Prolonged Exposure Therapy for Post-Traumatic Stress Disorder (PTSD)
Get all the information you need online for:

- Live seminars
- Continuing education credit
- Audio products
- Faculty

Once you have found the information you need, you can:

- Register for any of our upcoming seminars
- Order audio products or online continuing education courses
- Request information on future offerings be emailed to you
- Request information on in-house training

CrossCountryEducation.com

Your source for professional development resources!

www.CrossCountryEducation.com

Cross Country Education

Leading the Way in Professional Development

800-397-0180

fax 615-346-5350
Prolonged Exposure Therapy for Post-Traumatic Stress Disorder (PTSD)

Written and Presented by:
Kirsten DeLambo Ph.D.
Table of Contents

Prolonged Exposure Therapy for PTSD ..................3
Stressful Life Experiences Screening ...............34
PTSD Checklist (PCL) ..................................35
In-Vivo Hierarchy Example.............................38
Adapting Prolonged Exposure Therapy for People
Living with HIV with PTSD ............................39
References ..................................................60
Selected Empirical Articles—Exposure Based
Treatments ..................................................68
The goal of this workshop

- Provide an overview of prolonged exposure (PE), a treatment program that was developed by Dr. Edna B. Foa and her colleagues
- Participants will be acquainted with the various procedures that are utilized in PE
Delivering PE Requires More Extensive Training

- Center for the Treatment and Study and Anxiety at University of Pennsylvania
- http://www.med.upenn.edu/citsa/
- Led by Edna Foa, Ph.D., and her colleagues; or,
- Center for Deployment Psychology
- www.deploymentpsych.org
- Excellent training with opportunities to practice Prolonged Exposure treatment components

Agenda

- Diagnostic Criteria
- Screening and Assessment tools
- Treatments for Trauma
- Theoretical Underpinnings for PE
- Components of PE including demonstration and videos
- Session by Session instructions
- How to manage your own distress
- Advanced topics

Post-Traumatic Stress Disorder

- About 5.2 million adults have PTSD during a given year. This is a small portion of people who have experienced trauma.

- Up to 60% of the U.S. population is exposed to at least one traumatic event in their lifetime.
PTSD

- Lifetime prevalence of PTSD in the United States is approximately 8%
- For veterans of the Iraq and Afghanistan wars, PTSD prevalence rate is estimated to be 11-20%.
- Women are twice as likely to develop PTSD than men

PTSD

- PTSD is associated with higher odds for:
  - school dropout
  - teenage childbearing
  - marital instability
  - unemployment
  - suicide attempts
  - substance abuse
  - inpatient hospitalizations

Type of trauma

Examples of trauma that may lead to PTSD:
- War trauma
- Domestic violence
- Rape
- Motor vehicle accident
- Witnessing a murder or other violent act
- Industrial accident
- Childhood abuse
- Natural Disasters
- Traumatic Grief
- Severe medical illness (HIV, cancer)
DSM-5 Criteria

Criterion A: Stressor
(1 required)
The person was exposed to: death, threatened death, actual or threatened serious injury, or actual or threatened sexual violence, as follows:

1) Direct exposure
2) Witnessing, in person

Criterion A (cont.)
3) Indirectly, by learning that a close relative or close friend was exposed to trauma. (If death, must be violent or accidental)
4) Repeated or extreme indirect exposure to aversive details of the event, usually in the course of professional duties. Does NOT include exposure through media, tv, movies.
Criterion B: Intrusion  
(1 required)  
1) Recurrent, involuntary and intrusive memories  
2) Traumatic nightmares  
3) Dissociative reactions  
4) Intense prolonged distress after exposure to reminders,  
5) Marked physiologic reactivity

Criterion C: Avoidance  
(1 required)  
Persistent effortful avoidance of trauma-related stimuli:  
1) Thoughts and feelings  
2) External reminders (people, places, conversations, activities, situations, etc.)

Criterion D: Negative alterations in cognition and mood  
(2 required)  
1) Inability to recall key features of event  
2) Persistent negative beliefs about oneself  
3) Persistent distorted blame (self or others)  
4) Persistent negative emotions  
5) Markedly diminished activities  
6) Feeling alienated from others  
7) Constricted affect
Criterion E: alterations in arousal and reactivity (2 required)

1) Irritable or aggressive behavior
2) Self-destructive or reckless behavior
3) Hypervigilance
4) Exaggerated startle response
5) Concentration problems
6) Sleep disturbance

Specify If:

With dissociative symptoms (dепersonalization or derealization)

With delayed expression (full diagnosis is not met until 6 months after the trauma)

Diagnostic Criteria for PTSD

• E. Duration of the disturbance is more than 1 month

• F. The disturbance causes significant distress or impairment in important areas of functioning
Overlap between PTSD and other disorders

- Many people with PTSD are misdiagnosed because their presentation overlaps with other disorders (e.g. GAD, OCD, specific phobia, substance abuse, borderline personality disorder)
- Can have both PTSD and one or more of the above disorders
- PTSD treatment has been shown to diminish symptoms of other disorders along with PTSD

Overlap between PTSD and other disorders

- One could have trauma-related difficulties without having full-blown PTSD.
- Hallmark of PTSD is: a constellation of symptoms grouped into four general clusters: intrusion, avoidance, alterations in cognitions and mood, and alterations in arousal and reactivity.
- May oscillate continuously between the four or tend to be mostly “stuck” on one.

Screening Measures

- A screening measure is not meant to diagnose PTSD, but can be used to assess someone’s distress and assess the need for further assessment and treatment
- PTSD Checklist (PCL)
- Stressful Life Experiences Screening
PTSD Assessment

- SCID—Structured Clinical Interview for DSM. Is used for a wide variety of disorders, not just trauma-related disorders
- CAPS—Clinician Administered PTSD Scale

Factors that increase vulnerability for PTSD

- Prior victimization
- Low cortisol excretion?
- Early age onset and/or longer lasting
- Trauma severity
- Severity of other stressors
- Lack of social support
- Greater perceived threat or lack of control

PTSD and Cortisol

- Cortisol is a hormone associated with stress
- Generally, when one is stressed cortisol levels rise. Levels subside when stress subsides.
- Studies show that people with PTSD have lower levels of cortisol.
- Why????
- Unclear and controversial exactly why this occurs.
Treatments for PTSD

- Psychological First Aid (not necessarily PTSD)
- Stress Inoculation Training
- EMDR
- Cognitive Processing Therapy
- Seeking Safety
- Trauma Focused Cognitive Behavioral Therapy (kids)
- Relaxation Training
- Social Skills Training
- Cognitive Therapies
- Pharmocotherapy
- Exposure Therapies

Psychological First Aid

- Evidence-informed model designed to reduce initial distress, assist with current needs, and identify those who may require additional services
- Not “debriefing”
- Do not elicit details of the traumatic experience and losses
- Comprehensive manual available at ptsd.va.gov

Psychological First Aid

- 1. Contact and Engagement
- 2. Safety and Comfort
- 3. Stabilization
- 4. Information Gathering
- 5. Practical Assistance
- 6. Connection with Social Supports
- 7. Information on Coping
- 8. Linkage with Collaborative Services
Stress Inoculation Training

- Three phase intervention
- 1) education about impact of stress, goal-setting.
- 2) coping skills are taught and rehearsed.
- 3) apply skills learned across increasing levels of stressors
- 8-15 sessions (sometimes more or less)

EMDR

- Eye Movement Desensitization and Reprocessing
- Eight phase intervention
- 1) gathering history and treatment planning
- 2) stabilization (if necessary)
- 3-6) Client focuses on trauma related visual image, negative thought, and body sensations.
- Simultaneously moves eyes back and forth for 20-30 seconds
- Repeated several times
- When distress ceases, client is instructed to think of the preferred positive belief.
- 7) Closure-document and be aware of related material
Cognitive Processing Therapy

- Process the trauma through writing out details and reading repeatedly.
- Systematically challenges unhelpful "rules" related to self, others, world.
- Addresses topics such as safety, trust, intimacy, and power and control.
- 17 sessions
- https://cpt.musc.edu

Seeking Safety

- Addresses PTSD and Substance Abuse simultaneously.
- Individual or group sessions
- Present focused, skills-based
- Topics include honesty, asking for help, recovery thinking, and self-nurturing.
- 25 sessions
- www.seekingsafety.org

Trauma-Focused CBT

- Similar to Prolonged Exposure
- More child-friendly
- Involves caregivers
- Free online training available for clinicians.
- www.tfcbt.musc.edu
Theoretical Explanations for PTSD

Theoretical Explanations

PTSD can be explained from different perspectives:

Neurobiological
Classical Conditioning
Cognitive
Emotional Processing Theory

Biology of PTSD

- PTSD actually changes brain functioning.
- Hippocampus (involved in memory) decreases in mass.
- Amygdala (fear center) is over reactive
- Brain may have difficulty learning new expectations following a trauma.
- Brain “tells” person that a safe situation is threatening even if the situation has nothing to do with the trauma
Emotional Processing Theory
- Developed by Foa & Kozak (1985, 1986)
- Is theoretical model to understand anxiety disorders and drives Prolonged Exposure Therapy.
- There are many cognitive structures in memory that organize our knowledge, including fear structures
- A fear structure includes information about feared stimuli (object/situation), fear responses and meaning of the feared stimuli and responses.

