Cognitive Behavioral Therapy for PTSD

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Diagnosis of PTSD
Definition of a Trauma

The person has been exposed to a traumatic event in which:

1) The person has experienced, witnessed, or been confronted with an event that involves actual or threatened death or injury, or a threat to the physical integrity of oneself or others.

2) The person’s response involved intense fear, helplessness, or horror.
A. Re-experiencing

- Distressing recollections of the trauma
- Distressing dreams of the event
- Reliving the experience (flashbacks)
- Psychological distress at exposure to trauma reminders (internal or external)
- Physiological reactivity to trauma reminders
B. Persistent Avoidance

- Efforts to avoid trauma-related thoughts or feelings
- Efforts to avoid trauma-related activities or situations
- Psychogenic amnesia
- Diminished interest in activities
- Detachment from others
- Restricted Range of affect
- Foreshortened future
C. Increased Arousal

• Sleep disturbances
• Irritability or outburst of anger
• Difficulty concentrating
• Hypervigilance
• Exaggerated startle response
E. Duration of the disturbance is more than 1 month.

F. The disturbance causes significant distress or impairment in important areas of functioning.
Diagnostic Criteria for PTSD (con’t)

Specify if:

**Acute:** if duration of symptoms is less than 3 months

**Chronic:** if duration of symptoms is 3 months or more

**Delayed**

**Onset:** if onset of symptoms is at least 6 months after the stressor
Prevalence PTSD and Related Impairment
Rate of PTSD is Influenced by the Nature of the Trauma

Kessler 1995
Current Rates of PTSD among Traumatized Individuals

- 15.2% of 500,000 Vietnam male theater veterans
- 17.8% of 9.9 million female physical assault victims
- 13% of 13.8 million female sexual assault victims
- 3.4% of female victims of non-crime trauma
### Increased Morbidity With PTSD

<table>
<thead>
<tr>
<th></th>
<th>PTSD</th>
<th>Non PTSD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Psychiatric</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GAD</td>
<td>53</td>
<td>9</td>
</tr>
<tr>
<td>Major depression</td>
<td>30</td>
<td>4</td>
</tr>
<tr>
<td>Somatization</td>
<td>12</td>
<td>0</td>
</tr>
<tr>
<td>Drug abuse/dependence</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td><strong>Medical</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bronchial asthma</td>
<td>13</td>
<td>5</td>
</tr>
<tr>
<td>Peptic ulcer</td>
<td>13</td>
<td>4</td>
</tr>
<tr>
<td>Hypertension</td>
<td>31</td>
<td>18</td>
</tr>
</tbody>
</table>

Davidson 1991
Impaired Quality of Life with PTSD

SF-36 = 36-item short form health survey; lower score = more impairment.

Malik et al., 1999
Summary of Reactions to Trauma

- The majority of trauma victims recover with time.
- PTSD represents a failure of natural recovery.
- After one year, PTSD does not remit without treatment.
- PTSD is highly distressing and debilitating disorder.
Empirical Evidence for Prolonged Exposure
CBT Treatments for Chronic PTSD

- Promote **safe** confrontations (via exposure, discussions) with trauma reminders (memories, situations)
- Aim at modifying the dysfunctional cognitions underlying PTSD
Cognitive-Behavioral Treatment Can Be Divided Into:

- Exposure Procedures
- Anxiety Management Procedures
- Cognitive therapy
Exposure Therapy

A set of techniques designed to help patients confront their feared objects, situations, memories, and images (e.g., systematic desensitization, flooding).
Anxiety Management Treatment

- Relaxation Training
- Controlled Breathing
- Positive Self-talk and Imagery
- Social Skills Training
- Distraction Techniques (e.g., thought stopping)
Cognitive Therapy

- Identifying dysfunctional, erroneous thoughts and beliefs (cognitions)
- Challenging these cognitions
- Replacing these cognitions with functional, realistic cognitions
Prolonged Exposure Therapy (PE) for PTSD

- **Breathing retraining**: 10 minutes in session 1
- **Education** about common reactions to trauma (25 minutes in session 2)
- **Imaginal exposure** (reliving) to the trauma memory (30-45 minutes during sessions 3-12)
- **In vivo exposure** to trauma reminders in life between sessions
- 9-12 weekly or twice weekly 90-minute sessions
Study I With Women Assault Victims

Treatments:

- Prolonged Exposure (PE)
- Stress Inoculation Training (SIT)
- SIT + PE
- Wait List Controls

Treatments included 9 sessions conducted over 5 weeks

Foa et al., 1999
Foa et al., 1999
Post-Rx Effect Sizes* of PE vs SIT vs PE/SIT: PTSD

