Treating the Effects of Psychological Trauma: Evidence-Based Treatments for Posttraumatic Stress Disorder

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Boston University School of Medicine

Presented as part of the Oklahoma Psychological Association Convention,
November 14, 2014
My Perspective

• Researcher
  • Sex/gender differences in trauma exposure and subsequent adjustment
  • Military sexual trauma
  • Effects of combat exposure on women veterans

• Clinician in a VA Setting
  • Working with a complex and multiply-traumatized patient population

• Educator
Disclaimer

• My opinions are my own and do not reflect the position of the Department of Veterans Affairs or the U.S. Government.

• I have no commercial relationships to disclose.
Psychological Trauma
Psychological Trauma

• We used to refer to traumatic experience as an “event outside the range of usual human experience”.

• Sadly, we now know these life-altering experiences are a common part of the human experience.

We used to refer to traumatic experience as an “event outside the range of usual human experience.” Sadly, we now know these life-altering experiences are a common part of the human experience.

### Lifetime Prevalence of Trauma Exposure in the General Population

<table>
<thead>
<tr>
<th>Event</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Any Traumatic Event</strong></td>
<td>60.7%</td>
<td>50.2%</td>
</tr>
<tr>
<td>Accident</td>
<td>25.0%</td>
<td>13.8%</td>
</tr>
<tr>
<td>Natural Disaster</td>
<td>18.9%</td>
<td>15.2%</td>
</tr>
<tr>
<td>Physical Attack</td>
<td>11.1%</td>
<td>6.9%</td>
</tr>
<tr>
<td>Child Physical Abuse</td>
<td>3.2%</td>
<td>4.8%</td>
</tr>
<tr>
<td>Rape</td>
<td>0.7%</td>
<td>9.2%</td>
</tr>
</tbody>
</table>

Posttraumatic Stress Disorder (PTSD)
PTSD

- Exposure to traumatic events is associated with a wide range of later mental health and physical health conditions.
- PTSD is the psychological condition most closely associated with traumatic stress exposure.
- Exposure to a traumatic event is a specific diagnostic criterion and the signature feature of PTSD.
PTSD Diagnostic Criteria

DIAGNOSTIC AND STATISTICAL MANUAL OF MENTAL DISORDERS
FIFTH EDITION

DSM-5

AMERICAN PSYCHIATRIC ASSOCIATION
PTSD Diagnostic Criteria

A. Exposure to actual or threatened death, serious injury, or sexual violence

Important changes:
- Explicit mention of sexual violence
- Removed criteria requiring an emotional reaction of fear, helplessness or horror
- Clarified that exposure must be direct, and not through electronic media

PTSD Diagnostic Criteria

B. At least 1 recurrent Intrusion Symptom

- distressing memories
- distressing dreams
- dissociative flashbacks
- psychological distress to reminders of the trauma
- physiological reactions to reminders of the trauma

Important changes:
- Minor wording revisions to clarify symptom expression

PTSD Diagnostic Criteria

C. At least 1 symptom of **Persistent Avoidance**

- avoidance of internal reminders (e.g., memories, thoughts or feelings)
- avoidance of external reminders (e.g., people, places or situations)

**Important changes:**

- Avoidance symptoms now comprise their own symptom cluster

PTSD Diagnostic Criteria

D. At least 2 symptoms of **Negative Alterations in Cognition and Mood**

- inability to remember parts of trauma
- negative beliefs and expectations about oneself, others or the world
- persistent distorted cognitions about the cause or consequences of the traumatic event
- persistent negative emotional state
- diminished interest in activities
- feelings of detachment and estrangement
- inability to experience positive emotions

PTSD Diagnostic Criteria

D. At least 2 symptoms of **Negative Alterations in Cognition and Mood**

Important changes:
- New category of symptoms
- New symptoms have an increased focus on the meaning of the traumatic event to the individual
E. At least 2 **Alterations in Arousal and Reactivity**

- irritable or angry behavior
- reckless or self-destructive behavior
- hypervigilance
- exaggerated startle response
- concentration problems
- sleep disturbance