Emotional Processing Theory
- When a fear structure is “normal” it helps escape from danger
  - Feared stimuli — a shark
  - Feared response — heart is pounding
  - Meaning of stimuli — “Sharks are dangerous”
  - Meaning of fear responses — “heart pounding means that I am afraid”

Emotional Processing Theory
- When a fear structure is “pathological” it can severely limit daily functioning:
  - Feared stimuli — men on date
  - Feared responses — nausea, cancel date
  - Meaning of stimuli — “all men are dangerous”
  - Meaning of responses — “my getting sick means I am afraid”
Emotional Processing Theory

Successful treatment involves changes in the pathological fear structure

These changes require:
 Activation of the pathological structure
 Modification of the pathological aspects of the structure

Reorganization of Trauma Memory

- Fear structure is activated by accessing trauma memory via emotional engagement during imaginal and in-vivo exposure.
- When client confronts trauma reminders and nothing dangerous happens, new information results in a gradual change in perception
- Results in disconfirmation of fear

Prolonged Exposure Therapy

Based on:
Prolonged Exposure Therapy

- Based on over 20 years of well-controlled studies
- International Consensus Group on Depression and Anxiety selected exposure therapy as the most appropriate form of treatment for PTSD
- Deemed “Model Program” by SAMHSA

Prolonged Exposure Therapy

- PE therapy has been found to be effective in the treatment of PTSD and comorbid symptoms across several controlled studies.
- Has been found appropriate for use across different cultural groups
- Effective in treating victims from a wide range of traumas

Prolonged Exposure Therapy

- Found to be effective in treating individuals who have multiple traumas and patients who suffer from complex PTSD
- Progress is generally maintained at follow-up (6 months or 1 year)
- See Appendix for list of empirical studies
Prolonged Exposure Therapy

The main components of Prolonged Exposure Therapy (PE) are:
1) Education about PTSD and trauma
2) Repeated reliving of trauma memories through imagination
3) Repeated in-vivo exposure to avoided situations

Foa, Hembree, & Rothbaum, 2007

Prolonged Exposure Therapy

- Full treatment usually is 10 weekly sessions.
- Can be done twice per week.
- Sessions should last about 90 minutes
- Therapy may take fewer or more than 10 sessions depending on number of traumas and severity.

Foa, Hembree, & Rothbaum, 2007

Rationale
Rationale for treatment

- Rationale extremely important to success of treatment!
- Client needs to grasp concept of how PE works in order to commit to process.
- It is difficult for client to give up avoidance strategies, therefore they must accept the rationale at the beginning of therapy

Rationale for treatment

- Present rationale with confidence and clarity
- Use discussion format, instead of lecture
- Talk about success of PE (research and/or clinical success)
- Involve client’s situation in discussion (e.g., it sounds like you are really ready to do this type of work)

Rationale for Treatment Program

- The program focuses on addressing trauma-related fears and symptoms
- Sometimes trauma memories and symptoms get easier with time, but with a lot of survivors, like you, memories and symptoms stay the same or get worse.
- Why is this? We believe it is mainly because of avoidance.
Rationale for Treatment Program

- Three main factors prolong trauma-related problems:
  - Pushing away memories, thoughts, and feelings
  - Avoiding situations, places, or people
  - The presence of unhelpful beliefs such as: “the world is dangerous” “I can’t trust anyone” “I can’t get over this”

Fox, Hembree, & Rothbaum, 2007

---

Rationale for Treatment Program

- “When you avoid, you are not giving yourself the opportunity to work through the memory or to think about it in a more helpful way. It never gets better.”
- When explaining avoidance, engage client by asking them about their own avoidance behaviors.
- Can also ask them towards the end of the rationale if they can remember a time when they overcame anything they have ever been anxious or avoidant about.

Fox, Hembree, & Rothbaum, 2007

---

Rationale for Treatment Program

- The two main procedures are:
  - Imaginal exposure and in-vivo exposure
  - Imaginal Exposure: repeatedly reliving the traumatic event using imagination. Confronting the memories allows for processing of experiences and allows for modifying unhelpful cognitions

Fox, Hembree, & Rothbaum, 2007
Rationale for Treatment Program

- In-Vivo Exposure: repeatedly approaching trauma related situations out in real-life (usually for homework, in between sessions). Target trauma-related, avoided situations that are SAFE. It enables client to realize these situations are not dangerous, thus modifying dysfunctional cognitions.

Fox, Hembree, & Rothbaum, 2007

Breathing re-training

The overall goal is to pay attention to your breathing and slow down your breathing.

- Normal breath in
- Slow breath out, count to 4 on the exhale, then pause.
- Begin again
- Practice for 10 minutes, 3 times a day.

Fox, Hembree, & Rothbaum, 2007
Common Reactions to Trauma

- Intended to be a dialogue
- Provide a lot of information, but avoid lecturing
- Encourage client to discuss feelings, thoughts, and behaviors since the trauma
- The therapist can use what the client says to use later for choosing appropriate metaphors and to target in-vivo exposures

Common Reactions to Trauma

- Fear and anxiety
- Re-experiencing (flashbacks, nightmares, intrusive thoughts)
- Trouble concentrating
- Easily startled, over-alertness
- Irritability and anger
- Avoidance behaviors
Common Reactions to Trauma

- Emotional numbing (may include substance abuse)
- Loss of interest and depression
- Feelings of “going crazy”
- Shame and guilt
- Poor self-image
- Relationship strain
- Problems with emotional or sexual intimacy

Foa, Hembree, & Rothbaum, 2007

Common Reactions to Trauma

- Open-ended question to enhance conversation format may include:
  - What is that like for you?
  - What does your body feel like when that happens?
  - What triggers that reaction?
  - Earlier you said you were having trouble with ______. Tell me more.

Foa, Hembree, & Rothbaum

In-vivo Exposure
Rationale for In-Vivo Exposure

- Avoidance maintains PTSD
- Through In-vivo exposure you:
  * experience decrease in anxiety
  * begin to discern safe vs. unsafe situations
  * increase confidence
  * improve quality of life by widening activities that you are capable of doing

SUDS

- Define SUDS (Subjective Units of Distress Scale): ranges from 0 to 100
- Create anchor points (0, 50, 100)
- Develop a list of avoided situations and ask client to rate SUDS
- Arrange the situations in a hierarchy according to SUDS (See Appendix)

Items on In-Vivo Hierarchy

- Trauma-related behaviors that are avoided
- Behaviors that one would use in CBT treatment for depression (e.g., increasing pleasurable activities)
- Activities that increase social interaction and support. May include support group or other situation where person talks about trauma.
Implementing In-Vivo Exposure

- Present rationale
- Provide examples of in-vivo exposure
- Introduce SUDS
- Create in-vivo hierarchy
- Assign in-vivo homework beginning with SUDS in (50-70 range)
- Instruct client to repeat several times and/or reduce SUDS by 50%

Foa, Hembree, & Rothbaum, 2007

Imaginal Exposure

Rationale for Imaginal Exposure

- Explain that most of session will be spent on safely revisiting the trauma using imagination
- If necessary, can briefly review current re-experiencing problems or other PTSD symptoms
- Re-iterate pushing away memories maintains PTSD
- The symptoms that you are having tells us this is “unfinished business.”