*Effect size compared to wait-list group at post-treatment

Foa et al., 1999
Study II With Women Assault Victims

Treatments:

• Exposure (PE) alone
• PE + Cognitive Restructuring (PE/CR)
• Wait List (WL)

Treatment includes 9 weekly sessions, extended to 12 for partial responders (< 70% improvement)

Foa et al., 2006
Percent of Patients With PTSD Diagnosis

Foa et al., 2006
Within Group Effect Sizes

Foa et al., in preparation
Rate of Improvement in Completers of 9 vs. 12 Sessions
Study with Men and Women Victims of Mixed Traumas

Treatments:

- Exposure (PE)
- Cognitive Restructuring (CR)
- PE + CR
- Relaxation Training

Treatment consisted of 10 sessions conducted over 16 weeks

Marks et al., 1998
Good End State Functioning Post Treatment*

* > 50% improved on PTSD; <7 BDI; <35 STAI-S
Safety and Acceptability of Prolonged Exposure
Exacerbation of Symptoms

- Minority of clients in treatment show a reliable exacerbation of symptoms
  - 10.5% in PTSD symptoms
  - 21.1% in Anxiety symptoms
  - 9.2% in Depressive symptoms

- Exacerbation of symptoms was not associated with:
  - treatment drop out
  - poorer treatment outcome

PTSD Severity and Exacerbation

PTSD Severity

No Exacerbation
Exacerbation

Pre-Tx | Week 2 | Week 4 | Week 6 | Week 8 | Post-Tx

0 5 10 15 20 25 30 35

PTSD Severity

Week
## Improvement and Worsening after Cognitive Behavioral Treatments

<table>
<thead>
<tr>
<th></th>
<th>PE</th>
<th>PE+SIT/CR</th>
<th>SIT</th>
<th>WL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>n</strong></td>
<td>125</td>
<td>66</td>
<td>19</td>
<td>99</td>
</tr>
<tr>
<td>Improve on PTSD</td>
<td>93%</td>
<td>86%</td>
<td>84%</td>
<td>36%</td>
</tr>
<tr>
<td>Worsening on PTSD</td>
<td>3%</td>
<td>2%</td>
<td>0</td>
<td>29%</td>
</tr>
<tr>
<td>Worsening on Depression</td>
<td>4%</td>
<td>5%</td>
<td>0</td>
<td>26%</td>
</tr>
</tbody>
</table>

Worsening = Increase in symptoms by => 1 point
Improve = Decrease in symptoms by => Standard Error of the Difference (based on SD and test-retest reliability; 7.5 points in the PSSI, 11.4 points on the CAPS)
<table>
<thead>
<tr>
<th>Treatment (25 studies)</th>
<th>Total n</th>
<th>% Dropout</th>
</tr>
</thead>
<tbody>
<tr>
<td>EX Alone</td>
<td>330</td>
<td>20.6%</td>
</tr>
<tr>
<td>SIT or CT Alone</td>
<td>222</td>
<td>22.1%</td>
</tr>
<tr>
<td>EX plus CT or SIT</td>
<td>335</td>
<td>26.0%</td>
</tr>
<tr>
<td>EMDR</td>
<td>143</td>
<td>18.9%</td>
</tr>
<tr>
<td>Controls (Active and WL)</td>
<td>543</td>
<td>11.4%</td>
</tr>
</tbody>
</table>

No difference among active treatments:

\[ \chi^2 (3, N=1030) = 1.73, p = 0.631 \]

Hembree et al., 2003
PTSD Symptom Reduction in Patients with AD PTSD

- Total
- Reexp
- Avoid
- Arousal

Legend:
- Pre No PE
- Post - No PE
- Pre - PE
- Post - PE
Percent Days Drinking in Patients With AD and PTSD

Percent

No PE  PE

Pre No PE  Post - No PE  Pre - PE  Post - PE
Alcohol Cravings in Patients With

PACS

No PE

PE

Pre No PE

Post - No PE

Pre - PE

Post - PE
Indications and Counterindications for Exposure Treatment

**Indications**

- Pervasive trauma-related anxiety and avoidance
- Anxiety about the PTSD symptoms themselves
- Fear of loss of control or “going crazy”

**Counterindications**

- Psychosis, severe dissociative symptoms,
- PTSD symptoms related to realistic guilt and shame (e.g., murdering or raping during war)
Conclusions

Several CBT programs are highly effective for PTSD:

- Stress inoculation training
- Cognitive therapy (more studies are needed)
- PE has received the widest empirical evidence
- Clinicians who are not experts in cognitive behavior therapy can successfully learn PE in short period of time