PTSD Diagnostic Criteria

E. At least 2 Alterations in Arousal and Reactivity

Important changes:
- Reckless or self-destructive behavior is a new symptom, with relevance to several populations

Epidemiology of PTSD

• Despite these changes to the diagnostic criteria, the prevalence of PTSD appears to be quite similar across DSM-IV and DSM-5.
Prevalence of PTSD

• Lifetime prevalence of PTSD in the general population:
  • 5.0% men and 10.4% women\(^1\)
  • 4.0% men and 11.7% women\(^2\)

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Which best describes PTSD?

- A natural reaction to an unnatural situation
- A failure to recover from traumatic stress exposure
Course of PTSD Recovery

Proportion of sample meeting PTSD diagnostic criteria for 3 months following assault (N = 84)¹

Individual Vulnerability Factors

- Severity of trauma exposure
- Younger age at time of trauma exposure
- Prior trauma, especially in childhood
- Gender
- Prior psychiatric history
- Family psychiatric history (genetic factors)
- Lack of education
- Lack of social support

Evidence-Based Assessment of PTSD
PTSD: National Center for PTSD

PROFESSIONAL This section is for Researchers, Providers & Helpers

This section contains training materials as well as information and tools to help you with assessment and treatment. These materials are based on the latest research, much of which is conducted by National Center staff.

Spotlight Continuing Ed Publications

Take part in one of many free in-depth trainings covering PTSD assessment and effective treatment in the Continuing Education section. Find what you need by filtering courses by topic.
Screening: PC-PTSD-5

Sometimes things happen to people that are unusually or especially frightening, horrible, or traumatic—for example, a serious accident or fire, physical or sexual assault or abuse, earthquake or flood, war, seeing someone be killed or seriously injured, or having a loved one die through homicide or suicide. Have you ever experienced this kind of event?

In the past month, have you…
1. had nightmares about the event(s) or thought about the event(s) when you did not want to?
2. tried hard not to think about the event(s) or went out of your way to avoid situations that reminded you of the event(s)?
3. been constantly on guard, watchful, or easily startled?
4. felt numb or detached from people, activities, or your surroundings?
5. felt guilty or unable to stop blaming yourself or others for the event(s) or any problems the event(s) may have caused?
# Self Report: PCL-5

**In the past month, how much were you bothered by:**

<table>
<thead>
<tr>
<th>Question</th>
<th>Not at all</th>
<th>A little bit</th>
<th>Moderately</th>
<th>Quite a bit</th>
<th>Extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Repeated, disturbing, and unwanted memories of the stressful experience?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2. Repeated, disturbing dreams of the stressful experience?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3. Suddenly feeling or acting as if the stressful experience were actually happening again (as if you were actually back there reliving it)?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4. Feeling very upset when something reminded you of the stressful experience?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5. Having strong physical reactions when something reminded you of the stressful experience (for example, heart pounding, trouble breathing, sweating)?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>6. Avoiding memories, thoughts, or feelings related to the stressful experience?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>7. Avoiding external reminders of the stressful experience (for example, people, places, conversations, activities, objects, or situations)?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>8. Trouble remembering important parts of the stressful experience?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>9. Having strong negative beliefs about yourself, other people, or the world (for example, having thoughts such as: I am bad, there is something seriously wrong with me, no one can be trusted, the world is completely dangerous)?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>10. Blaming yourself or someone else for the stressful experience or what happened after it?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>11. Having strong negative feelings such as fear, horror, anger, guilt, or shame?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

*Continue on next page*
Structured Interview – CAPS-5

National Center for PTSD

CLINICIAN-ADMINISTERED PTSD SCALE FOR DSM-5
PAST MONTH VERSION

Name: ___________________________    ID#: ___________________________
Interviewer: ______________________    Date: ________________________
Study: ____________________________

Frank W. Weathers, Dudley D. Blake, Paula P. Schnurr,
Danny G. Kaloupek, Brian P. Marx, & Terence M. Keanie

National Center for Posttraumatic Stress Disorder
October 28, 2013
Structured Interview – CAPS-5

Criterion B: Presence of one (or more) of the following intrusion symptoms associated with the traumatic event(s), beginning after the traumatic event(s) occurred:

1. (B1) Recurrent, involuntary, and intrusive distressing memories of the traumatic event(s). Note: In children older than 6 years, repetitive play may occur in which themes or aspects of the traumatic event(s) are expressed.