Foa, Hembree, & Rothbaum, 2007
Rationale for Imaginal Exposure

- Present analogy
- The goal of revisit the trauma is:
  * to process and organize the memories
  * to learn that traumatic memories are not dangerous
  * to bring about habituation
  * “for you to control the memories instead of the memories controlling you”

Implementing Imaginal Exposure

- Imaginal exposure aims to:
  * enhance client’s ability to access and talk about details of the trauma
  * activate fear structure and emotions
  * begin allowing client to organize trauma by verbalizing it in a safe, intentional, manner

Imaginal Exposure Instructions

- Audio-record session
- Close your eyes
- Use your imagination to picture the trauma, and allow yourself to feel any emotions that come up.
- Describe memory in present tense, as if it happening now
- Recount as many details as you can
Implementing Imaginal Exposure

- Include how you are feeling and what you are thinking at the time of the trauma.
- Repeat the narrative as many times as necessary so that you reach about 40-60 minutes.
- The first session of imaginal exposure should have little direction from therapist. In later sessions, therapist can guide client more to elicit more details and emotions.

Therapeutic Comments During Imaginal Exposure

- You are doing great, stay with it.
- I know this is hard. You can do this.
- Hang in there.
- You are completely safe here. Keep going.
- The memories can’t hurt you.

Processing Imaginal Exposure

- Offer lots of praise!!!!
- Assist client with calming down, if needed.
- Ask client to talk about experience of exposure
- Normalize clients thoughts and feelings.
- May offer some corrective info. (It is not a child’s fault that she was abused) Better if client can articulate, instead of therapist.
Processing Imaginal Exposure

- In subsequent sessions, inquire about how exposure and perceptions of trauma are changing across sessions.
- Discuss beliefs related to trauma, self, or how client behaved during trauma.
- Assist client with modifying unhelpful beliefs.

Contraindications for PE

- If trauma just happened—exact amount of time varies
- Imminent threat of suicide or serious self-harm
- Psychosis
- Traumatic Brain Injury (TBI)
- Still has relationship with assailant
- Severe dissociation
- Current substance abuse with no motivation to stop.
- Inadequate memory of trauma

Under engagement

- Client appears to be “going through the motions”
- Little emotion
- Tell client your observations about what is happening
- Label as PTSD avoidance
- Explore perceived consequences
- Assist client with using senses to get in better touch with event.
Over Engagement

- Too close to feeling as if it really is happening
- Evidence of dissociating
- Regressive behaviors
- Physical movements that "replay" event
- Uncontrollable sobbing

Foa, Hembree, & Rothbaum, 2007

Over Engagement

- Can modify procedures to decrease engagement
- Past tense
- Eyes open
- Write it out
- Take a time out
- More therapist involvement
- Grounding techniques

Foa, Hembree, & Rothbaum, 2007

Session 1

- Present an overview PE
- Explain the rationale for treatment
- Collect information relevant to the trauma (trauma interview)
- Teach breathing re-training
- Assign homework

Foa, Hembree, & Rothbaum, 2007
Session 2

- Review homework
- Educate client about PTSD and trauma
- Discuss rationale for in-vivo exposure
- Introduce SUDS and construct in-vivo hierarchy
- Select in-vivo assignments for homework and assign other homework

Foa, Hembree, & Rothbaum, 2007

Session 3

- Review homework
- Present rationale for imaginal exposure
- Conduct imaginal exposure (45-60 minutes, when possible)
- Process imaginal exposure (15-20 minutes, when possible)
- Discuss and plan for in-vivo exposure
- Assign homework

Foa, Hembree, & Rothbaum, 2007

Sessions 4-5

- Review homework
- Conduct imaginal exposure (30-45 minutes)
- Process imaginal exposure (15-20 minutes)
- Discuss and plan for in-vivo exposure
- Assign homework

Foa, Hembree, & Rothbaum, 2007
Sessions 6-9
- Review homework
- Conduct imaginal exposure focusing on most troubling details of memory (30-45 minutes)
- Process imaginal exposure
- Discuss and plan in-vivo exposure
- Assign homework

Session 10 (or final session)
- Review homework
- Conduct final exposure
- Process imaginal exposure and discuss how perception of trauma has changed
- May discuss how process is affecting current functioning or how it can impact future.

Final Session (continued)
- Obtain current SUDs for in-vivo hierarchy (designed in session 2) and discuss how it differs from original SUDs
- Discuss what was learned in treatment
- Appreciations/regrets related to therapy and terminating
- Assign “homework” (Continue to apply concepts learned throughout therapy)
Achieving Success With PE

Therapeutic Alliance

- Use all previously learned clinical skills related to establishing and maintaining rapport
- It is acceptable and necessary to offer more support than you might with other types of therapy (e.g., scheduled phone call in-between sessions)
- Offer lots of praise

Individualizing Treatment

- PE is a manualized treatment, but not “cookie cutter”
- Homework is specifically tailored for each client’s unique avoidance behaviors
- You should inquire about client’s therapy goals and life goals. Then re-iterate throughout therapy how PE is helping to achieve goals
Addressing Avoidance

- Every client avoids!!!! This goes along with PTSD
- Provide support. Do not reprimand.
- Validate client’s avoidance behaviors. Tie back to PTSD.
- Problem-solve with client how to reduce avoidance. This includes practical solutions and clear PTSD avoidance.

Addressing Avoidance

- Review rationale for treatment
- Ask client to explain rationale back to you.
- Ask them to recall why they wanted treatment in first place.
- Use analogies to support the rationale

Comorbidity

- 80% of PTSD patients also suffer from depression, another anxiety disorder, or a substance use disorder
- May have a personality disorder
- Medical conditions can complicate PTSD and can even be the index trauma (HIV, cancer)
Comorbidity

- Can still do PE with these groups
- May have to be more flexible with treatment
- Address substance use or health issues as needed
- Important to still focus on trauma as main focus of treatment

Other Considerations

- When in doubt on how to proceed, think back to emotional processing theory
- Consult with experts for support on difficult cases
- When troubled by clients emotional distress, remind self how well PE will help in the near future
- Consider further training to increase PE competence.

Additional Contact Information

- Kirsten DeLambo, Ph.D.
- drdelambo@yahoo.com
- Feel free to contact me with questions or consultation.

THANK YOU!!
### Stressful Life Experiences Screening

Please fill in the number that best represents how much the following statements describe your experiences. You will need to use two scales, one for how well the statement describes your experiences and one for how stressful you found this experience. The two scales are below.

**Describes your Experience:**

<table>
<thead>
<tr>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did not experience this</td>
<td>a little like my experiences</td>
<td>somewhat like my experiences</td>
<td>exactly like my experiences</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Stressfulness of Experience:**

<table>
<thead>
<tr>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all stressful</td>
<td>not very stressful</td>
<td>somewhat stressful</td>
<td>extremely stressful</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Describes your Experience</th>
<th>Life Experience</th>
<th>Stressfulness Then</th>
<th>Stressfulness Now</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have witnessed or experienced a natural disaster; like a hurricane or earthquake.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have witnessed or experienced a human made disaster like a plane crash or industrial disaster.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have witnessed or experienced a serious accident or injury.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have witnessed or experienced chemical or radiation exposure happening to me, a close friend or a family member.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have witnessed or experienced a life threatening illness happening to me, a close friend or a family member.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have witnessed or experienced the death of my spouse or child.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have witnessed or experienced the death of a close friend or family member (other than my spouse or child).</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I or a close friend or family member has been kidnapped or taken hostage.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I or a close friend or family member has been the victim of a terrorist attack or torture.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have been involved in combat or a war or lived in a war affected area.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have seen or handled dead bodies other than at a funeral.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have felt responsible for the serious injury or death of another person.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have witnessed or been attacked with a weapon other than in combat or family setting</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>As a child/teen I was hit, spanked, choked or pushed hard enough to cause injury</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>As an adult, I was hit, choked or pushed hard enough to cause injury</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>As an adult or child, I have witnessed someone else being choked, hit, spanked, or pushed hard enough to cause injury.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>As a child/teen I was forced to have unwanted sexual contact.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>As an adult I was forced to have unwanted sexual contact.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>As a child or adult I have witnessed someone else being forced to have unwanted sexual contact</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have witnessed or experienced an extremely stressful event not already mentioned. Please Explain:</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### PTSD Checklist (PCL)

**INSTRUCTIONS TO PATIENT:** Below is a list of problems and complaints that people sometimes have in response to stressful experiences. Please read each one carefully, put an X in the box to indicate how much you have been bothered by that problem in the past month.

