The Impact of PTSD Severity on Treatment Outcomes in DBT with and without the DBT Prolonged Exposure Protocol

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ABCT 50th Annual Convention | New York, NY | October 2016

Disclosures

• This project was funded by a grant from NIMH (R34MH082143) to the first author.
• Dr. Harned is a trainer and consultant for Behavioral Tech, LLC.

The Impact of PTSD in BPD

• 30-50% of individuals with BPD also have PTSD (e.g., Harned et al., 2010; Pagura et al., 2010; Zanarini et al., 2004)
• PTSD is associated with greater impairment:
  – Suicidal and self-injurious behavior
  – Depression
  – Anxiety
  – Poorer physical health
  – Poorer global functioning (e.g., Harned et al., 2010; Zlotnick et al., 2003; Bolton et al., 2006; Rusch et al., 2007)
The Impact of PTSD in DBT for BPD

- Baseline PTSD diagnosis:
  - Mixed results as a predictor of improvements in suicidal and self-injurious behavior; unrelated to improvements in BPD severity (Barnicot & Priebe, 2013; Boritz, Barnhart, & McMain, 2016; Harned et al., 2010)

- Baseline PTSD severity:
  - Predicts lower likelihood of eliminating acute suicide risk and suicidal and self-injurious behavior (Harned et al., 2010)

- No research has evaluated the longitudinal course of PTSD as a time-varying predictor of outcomes in DBT.

Study Aims

- Evaluate the time-varying impact of PTSD severity on outcomes during DBT with and without targeted PTSD treatment.
  - H1: Higher average PTSD severity will predict worse outcomes at subsequent time points.
  - H2: Greater within-person improvements in PTSD severity will predict better outcomes at subsequent time points.

*Both of the above will be true irrespective of treatment condition.

Secondary Analysis

- RCT of DBT (n=9) vs. DBT + DBT PE (n=17)
- Inclusion criteria:
  - Adult females, BPD, PTSD, recent/recurrent suicide attempt and/or serious NSSI
- Exclusion criteria:
  - Bipolar or psychotic disorders, IQ<70, mandated to treatment

(Harned, Korslund, & Linehan, 2014)
Sample Characteristics (n=26)

• Mean age = 32.6 yrs, 80.8% Caucasian
• Past year self-injurious behavior:
  – 57.7% attempted suicide (M=2.4 attempts)
  – 96.2% engaged in NSSI (M=63.3 episodes)
• Trauma history:
  – M=11.4 types of lifetime trauma, onset at 6.2 yrs
  – Primary index trauma = CSA (50%)
• Current Axis I and II diagnoses: M = 7.0
• Global Assessment of Functioning: M = 43.0

Measures

• Time-Lagged Predictor
  – PTSD Symptom Scale – Interview (Foa et al., 1993)
• Outcomes
  – Suicide Attempt Self-Injury Interview (Linehan et al., 2006)
  – Suicidal Behaviors Questionnaire (Linehan, unpublished)
  – Dissociative Experiences Scale (Carlson & Putnam, 1993)
  – Hamilton Rating Scale for Depression (Hamilton, 1960)
  – Brief Symptom Inventory - Global Severity Index (Derogatis, 1993)
  – Global Social Adjustment (Keller et al., 1987)
  – CDC Health-Related Quality of Life (Moriarty, Zack, & Kobau, 2003)

Analytic Approach

• Time-lagged HLM and GEE models
Model Effects

- **Time**
- **Time-lagged predictors** (Enders & Tofigi, 2007)
  - Between-person variance in average PTSD severity
    - PTSD severity grand mean centered
  - Between-person variance in average PTSD severity X Time
    - Differential rate of change over time by average PTSD severity
  - Within-person change in PTSD severity
    - PTSD severity centered at the individual level

*Treatment condition did not significantly interact with time-lagged predictors so was not included in the final models.*

Results

<table>
<thead>
<tr>
<th></th>
<th>Between-Person Factors</th>
<th>Within-Person Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Time</td>
<td>Average PTSD severity X Time</td>
</tr>
<tr>
<td>Suicide attempts &amp; NSSI</td>
<td>&lt; .001</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Suicidal ideation</td>
<td>.02</td>
<td>.04</td>
</tr>
<tr>
<td>Dissociation</td>
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<td>.001</td>
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<tr>
<td>Depression</td>
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<td>Global severity</td>
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<tr>
<td>Social adjustment</td>
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<td>.08</td>
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<tr>
<td>Health-related quality of life</td>
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<td>.02</td>
</tr>
</tbody>
</table>

*Data are p-values

Summary of Findings

- Clients with more severe PTSD had poorer outcomes at subsequent time points.
  - **Exception: social adjustment**
- Clients with more severe PTSD had a slower rate of change in suicide attempts and NSSI.
- Clients with greater improvements in PTSD reported better outcomes at subsequent time points.
  - **Exception: suicide attempts and NSSI**
Conclusions

• Clients with more severe PTSD are likely to be more impaired in a variety of areas during treatment.
• When PTSD severity is reduced, it is associated with subsequent improvements in multiple outcome domains.

THEREFORE

It is critical to treat PTSD during DBT.