   In the past month, have you had any unwanted memories of (EVENT) while you were awake, not counting dreams? [Rate 0 = Absent if only during dreams]

   How does it happen that you start remembering (EVENT)?

   [If not clear] (Are these unwanted memories, or are you thinking about (EVENT) on purpose?) [Rate 0 = Absent unless perceived as involuntary and intrusive]

   How much do these memories bother you?

   Are you able to put them out of your mind and think about something else?

   Circle: Distress = Minimal Clearly Present Pronounced Extreme

   How often have you had these memories in the past month? # of times ______

   Key rating dimensions = frequency/intensity of distress
   Moderate = at least 2 x month / distress clearly present, some difficulty dismissing memories
   Severe = at least 2 x week / pronounced distress, considerable difficulty dismissing memories

2. (B2) Recurrent distressing dreams in which the content and/or affect of the dream are related to the event(s). Note: In children, there may be frightening dreams without recognizable content.

   In the past month, have you had any unpleasant dreams about (EVENT)?

   Describe a typical dream. (What happens?)

   [If not clear] (Do they wake you up?)

   [If yes] (What do you experience when you wake up? How long does it take you to get back to sleep?)

   [If reports not returning to sleep] (How much sleep do you lose?)

   How much do these dreams bother you?

   Circle: Distress = Minimal Clearly Present Pronounced Extreme

   How often have you had these dreams in the past month? # of times ______

   Key rating dimensions = frequency/intensity of distress
   Moderate = at least 2 x month / distress clearly present, less than 1 hour sleep loss
   Severe = at least 2 x week / pronounced distress, more than 1 hour sleep loss

CAPS, Page 6
Evidence-based Treatment of PTSD
Evidence-Based Psychotherapy for PTSD

“Evidence-based medicine is the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients.”

Sackett et al. (1996) ¹

“Evidence-based practice in psychology is the integration of the best available research with clinical expertise in the context of patient characteristics, culture, and preferences.”

American Psychological Association 2005 Policy Statement ²

“Common Factors” as EBP

- Research has demonstrated the importance of non-specific factors common to all forms of therapy
  - Forming a therapeutic alliance
  - Demonstrating cultural competence
  - Promoting engagement in treatment
  - Using systematic case formulation
  - Monitoring patient progress; adjusting practices accordingly

- Effectively attending to these common factors constitutes evidence-based practice
“Gold Standard” Evidence

• In implementing EBP, it’s important to consider the strengths and limitations of evidence obtained from different types of research

• Studies using “gold standard” guidelines provide particularly strong evidence of efficaciousness
  • Random assignment of patient to treatment condition (randomized controlled trial or RCT)
  • Clearly defined target symptoms
  • Evaluators are blind to treatment condition
  • Evaluators are well-trained
  • Reliable and valid measures are used
  • Treatment adherence is measured
  • Treatment is manualized and replicable
Empirically-Supported Treatments

- Therapies tested with randomized controlled trials (RCTs) and found to be effective are referred to as Empirically-Supported Treatments (ESTs).

- Examples of widely-used ESTs for PTSD:
  - Cognitive Processing Therapy (CPT)
  - Prolonged Exposure (PE)

- These therapies are manualized, meaning they come with extensive therapist directions.