<table>
<thead>
<tr>
<th></th>
<th></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.</td>
<td>Repeated, disturbing <em>memories, thoughts</em>, or <em>images</em> of a stressful experience?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2.</td>
<td>Repeated, disturbing <em>dreams</em> of a stressful experience?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3.</td>
<td>Suddenly <em>acting</em> or <em>feeling</em> as if a stressful experience were happening again (as if you were reliving it)?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4.</td>
<td>Feeling <em>very upset</em> when <em>something reminded you</em> of a stressful experience?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5.</td>
<td>Having <em>physical reactions</em> (e.g., heart pounding, trouble breathing, sweating) when <em>something reminded you</em> of a stressful experience?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6.</td>
<td>Avoiding <em>thinking about</em> or <em>talking about</em> a stressful experience or avoiding <em>having feelings</em> related to it?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7.</td>
<td>Avoiding <em>activities or situations</em> because <em>they reminded you</em> of a stressful experience?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8.</td>
<td>Trouble <em>remembering important parts</em> of a stressful experience?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Weathers, Litz, Huska, & Keane; National Center for PTSD - Behavioral Science Division; This is a government document in the public domain.
<table>
<thead>
<tr>
<th></th>
<th></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>9.</td>
<td>Loss of interest in activities that you used to enjoy?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10.</td>
<td>Feeling distant or cut off from other people?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11.</td>
<td>Feeling emotionally numb or being unable to have loving feelings for those close to you?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12.</td>
<td>Feeling as if your future will somehow be cut short?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13.</td>
<td>Trouble falling or staying asleep?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>14.</td>
<td>Feeling irritable or having angry outbursts?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>15.</td>
<td>Having difficulty concentrating?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>16.</td>
<td>Being &quot;super-alert&quot; or watchful or on guard?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>17. Feeling <em>jumpy</em> or easily startled?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
</tr>
</tbody>
</table>

Weathers, Litz, Huska, & Keane; National Center for PTSD - Behavioral Science Division; This is a government document in the public domain.
Example  
In-Vivo Hierarchy

Index Trauma: acquaintance rape

<table>
<thead>
<tr>
<th>Behavior</th>
<th>SUDS Session 2</th>
<th>SUDS Final Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Watching the news</td>
<td>50</td>
<td>5</td>
</tr>
<tr>
<td>2. Talking to best friend about rape</td>
<td>50</td>
<td>0</td>
</tr>
<tr>
<td>3. Watching movie with rape scene</td>
<td>60</td>
<td>30</td>
</tr>
<tr>
<td>4. Going out with friends during day</td>
<td>60</td>
<td>0</td>
</tr>
<tr>
<td>5. Going out with friends at night</td>
<td>70</td>
<td>10</td>
</tr>
<tr>
<td>6. Running errands alone</td>
<td>70</td>
<td>10</td>
</tr>
<tr>
<td>7. Reading police report of rape</td>
<td>75</td>
<td>20</td>
</tr>
<tr>
<td>8. Writing mock letter to perpetrator</td>
<td>75</td>
<td>15</td>
</tr>
<tr>
<td>9. Sitting with back to people</td>
<td>75</td>
<td>35</td>
</tr>
<tr>
<td>10. Having a conversation with a man</td>
<td>80</td>
<td>35</td>
</tr>
<tr>
<td>11. Wearing the outfit I had on</td>
<td>80</td>
<td>15</td>
</tr>
<tr>
<td>12. Going to same restaurant</td>
<td>85</td>
<td>20</td>
</tr>
<tr>
<td>13. Going out on a date</td>
<td>90</td>
<td>—</td>
</tr>
<tr>
<td>14. Holding hands with a man</td>
<td>95</td>
<td>—</td>
</tr>
<tr>
<td>15. Kissing a man</td>
<td>95</td>
<td>—</td>
</tr>
<tr>
<td>16. Having sex</td>
<td>100</td>
<td>—</td>
</tr>
</tbody>
</table>
Adapting Prolonged Exposure Therapy for People Living with HIV with Posttraumatic Stress Disorder

Kirsten E. DeLambo¹ and Douglas L. Delahanty¹, ²

¹Department of Psychology at Kent State University, Kent, Ohio
²Department of Psychology in Psychiatry, Northeastern Ohio Universities College of Medicine (NEOUCOM), Rootstown, Ohio

This study was supported by NIMH grant R34 MH71201
Abstract

People living with HIV (PLWH) experience disproportionately high rates of posttraumatic stress disorder (PTSD) symptoms. Although prolonged exposure (PE) is the recommended evidence-based therapy for PTSD stemming from a number of traumas, little is known about the efficacy of PE among PLWH. Moreover, several challenges arise with this population making it difficult to deliver psychological services. Challenges faced while working with PLWH who have PTSD fall generally into the following categories: those involving the low socioeconomic status nature of the sample, those involving the high number of prior traumas experienced by PLWH, those involving high levels of continuing daily stress, those involving co-occurring substance abuse, and those involving disease-related issues. In order to address these challenges, a more flexible approach to treatment is proposed. The present paper reviews challenges associated with working with PLWH, and makes recommendations concerning content changes to the standard PE therapy for PLWH. Early outcomes suggest that PE is just as effective with PLWH as with other trauma groups when a flexible approach to treatment is taken.

Key Words: HIV, AIDS, Prolonged Exposure, therapy, PTSD
Adapting Prolonged Exposure Therapy for People Living with HIV with Posttraumatic Stress Disorder

Historically, diagnosis with a life-threatening or terminal disease was specifically excluded as an event that could precipitate a diagnosis of posttraumatic stress disorder (PTSD). However, with the publication of the fourth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV: American Psychiatric Association, 1994), diagnosis with a life-threatening or terminal disease was recognized as a traumatic event that could lead to the development of PTSD. Whereas the lifetime prevalence of PTSD in the U.S. is 7.8% (Kessler, 1995), the prevalence of PTSD symptoms is disproportionately high among people living with HIV (PLWH). Recent studies have found that 22-54% of PLWH meet PTSD diagnostic criteria (Safren, Gershuny, & Hendriksen, 2003) and 30% of PLWH meet PTSD criteria related to their diagnosis and living with HIV (Kelly et al., 1998). The high prevalence of PTSD in PLWH may reflect the high number of traumatic events experienced by PLWH. People with HIV are much more likely to have experienced traumatic events than are members of the general population or uninfected counterparts (Gielen, McDonnell, Wu, O’Campo, & Faden, 2001; Kimerling, Armstead, & Forehand, 1999a; Kimerling et al., 1999b). Furthermore, preliminary research has shown that symptoms of PTSD are associated with lower adherence to medication regimens in PLWH (Delahanty, Bogart, & Figler, 2004; Safren, et al., 2003). Despite the relatively strong relationships observed between PTSD symptoms and nonadherence, interventions designed to increase adherence have typically not addressed mental health issues (Kelly & Kalichman, 2002). Prolonged exposure (PE)
therapy has been repeatedly demonstrated to be effective in treating PTSD (Boudewyns & Hyer, 1990; Cooper & Clum, 1989; Foa et al., 1999; Foa, Rothbaum, Riggs, & Murdock, 1991; Keane, Fairbank, Caddell, & Zimering, 1989; Resick, Nishith, Weaver, Astin, & Feuer, 2002; Taylor et al., 2003). Further, the International Consensus Group on Depression and Anxiety selected exposure therapy as the most appropriate form of treatment for PTSD in a range of trauma victims (Ballenger et al., 2000). However, the efficacy of PE therapy at reducing/treating PTSD and improving medication adherence in individuals with life-threatening diseases has not been examined.

The present paper draws from the clinical work of an ongoing study testing the efficacy of prolonged exposure (PE) therapy at reducing PTSD symptoms in PLWH who meet PTSD diagnostic criteria. The purpose of this paper is to aid therapists working with PLWH by describing challenges with this client population and adaptations to PE therapy that were used to address these challenges. General and case-specific adaptations of PE are demonstrated using case examples.

