Based Workshops for Postpartum Depression

<table>
<thead>
<tr>
<th>Instrument or variable</th>
<th>Pre-workshop score, mean (SD)</th>
<th>Post-workshop score, mean (SD)</th>
<th>Δ Mean (95% CI)</th>
<th>Effect size (Cohen d)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPDS</td>
<td>17.54 (4.10)</td>
<td>12.13 (5.19)</td>
<td>−5.41 (−3.63 to −7.19)</td>
<td>1.02*</td>
</tr>
<tr>
<td>GAD-7</td>
<td>13.51 (4.50)</td>
<td>7.94 (4.90)</td>
<td>−5.57 (−3.78 to −7.36)</td>
<td>1.10*</td>
</tr>
<tr>
<td>Parent Bonding Questionnaire</td>
<td>Impaired bonding</td>
<td>14.49 (8.15)</td>
<td>10.32 (6.70)</td>
<td>−4.17 (−1.33 to −7.01)</td>
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<tr>
<td></td>
<td>Rejection and pathological anger</td>
<td>7.89 (5.73)</td>
<td>5.40 (4.20)</td>
<td>−2.49 (−0.58 to −4.40)</td>
</tr>
<tr>
<td></td>
<td>Infant-focused anxiety</td>
<td>6.32 (3.35)</td>
<td>4.40 (2.71)</td>
<td>−1.92 (−0.76 to −3.08)</td>
</tr>
<tr>
<td>Infant Bonding Questionnaire-Revised</td>
<td>Positive affectivity/surgency</td>
<td>4.29 (1.17)</td>
<td>5.02 (0.77)</td>
<td>0.73 (1.11 to 0.35)</td>
</tr>
<tr>
<td></td>
<td>Negative emotionality</td>
<td>4.18 (1.13)</td>
<td>4.07 (1.07)</td>
<td>−0.11 (0.31 to −0.53)</td>
</tr>
<tr>
<td></td>
<td>Effortful control</td>
<td>5.23 (0.87)</td>
<td>5.20 (0.10)</td>
<td>−0.03 (0.21 to −0.27)</td>
</tr>
<tr>
<td>Social Provisions Scale</td>
<td>73.85 (9.10)</td>
<td>77.89 (10.01)</td>
<td>4.04 (7.68 to 0.40)</td>
<td>0.51*</td>
</tr>
</tbody>
</table>

*P < .05.

Abbreviations: CBT = cognitive behavioral therapy, EPDS = Edinburgh Postnatal Depression Scale, GAD-7 = Generalized Anxiety Disorder-7.

**Role of the sponsor:** The sponsor had no further role in study design; in the collection, analysis, and interpretation of data; in the writing of the report; and in the decision to submit the report for publication.

**REFERENCES**