- Short-term cognitive-behavioral therapies, 10 – 14 sessions.
Common Components

- Habituation to trauma memories
- Habituation to feared, but objectively safe situations
- Building a coherent trauma narrative
- Challenging beliefs that were formed or strengthened by the traumatic experience
The Impact of Treatment on PTSD Symptoms Among Sexual Assault Survivors

The Impact of Treatment on PTSD Symptoms Among Sexual Assault Survivors

2009 ISTSS Treatment Guidelines
### Table I-4 Psychotherapy Interventions for Treatment of PTSD

<table>
<thead>
<tr>
<th>SR</th>
<th>Balance of Benefit and Harm</th>
<th>A</th>
<th>Trauma-focused psychotherapy that includes components of exposure and/or cognitive restructuring; or, Stress inoculation training</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR</td>
<td>Significant Benefit</td>
<td></td>
<td>Patient Education Imagery Rehearsal Therapy Psychodynamic Therapy Hypnosis Relaxation Techniques Group Therapy</td>
</tr>
<tr>
<td></td>
<td>Some Benefit</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Unknown Benefit</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>None</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SR = Strength of Recommendation (see Appendix A)
Evidence-Based Treatment Recommendations

• Cognitive-behavioral treatments that include components of exposure and cognitive restructuring should be a first line treatment for PTSD

• Skills training in affect and interpersonal training prior to beginning trauma-focused work (e.g. STAIR) may be helpful for some individuals, but no evidence suggests that it is necessary to do this routinely

• The bulk of evidence supports delivery of these therapies in an individual format. Less work has examined the efficacy of group therapy modalities
Evidence-Based Treatment Recommendations

• Relaxation, biofeedback, and complimentary and alternative medicine approaches are not front line treatments, but may be useful ancillary treatments for some individuals

• Similarly acceptance-based approaches (e.g., ACT, DBT) do not have a sufficient evidence-base to suggest they should be front line treatments, but these approaches may be useful ancillary treatments for some individuals
Dissemination of Evidence-Based Therapies within the Veterans Health Administration
Dissemination Efforts

• A key component of a broader focus to transform the VA mental health care system to an evidence-based and recovery-oriented system of care

• Requires systemic changes at multiple levels
  • Policy level
  • Provider level
  • Clinical infrastructure
  • Patient expectations
VHA’s Policy Mandate

- **Evidence-based Psychotherapy for PTSD.** All veterans with PTSD must have access to Cognitive Processing Therapy (CPT) or Prolonged Exposure (PE) Therapy. Medical Centers and very large CBOCs must provide adequate staff capacity to allow the delivery of evidence-based psychotherapy to their patients. Large and mid-sized CBOCs may provide these services through telemental health when necessary.

Uniform Services Handbook, 2008
Veterans Health Administration (VHA) Handbook
Intensive Training

- Competency based training model
  - In person, multi-day experiential training
  - Telephone-based, 6 month clinical consultation on actual therapy cases
  - Review and rating of therapy sessions for eventual certification
- VA has provided training it at least one evidence-based therapy to over 6,400 mental health providers
All of these efforts are worth it!

• While there is still much more work to be done, this is a rare successful effort to bridge the evidence-to-practice gap in a large, public healthcare system.

• Evaluation efforts in these real-world settings demonstrate positive changes in patient symptoms similar to those observed in randomized clinical trials.
There are also great (free) training resources in these empirically-supported therapies for those located outside of VA settings.
Many Questions Still To Be Answered
Emerging Areas in PTSD Treatment Research

- Treatment matching
- Treatment efficiency
- New modalities of delivery
  - Telemedicine
  - Self-directed web-based therapy
- Next steps for treatment nonresponders
- Efficacy of group therapy
Reducing PTSD symptoms is not the end goal...

- Individuals with reductions in PTSD symptoms are also likely to experience...
  - Reductions in comorbid conditions like depression and substance abuse
  - Improvements in physical health
  - Reductions in risk for retraumatization
  - Improved social relationships
  - Improved quality of life
The strongest oak of the forest is not the one that is protected from the storm and hidden from the sun. It's the one that stands in the open where it is compelled to struggle for its existence against the winds and rains and the scorching sun.

-Napoleon Hill, author (1883-1970)
Thank you!
Questions?

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