**Prolonged Exposure Therapy**

Prolonged Exposure Therapy is a cognitive-behavioral treatment that typically consists of 10 sessions conducted 1-2 times weekly. Each session lasts between 90-120 minutes. Treatment procedures include education about common reactions to trauma, breathing retraining, prolonged (repeated) exposure to trauma memories, repeated in-vivo exposure to avoided situations due to trauma-related fear, and discussion of thoughts and feelings related to exposure exercises. This discussion addresses unrealistic beliefs about one’s self and the world. PE therapy aims to reduce the fear or anxiety associated with the trauma by
encouraging patients to repeatedly confront fear-evoking stimuli in a safe environment. The stimuli are confronted in-session during imaginal exposure. In between sessions, the stimuli are confronted through in-vivo exposure and through listening to audiotapes of the imaginal exposure. A number of mechanisms have been proposed through which exposure is thought to lead to improvement in PTSD symptoms (Foa & Rothbaum, 1998). First, repeated imaginal exposure facilitates habituation and reduction of anxiety associated with the traumatic memory. Second, by imagining and discussing the traumatic event with a supportive therapist, the patient begins to realize that thinking about the trauma is not dangerous. Third, through imaginal exposure to the trauma memory and in vivo exposure to external cues, the patient begins to differentiate the traumatic event from other situations, decreasing generalization of fear responses. Finally, following repeated exposure, the patient achieves a sense of mastery that contradicts the typical view of symptoms reflecting weakness (Foa & Rothbaum, 1998).

**Synopsis of Study**

The ongoing therapy intervention (R34 MH71201) is part of a study examining the extent to which PE is efficacious at decreasing PTSD and comorbid disorders in PLWH. A secondary aim is to determine whether successful treatment of PTSD is associated with an increase in adherence to medication regimens. Eligible participants consist of PLWH who meet PTSD diagnostic criteria and who are currently taking antiretroviral medications. The recruitment and subsequent therapy occurs at two social service agencies in Northeast Ohio serving PLWH. The agencies provide case
management, food, bus/gas vouchers, and/or emergency assistance. By conducting the study at these agencies as opposed to a medical clinic we are able to target less adherent people who may not regularly attend medical appointments. Further, the environment is familiar and relatively comfortable for most participants, which is thought to promote retention. To date, the sample consists of approximately 69% male, 47% Caucasian, 43% African American, and 8% Hispanic participants. This sample roughly parallels the race and gender distribution of HIV/AIDS cases in this region (Ohio Department of Health, 2001). Participants receive a minimum of 10 sessions of PE, and additional sessions are available if needed. Sessions are provided twice per week, which is believed to result in higher compliance and better retention than conducting sessions once per week. The therapy is provided at no cost and participants receive $10 for each therapy session completed, and $25 for pre and post-treatment assessments. Although the intervention has resulted in positive outcomes for most participants, a number of challenges are noted. Challenges faced while working with PLWH who have PTSD typically revolved around the low socioeconomic status nature of the sample, the high number of prior traumas experienced, the high amount of daily stress, the high co-occurrence of substance abuse, and disease-related issues.

**Challenges Related to Low Socioeconomic Status**

Participants, in general, were well below the poverty line (average yearly income is below $10,000 per year) which presented a number of challenges for delivering psychological services to this population. Although participants received remuneration for participating, this still did not result in perfect or near-perfect attendance. Lack of transportation and an inability to pay bills were the principle contributors to attendance
Most participants did not have reliable transportation. Some clients qualified for transportation services, but the service was limited to a certain number of rides per year, typically had to be arranged well in advance, and usually involved a great deal of waiting time to be taken home after an appointment. Clients with this service were only able to secure rides once per week at most. Therefore, they could not take part in PE twice weekly, which is how the study was originally designed. Clients who were not eligible for this service relied on the bus or friends and family for transport. Riding the bus was time-consuming and often perceived as threatening for persons suffering from PTSD. It was not uncommon for participants to miss sessions because they could not manage the stress accompanying riding the bus. Friends and family were often not reliable with regards to providing transportation, and rides often showed up late, not at all, or with difficult demands on the participant (e.g., requiring participant to pay for gas, making multiple stops, etc.).

Most participants did not have enough money to cover their monthly costs. It was common for phones, gas, or electricity to be shut off. As a result, participants were hard to locate because they could not be reached by phone. Some clients would temporarily move in with someone else while utilities were cut-off without informing study personnel.

We found that with this population, successful treatment required great flexibility and understanding on the part of the therapist to promote attendance. For example, the therapist expressed an understanding of difficulties with keeping appointments for the above-mentioned reasons. We did not terminate anyone, even after multiple cancellations
or no-shows. We found it extremely beneficial for the therapist to call the participant (if possible) to remind them of the next appointment and to problem-solve around potential barriers for keeping the next appointment. If a client was unreachable, we enlisted the help of the case manager to locate the client. We found that these extra steps were especially important during the first few therapy sessions, and that implementation of these steps resulted in increased attendance. In later sessions, we were able to relax some of the steps once the client became engaged in the therapy and began to experience benefit from the therapy.

Challenges Related to Greater Trauma History and Daily Stressors

Perhaps due to experiencing a high number of prior traumatic events, this population had more complex and more chronic forms of PTSD than is typically found in other trauma populations. Common reported traumas included sexual assault, physical assault, and witnessing others being killed or seriously injured. On average, participants experienced 4.8 prior traumatic events. In comparison to other types of trauma victims, PLWH appeared to experience more severe distress than victims of other types of trauma seen at our center.

In addition to PLWH having a greater trauma history, they also experienced a high number of ongoing significant life stressors. For instance, practical stressors such as financial distress, housing problems, and unemployment were faced on a daily basis. Further, interpersonal stressors were also common. This sample tended to have inadequate social supports. Many had regular conflicts with their family of origin, their children, or were estranged from family altogether. Many of these conflicts began long before the participants’ HIV or PTSD diagnosis. Other common problems included
emotional and physical abuse in their adult relationships. It is likely that these dysfunctional relationship patterns increased vulnerability to trauma and PTSD. Other conflicts were related to HIV status or sexual orientation. About half of the participants had not disclosed their HIV status to family members. Among the participants who identified themselves as homosexual or bisexual, about one quarter had not disclosed their sexual orientation. In either case, the participants expressed a great deal of distress related to not being accepted and extreme worry involving disrupting family when disclosing.

Since PE has been demonstrated to be effective for complex and severe PTSD, treatment for this highly traumatized population should not vary greatly from people with fewer traumas, and we have, for the most part, adhered to the PE guidelines. The aim is for the therapist to convey understanding and offer high praise for surviving the multiple traumas. One way in which we have adapted the therapy to address patients with multiple prior traumas is to include the option of taking more sessions in order to process additional trauma memories.

To address the participants’ daily stressors it is necessary for a therapist to understand and address these issues while still remaining true to the format of PE. This is best done by listening to and supporting the clients with their daily stressors for a short amount of time at the beginning or end of each session. Whenever possible, an attempt should be made to make a connection between how their current stressor is affected by the participant’s PTSD symptoms. For instance, if the client complains of getting fired from a job, the therapist should inquire about how their PTSD symptoms contributed to the job loss. The therapist can then reinforce that, “the best way I can help you is to treat
your PTSD, which, in the future, will help you with all of the stressors you are dealing with right now.” This way the therapy remains on track with the major focus of the therapy session on PE therapy. Often, less skilled therapists may not be adherent to the PE protocol because they believe they have to directly address current stressors experienced by the client. This does not tend to help participants, and certainly is not effective at decreasing the PTSD symptoms.

Challenges Related to Substance Abuse

Many participants reported problems related to alcohol and/or drug abuse. Reviews of the literature have supported links between alcohol/drug use disorders and PTSD (Brown & Wolfe, 1994; Brown et al., 1999). Clinical researchers have hypothesized that trauma victims may use substances to self-medicate post-traumatic symptoms (Brown, 1991; Miller & Downs, 1995), and some empirical evidence has provided limited support for this hypothesis (Harrison, Hoffman, & Edwall, 1989; Jarvis, Copeland, & Walton, 1998). Although substance abuse was a concern, there is not a consistent relationship between alcohol use and PE treatment outcome or dropout (van Minnen, Arntz, & Keijsers, 2002). Moreover, Brady and colleagues (2001) found exposure therapy to be a safe and tolerable treatment for PTSD in cocaine-dependent individuals.

