**INTRODUCTION**

- Dissemination of evidence-based psychotherapies (EBPs) into routine practice requires clinicians working in these settings to be trained to deliver these treatments.
- Current “gold standard” of training in EBPs includes a workshop and expert supervision (Beidas & Kendall, 2010).
  - However, few clinicians have access to expert supervision and, when available, these services are both costly and time-intensive.
  - As a result, brief continuing education (CE) workshops remain a common method of training community clinicians in EBPs.
- Little research has examined the effectiveness of different workshop lengths in changing community clinicians’ practice.
- Posttraumatic stress disorder (PTSD) is a common and often disabling disorder among clients receiving Dialectical Behavior Therapy (DBT), an evidence-based treatment that is widely used in routine practice settings to treat high-risk and multi-problem clients.
- The DBT Prolonged Exposure (DBT PE) protocol was developed to be added to DBT to facilitate formal targeting of PTSD once higher-priority problems are sufficiently stabilized.

This observational study evaluated the extent to which a 2-day versus a 4-day workshop in the DBT PE protocol increased implementation and effectiveness outcomes among community clinicians, as well as which clinicians were most likely to change their practice following training.

**METHOD**

**Participants**
- Clinicians were recruited from among attendees at five CE workshops (two 2-day and three 4-day) conducted in 2015 in four U.S. states and the United Kingdom.
- Of the 409 attendees, 254 (62.1%) volunteered to participate in the present study.
- Participants were primarily female (82.7%), Caucasian (92.0%), cognitive-behavioral in orientation (79.6%), and working in outpatient community mental health centers (29.8%), private practice (27.7%), and psychiatric inpatient units (14.3%).

**Procedure**
- Both workshops covered the same general content; however, the 4-day workshop provided greater depth of content and more opportunities for active learning.
- Online surveys were administered at pre- and post-training, and 3 and 6 months after training.

**Outcome Measures**
- **Adoption**: Yes/No item, “Since the training, have you used the DBT PE protocol in your clinical practice?”
- **Reach**: Open-ended item, “With how many clients have you used [the DBT PE protocol]?”
- **Competence**: The 20-item Exposure Implementation Scale (Deacon, unpub) measured techniques used when implementing exposure therapy. Response options range from 0 (never use) to 4 (always use) and yielded 2 subscales: Optimal and Suboptimal use of exposure.
- **PTSD**: The Clinical Global Impressions – Improvement Scale (CGI-I; Guy, 1976) assessed the degree of improvement in clients’ PTSD as a result of DBT PE on a 7-point Likert scale (1 = very much improved; 7 = very much worse). Response was defined as a score of 1 or 2.
- **Safety**: Assessed whether clients got worse during DBT PE in 8 possible areas. Response choices were “No worsening occurred,” “Initially got worse, than improved,” and “Got worse and stayed worse.”

**Measures of Predictors of Implementation Outcomes**
- **Demographics**: Work setting, # of clients treated with BPD, PTSD, and BPD + PTSD.
- **Credibility**: The 7-item Credibility and Expectancy Scale (Devilly & Borkovec, 2000) assessed perceived credibility of DBT PE.
- **Attitudes**: 14 items assessing beliefs that client problems might be worsened during or after a course of exposure therapy for PTSD rated from 1 (very likely) to 4 (very unlikely).
- **Self-efficacy**: 4 items assessed clinicians’ degree of comfort using imaginal and in vivo exposure for PTSD from 1 (not at all) to 4 (very).
- **Anxiety Sensitivity**: The 16-item Anxiety Sensitivity Index (Reiss et al., 1986) assessed clinicians’ fear of anxiety-related sensations from 0 (very little) to 5 (very much).

**RESULTS**

**Implementation Outcomes at 6 Months Post-Training**

<table>
<thead>
<tr>
<th></th>
<th>2-Day Workshop (n = 85)</th>
<th>4-Day Workshop (n = 98)</th>
<th>Total (n = 183)</th>
<th>Between-Group Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adoption, (n, %)</td>
<td>33 (38.8%)</td>
<td>65 (66.3%)</td>
<td>98 (53.5%)</td>
<td>$\chi^2 (1) = 13.8, p &lt; .001$</td>
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<tr>
<td>Reach, (M ± SD)</td>
<td>0.7 ± 1.3</td>
<td>1.9 ± 2.3</td>
<td>1.3 ± 1.9</td>
<td>t (180) = 4.1, p &lt; .001</td>
</tr>
<tr>
<td>Optimal use (M ± SD)</td>
<td>4.3 ± 0.5</td>
<td>4.3 ± 0.6</td>
<td>4.3 ± 0.6</td>
<td>t (93) = 0.1, p = .89</td>
</tr>
<tr>
<td>Suboptimal use (M ± SD)</td>
<td>3.1 ± 0.7</td>
<td>2.6 ± 0.9</td>
<td>2.8 ± 0.8</td>
<td>t (93) = 2.6, p = .01</td>
</tr>
</tbody>
</table>

**Effectiveness Outcomes at 6 Months Post-Training**

- **Adoption**: While findings from this observational study are promising, limitations include: (1) lack of randomization, (2) a short follow-up period, (3) use of clinician report, (4) lack of descriptive data about clients treated.
- **Implementation Outcomes**: Clinicians reported greater self-efficacy at post-training had higher rates of adoption, reach, and optimal use of exposure irrespective of training condition.

**DISCUSSION**

- This study evaluated the extent to which a 2-day versus a 4-day workshop in the DBT PE protocol for PTSD increased effectiveness and implementation outcomes among community clinicians.

**Implementation Outcomes**
- Brief workshops of varying lengths that emphasize active learning methods can be an effective method of increasing adoption, reach, and competence in EBPs.
  - In the 6 months after training, 53.3% of clinicians adopted DBT PE and treated 241 clients.
  - Clinicians reported “often” to “always” using optimal exposure procedures and “rarely” to “moderately” using suboptimal exposure procedures.
- After adjusting for baseline differences, greater self-efficacy with the EBP methods at the end of training was the strongest predictor of adoption, reach, and optimal use of the EBP.
- Longer workshops appear to be more effective in reducing ineffective delivery of EBPs after training.

**Effectiveness Outcomes**
- Clinicians reported that DBT PE was effective in changing their clients’ PTSD with improvement and response rates of 81.3% and 66.7%, respectively.
- **During DBT PE**: Few clients attempted suicide (4.5%) or engaged in non-suicidal self-injury (20.3%).
- Moderate rates of initial worsening followed by improvement were reported for emotion dysregulation, dissociation, depression, and suicidal ideation.
- Sustained worsening was rare for all co-occurring problems.

**Limitations and Future Directions**
- While findings from this observational study are promising, limitations include: (1) lack of randomization, (2) a short follow-up period, (3) use of clinician report, (4) lack of descriptive data about clients treated.
- Future research would also benefit from including observational methods to evaluate clinician behavior after training as well as assessing whether the addition of ongoing support improves outcomes compared to workshops alone.