We did not exclude participants who abused substances due to the high co-occurrence of PLWH with PTSD and substance use disorders. Excluding people with substance abuse would likely be excluding the people who could use PTSD treatment the most. To monitor the potential risk associated with substance use, we assessed usage at every session. This allowed us to determine whether PE lead to substance use
exacerbation in PLWH during imaginal exposure. For those with significant substance use exacerbation, the plan was to cease PE and refer them to substance abuse treatment. We have not had to do this with any participants thus far.

Challenges Related to Living with a Life-Threatening Illness

The participants seen as part of this study were different from other trauma victims with PTSD in that their ongoing reminders of the trauma extended beyond typical trauma memories and triggers. While 30% reported that HIV-related trauma is what led to their diagnosis, HIV-related symptoms were highly present in almost all participants. It varied with each participant as to what extent their PTSD symptoms stemmed from HIV-related memories. For instance, some reported their worst trauma to be something unrelated to HIV such as childhood abuse, sexual assault, or domestic violence. Others reported a more direct relationship to HIV. Many reported the moment when they were told they were HIV positive as the worst or one of the worst traumas. A few participants described the incident in which they believed to contract the virus as the worst trauma. For example, one person engaged in sexual intercourse only to be told after many encounters by the other person, “I have AIDS.” In all cases, living with HIV had been either traumatizing or severely distressing. This differed from most other types of trauma cases, in that in PLWH, there was no clear endpoint to the trauma. Participants engaged in traumatic reminders daily, they experienced regular losses within the community, and they experienced physical symptoms on a regular basis.

A person with PTSD due to an assault, motor vehicle accident, or other trauma with a clear endpoint can usually avoid re-occurrence of a similar trauma. With proper treatment, the person can recover from the difficult memories of the trauma. With HIV,
the difficult memories were presumably harder to deal with because there was no endpoint. After the initial shock of diagnosis, they had to cope with physical symptoms, a strict medication regimen, and a realistic sense of foreshortened future.

Individuals with PTSD stemming from HIV purposely engaged in traumatic reminders on a daily basis. For example, they were required to take medications each day and attend medical appointments frequently. While they must do this to remain healthy, these behaviors activated their re-experiencing symptoms of PTSD. Because these behaviors caused distress, some participants avoided them, despite the risk to their physical health.

All participants were involved with the HIV community to some degree. All reported knowing several people who had died due to AIDS. Many had romantic partners who were HIV positive. There were two participants whose partners died during the time period that they were receiving PE. In both cases, the participants dropped out of the study. In addition to the normal grieving process, all participants described the loss of friends as a distressing reminder of their own illness.

Most participants were experiencing few physical symptoms at the start of the study. This may be due to a selection bias as people who felt relatively healthy may have been more likely to volunteer to participate. That said, throughout the study, many participants experienced serious physical symptoms including pneumonia, bronchitis, and influenza. It was common for participants to have multiple trips to the emergency department, and it was not uncommon for these trips to lead to a hospital admission lasting several days to several weeks. Upon discharge, most were instructed to stay at home and limit outings to only those of the utmost necessity. Inevitably, PE therapy was
put on hold until the person was healthy enough to manage transporting themselves to appointments.

In order to address these unique challenges, a flexible approach to PE therapy had to be taken. Addressing these unique challenges mostly involved awareness on the part of the therapist that treating participants with these types of traumas may be different than other types of trauma and that the challenges should be discussed openly during the cognitive processing component of PE. For example, the participants in this study discussed with the therapist ways to live with the illness, ways to grieve and possibly memorialize loved ones they have lost, and how to increase acceptance of their illness. Whereas this level of processing is rare in other trauma victims, it is more the norm in treating PLWH.

Adapting Prolonged Exposure for People Living with HIV

**Treatment Length and Delivery**

We adapted the standard PE therapy regimen to provide additional therapy sessions if deemed necessary and desirable by the clinician and participant. As mentioned, virtually all of the participants had multiple prior traumatizations, and met PTSD diagnostic criteria in response to more than one trauma. In a 10-session standard treatment, there is usually only enough time to target 2 or possibly 3 memories in imaginal exposure (Hembree, Rauch, & Foa, 2003). In most cases, we began imaginal exposure with the most severe trauma. Since diagnosis/living with HIV/AIDS did not represent the most severe trauma for a majority of participants, those traumas were processed later in treatment. The study was designed so that all therapy participants
would receive a minimum of 10 sessions and were offered up to 8 more sessions to process any other traumas.

We aimed to administer PE two times weekly until the 10-18 session treatment was complete. However, due to the abovementioned challenges, a much more flexible approach had to be taken. Rescheduling occurred frequently and, infrequently, gaps in treatment of 2-6 weeks occurred.

Exposure Treatment

The format of PE according to the manual remained the same for this population. However, the content was different than PE for other types of trauma due to the focus on HIV-related issues. For instance, PE for rape survivors typically is more straight-forward and may include talking about the rape, watching a movie with a rape scene, and returning to where the rape occurred. In contrast, PE for PLWH was not as straight-forward. Initially, we were apprehensive as to how to conduct PE sessions involving triggers such as medication use and daily medical reminders. However, we remained true to the manualized treatment, with minor modifications in content.

The content of exposure varied greatly from participant to participant. The aim was to tailor exposure to each individual’s needs. For instance, if the PTSD symptoms were mainly in reaction to an HIV-related memory, the imaginal exposure would begin with one of those memories. The memories often included the moment they received their initial HIV diagnosis, when they were told they were diagnosed with AIDS, disclosing to loved ones their diagnosis, or a sexual assault which they believed led to HIV contraction. We found that imaginal exposure of these types of memories resulted
in similar success that has been found in other types of trauma with both PLWH and other trauma victims seen at our trauma center.

In-vivo exposure typically consists of establishing a hierarchy of avoided behaviors due to PTSD. The structure and format again remained the same, but items on the hierarchy, not surprisingly, often included HIV-related behaviors. As opposed to more traditional hierarchy items such as going to the location of the traumatic event or going to a crowded place, for PLWH items might include attending medical appointments and inquiring about lab results, attending support groups, disclosing status to trusted others, and viewing movies related to HIV. Also, as with other types of trauma victims, it was common for clients to isolate themselves, avoiding both social interactions and daily tasks (e.g., going to grocery store, pharmacy, welfare office). Increasing these behaviors also was included on the in-vivo hierarchy.

With respect to both imaginal and in-vivo exposure, the format was consistent with traditional PE therapy. However, with both types of exposures the content was focused on HIV-related memories for imaginal exposure and avoided HIV-related behaviors for in-vivo exposure. For example, a typical imaginal exposure focused on HIV diagnosis, and typical in-vivo exposures included attending HIV medical appointments and support groups.

Case Example

The following case example is presented as it depicts a number of the challenges faced in providing PE to PLWH.

Background
Luis is a 44 year-old bisexual, Hispanic male with PTSD and depression. He was diagnosed with HIV at the age of 34 and believed that he contracted it from a sexual partner three years prior to his diagnosis. Luis reported multiple traumas including HIV diagnosis, childhood sexual abuse, physical assaults, witnessing a murder, and two serious motor vehicle accidents. He was in a wheelchair due to severe back pain from falling off of a roof while working. He had limited social interactions and anxiety related to being out in public. He had difficulty reading stating, “how could I learn anything in school when I had all of this to deal with?” He told the therapist that he did not trust anyone because of his prior trauma experiences. At the start of therapy, Luis reported drinking either twelve cans of beer or a fifth of liquor approximately every other day.

**Course of therapy**

As with all participants, the 10-session protocol was followed according to the prolonged exposure manual. Alcohol and drug consumption were assessed at each session and the PTSD Symptom Scale-Self Report (PSS-SR; Foa et al., 1993) was administered every other session. The PSS is a 17-item questionnaire with scores ranging from 0-51; higher scores reflect greater symptom severity. The first session involved gathering a trauma history and related information, and instructions for breathing retraining. Luis reported being nervous about the treatment, but was hopeful that it would be effective. Rapport was easily established and he expressed appreciation for having someone to talk to who wouldn’t “tell his business.” The second session involved psychoeducation about common reactions to trauma, and constructing an in-vivo hierarchy of avoided situations. The non HIV–related behaviors targeted for in-vivo

---

* Name has been changed.
exposure were related to sexual abuse and included watching relevant movies, talking about abuse with others, and writing a mock-letter to the perpetrator. The HIV-related behaviors included going to medical appointments, going to an HIV support group, watching relevant movies, and taking medications. Where appropriate, these behaviors were broken down into smaller, more manageable steps. For example, Luis had intolerable anxiety surrounding going to medical appointments, so exposure began with sitting in the clinic waiting room repeatedly until the anxiety diminished. Luis’ isolative behaviors were also targeted for in-vivo exposure. For instance, before treatment, he would only go to the grocery store late at night to avoid even a small crowd. In addition, he had little contact with his grandchildren out of fear that he would infect them. Each session, Luis was assigned different behaviors from the hierarchy to do as homework. Beginning in session three and continuing through session ten, imaginal exposure was conducted. His worst memories of childhood sexual abuse were targeted first. Luis described in detail a neighbor who raped him countless times from ages 13-16. In the beginning years, the perpetrator would rape Luis and tell him, “you can trust me,” “you will like it,” and “I like your body”. As Luis got older the neighbor bribed him with cash, alcohol, and marijuana in exchange for sex. On one particular night, he held a gun to his head to force him to have sex. In later sessions, exposure focused on Luis recalling having sex with an acquaintance who told him after the fact, “I have AIDS.” Luis was enraged and a physical fight occurred.

Throughout therapy Luis had to cancel sessions eight times due to conflicting medical appointments, lack of transportation, and/or illness. Nevertheless, the therapy progressed despite taking eight weeks to complete as opposed to five. The therapist
called Luis any time a regularly schedule appointment was missed to inquire about how he was feeling emotionally and physically and to confirm the next appointment. Luis paged the therapist on three occasions for extra support with homework and information on how to cope with the memories.

Luis’ alcohol usage was an issue from the start because he was drinking several times a week, which potentially would conflict with treatment. He was not reprimanded in any way, but his usage was explained to him as an aspect of avoidance related to PTSD. It was explained that it is common for trauma survivors to abuse alcohol as an attempt to numb emotional pain, but that usage makes PTSD worse. In addition, ground rules were established that he could not be under the influence during a session or while doing homework. He was encouraged to reduce his use and consider Alcoholics Anonymous. He understood and agreed to the therapist’s rationale and rules. However, he was somewhat skeptical about how alcohol could hinder treatment stating, “if you really want get my story, I should get lit up first then tell it to you.”

As expected, Luis reported significant distress for the first few sessions of imaginal exposure. Consequently, his alcohol usage was comparable to what it had been before treatment. By session six, he reported and demonstrated a decrease in distress and a decrease in alcohol use (See Table). He became gradually habituated to the trauma memories with each exposure. Further, his cognitive distortions evolved throughout treatment. For example, he expressed self-blame, embarrassment, guilt over thinking fondly towards his perpetrator, and confusion in the beginning sessions. As the sessions progressed, the therapist worked with him on normalizing his feelings and challenging his beliefs about himself. For homework, he listened to the audiotapes of the sessions
and was asked to continue to re-evaluate his beliefs. In the later sessions, he expressed a lot of anger towards the perpetrator, but not as many negative thoughts about himself. Luis also had success with in-vivo exposure. He mastered going to appointments and support groups and reported no anxiety while doing so. He prioritized spending time with his grandchildren and other family members, which he was able to do without experiencing any anxiety by the end of therapy.

Outcomes

PE therapy is going extremely well for most participants. Luis’ therapy progression is not unique in that many others have experienced comparable success. We have had a small number of dropouts, but the rate is lower than typically seen in other trauma victims. To date, 17% of participants did not finish the treatment while the average dropout rate is about 30% (Foa et al, 1991; Foa et al., 1999). Further, common reasons for dropping included illness and the loss or deterioration of a partner. It was rare that someone did not complete treatment due to negative reactions to PE. Surprisingly, most clients received adequate relief from their symptoms and good resolution from all traumas by session 10. A few required 2 additional sessions. To date, no participants have required the 18 sessions even though they were offered to everyone.

Concluding Comments
PLWH who have PTSD face several challenges. Consequently, there are barriers to delivering effective mental health services to this population. Exposure therapy has been repeatedly demonstrated to be effective in treating PTSD in a wide range of trauma victims, but the effectiveness is unknown for PLWH. Although quantitative results are not yet available, early outcomes suggest that PE is just as effective with this population as with other trauma groups when a flexible approach to treatment is taken. Anecdotally, the completers thus far have reported therapy to be a life-changing experience. Many describe more hope for the future and a vast improvement in quality of life. Clearly, PE should be considered as a treatment for PLWH with PTSD.
### PSS Scores and Reported Alcohol Use

<table>
<thead>
<tr>
<th>Session</th>
<th>PSS</th>
<th>Approximate alcohol usage (past week)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>2 fifth bottles of liquor</td>
</tr>
<tr>
<td>2</td>
<td>37</td>
<td>3 shots</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>1 fifth bottle of liquor</td>
</tr>
<tr>
<td>4</td>
<td>42</td>
<td>1 fifth bottle of liquor</td>
</tr>
<tr>
<td>5</td>
<td>8</td>
<td>8 cans of beer, 2 shots</td>
</tr>
<tr>
<td>6</td>
<td>26</td>
<td>6 cans of beer</td>
</tr>
<tr>
<td>7</td>
<td>2</td>
<td>2 cans of beer</td>
</tr>
<tr>
<td>8</td>
<td>26</td>
<td>6 cans of beer</td>
</tr>
<tr>
<td>9</td>
<td>6</td>
<td>6 cans of beer</td>
</tr>
<tr>
<td>10</td>
<td>21</td>
<td>2 cans of beer</td>
</tr>
</tbody>
</table>
References


References


Selected Empirical Articles—Exposure-Based Treatments


Cross Country Education complies with all rules and regulations set forth by the boards/associations to offer continuing education. It is imperative that you complete your evaluation so that proper reporting can be done.

**Instructions for Completing your Scan Evaluation Form**

1. Use a No. 2 pencil or a blue or black ink pen only.
2. **DO NOT** bend or fold your Scan Evaluation Form.
3. Please make solid marks that fill the response completely without any stray marks.
4. Complete your first and last name in ALL CAPS (if you do not have enough space for your full name, simply use all boxes that are available.)
5. Write in your registration number in the appropriate box.
6. Mark your profession.
7. Fill in license number.
8. Clearly mark all boxes appropriately.
9. Complete the back page of the evaluation; your Seminar Evaluation Objectives are on the following page for you.
10. Return your completed Scan Evaluation form back to the instructor.
Seminar Evaluation Objectives

**Prolonged Exposure Therapy for Post-Traumatic Stress Disorder (PTSD)**

*Speaker: Kirsten DeLambo, Ph.D.*

The purpose/goal of this activity is to help participants learn how to successfully treat PTSD.

Objectives:

1. Discuss the diagnosis, theoretical explanations and available treatments for PTSD?

2. Explore how to educate trauma victims to increase their ability to cope with trauma?

3. Explain how to treat PTSD clients with co-occurring substance abuse, personality disorders or medical conditions?

4. Identify and explain the main components of Prolonged Exposure (PE) therapy?

5. Discuss the theoretical underpinnings of PE and how to communicate the theory to your clients?

6. Identify how to effectively use PE by learning where and when to modify the procedures based on the needs of the individual?
We value our customers!

That’s why we would like you to take advantage of this special offer. This coupon is good for a $10 discount off of any program you choose to attend in the future.

Thank you for choosing Cross Country Education to fulfill your educational requirements.

Finding professional, one-day seminars in your area is now even easier—visit our website at:

www.CrossCountryEducation.com

Cross Country Education • P.O. Box 200 • Brentwood, TN 37024 • (800) 397-0180

Include this coupon with your next registration for one of our one-day seminars and receive $10 off!

OR

Call our toll-free number at (800) 397-0180 and mention discount code DSPWBC to receive your discount.

Limit one coupon per registration.
May not be used with any other offer and may not be used retroactively.
Prolonged Exposure Therapy for PTSD
Presented By: Kirsten DeLambo, Ph.D.

TEST 3

1. According to Kessler et al. (1995), what percentage of the U.S. population is exposed to at least one traumatic event?
   a. 50%
   b. 60%
   c. 70%
   d. 80%

2. According to the DSM-5, how long must someone suffer symptoms to consider a diagnosis of Post-Traumatic Stress Disorder (PTSD)?
   a. Does not specify
   b. 1 week
   c. 1 month
   d. 1 year

3. What disturbance below is not listed as part of DSM-5 criteria for PTSD?
   a. A response involving fear, helplessness or horror
   b. Re-Experiencing
   c. Avoidance
   d. Hypervigilance

4. Which is not listed as a factor that increases vulnerability for PTSD?
   a. Early age onset
   b. High cortisol excretion
   c. Longer lasting
   d. Lack of social support

5. Which is an effective treatment for PTSD?
   a. Prolonged Exposure
   b. EMDR
   c. Cognitive Processing Therapy
   d. All of the above

6. What theory drives prolonged exposure therapy?
   a. Object Relations Theory
   b. Psychoanalytic Theory
   c. Emotional Processing Theory
   d. All of the above
7. Emotional Processing Theory consists of:
   a. Feared stimuli
   b. Feared response
   c. Meaning of stimuli and response
   d. All of the above

8. According to Emotional Processing Theory, how is change made possible?
   a. By activating the fear structure
   b. By avoiding the fear structure
   c. By doing progressive muscle relaxation
   d. None of the above

9. Prolonged Exposure Therapy has been found to be effective in:
   a. Treating victims who are combat survivors only
   b. Treating victims who are sexual assault survivors only
   c. Treating victims from a wide range or traumas
   d. None of the above

10. Which is not a main component of Prolonged Exposure Therapy?
    a. Education about PTSD
    b. Positive self-statements
    c. Imaginal exposure
    d. In-vivo exposure

11. In general, how many sessions is Prolonged Exposure?
    a. 8 sessions
    b. 10 sessions
    c. 14 sessions
    d. 16 sessions

12. Which is not a part of the rationale section of Prolonged Exposure?
    a. Discussing the details of the client’s trauma
    b. Discussing success of prolonged exposure therapy
    c. That avoidance maintains PTSD
    d. Involving the client in the discussion

13. What is one aspect of breathing retraining, as it is taught in Prolonged Exposure Therapy?
    a. Slow breath in, count to 4 on the exhale, then pause
    b. Count to 10 slowly
    c. Count to 10 backwards
    d. Breathe slowly, focusing on the inhalation
14. During common reactions to trauma, the therapist should:
   a. Avoid lecturing
   b. Encourage the client to discuss feelings about PTSD and the trauma
   c. Normalize the client’s symptoms
   d. All of the above

15. Which is not a typical symptom discussed during common reactions to trauma?
   a. Trouble concentrating
   b. “Going crazy”
   c. Mania
   d. Sexual problems

16. For in-vivo exposure, which statement is not listed as a benefit?
   a. Increase confidence
   b. Diminish depression
   c. Decrease anxiety
   d. Improve quality of life

17. “SUDS” stands for:
   a. Systematic Understanding of Depression and Stress
   b. Systematic Understanding of Distress Signals
   c. Subjective Units of Depression
   d. Subjective Units of Distress

18. What types of items should be included on the in-vivo hierarchy?
   a. Trauma-related behaviors that are avoided
   b. Activities that increase social interaction
   c. Neither a or b
   d. Both a and b

19. When is SUDS usually introduced?
   a. During the rationale for in-vivo exposure
   b. Common reactions to trauma
   c. The first session of prolonged exposure therapy
   d. SUDS is not introduced, it is used as a reference for the therapist

20. In general, what is the SUDS range for beginning in-vivo assignments?
   a. 10-30
   b. 30-50
   c. 50-70
   d. 70-90
21. In general, the therapist should instruct the client to reduce SUDS by __% during iv-vivo assignments.
   a. 25
   b. 50
   c. 75
   d. 100

22. Which is not a goal listed during the rationale for imaginal exposure?
   a. To process and organize the memories
   b. To reduce obsessions
   c. To bring about habituation
   d. To learn that memories are not dangerous

23. Imaginal exposure aims to:
   a. Activate fear structure and emotions
   b. Enhance avoidance
   c. Improve memory
   d. All of the above

24. While conducting imaginal exposure, when possible, the therapist should instruct the client to tell the memory:
   a. As fast as possible
   b. With eyes open
   c. In past tense
   d. In present tense

25. How much time should imaginal exposure last, if possible, when it is first implemented?
   a. 20-30 minutes
   b. 30-40 minutes
   c. 40-60 minutes
   d. A minimum of one hour

26. During the first session of imaginal exposure, generally there should be:
   a. More talking on the part of the therapist
   b. A discouragement to talk about details of the trauma
   c. Less direction from the therapist
   d. More direction from the therapist

27. What is not an appropriate comment during imaginal exposure?
   a. “Try not to think about it so much.”
   b. “The memories can’t hurt you.”
   c. “You can do this.”
   d. “Hang in there.”
28. Which is an appropriate task during processing imaginal exposure?
   a. Detailed cognitive restructuring techniques
   b. Normalizing the client’s thoughts and feelings
   c. Processing countertransference
   d. None of the above

29. What session of PE does imaginal exposure generally begin?
   a. 1
   b. 2
   c. 3
   d. 4

30. What session of PE does in-vivo exposure generally begin?
   a. 1
   b. 2
   c. 3
   d. 4

31. If someone is under engaged, what can the therapist do?
   a. Label as PTSD avoidance
   b. Explore perceived consequences
   c. Assist client in using their senses to connect with memory
   d. All of the above

32. If someone is over engaged, what can the therapist do to lessen the level of engagement?
   a. Tell memory in present tense
   b. Tell memory with eyes closed
   c. Both a and b
   d. Neither a or b

33. When should PE not be implemented?
   a. When the trauma happened long ago
   b. When the personal has an intimate relationship with the assailant
   c. When the person remembers too much about the trauma
   d. All of the above

34. According to this presentation, what percentage of people with PTSD have at least one other psychiatric disorder?
   a. 60%
   b. 70%
   c. 80%
   d. 90%
35. If someone has other psychiatric problems, can PE be considered?
   a. Yes, PE can still be effective
   b. Yes, but only if the trauma is not the main focus of treatment
   c. Yes, but only if a rigid approach is taken
   d. No, PE is not appropriate

36. Most people who are exposed to trauma develop PTSD.
   a. True
   b. False

37. According to the DSM-5 a person could still have PTSD even if they do not endorse re-experiencing symptoms.
   a. True
   b. False

38. Lack of social support increases vulnerability for PTSD.
   a. True
   b. False

39. According to Emotional Processing Theory, in order to change a pathological fear structure, it must be activated.
   a. True
   b. False

40. The main components of prolonged exposure therapy are relaxation, in-vivo exposure, and cognitive restructuring.
   a. True
   b. False

41. Prolonged Exposure therapy can be conducted twice per week.
   a. True
   b. False

42. While delivering the rationale to clients it is not necessary to involve them in the discussion.
   a. True
   b. False

43. While delivering the rationale to clients, you generally should not discuss their avoidance behaviors.
   a. True
   b. False
44. In Prolonged Exposure Therapy, if a client is a substance abuser, their substance use should not be discussed.
   a. True
   b. False

45. For in-vivo exposure, the goal is to start out with assignments in the 50-70 SUDS range and gradually increase to assignments with a higher SUDS level.
   a. True
   b. False

46. For imaginal exposure, when possible, instruct the client to close their eyes and describe the memory in present tense, with as much detail as they can.
   a. True
   b. False

47. During the processing of imaginal exposure, it is okay to assist the client with modifying unhelpful beliefs, but it need not be a main focus of Prolonged Exposure.
   a. True
   b. False

48. In general, when beginning imaginal exposure, the therapist should instruct the client to start with the least troubling trauma memory.
   a. True
   b. False

49. If a person has a psychotic disorder, they are generally not appropriate for Prolonged Exposure Therapy.
   a. True
   b. False

50. Prolonged Exposure Therapy cannot be implemented with substance abusers.
   a. True
   b. False