UNC CHAPEL HILL SCHOOL OF SOCIAL WORK CLINICAL INSTITUTE

PROLONGED EXPOSURE

Approaching what matters:
Prolonged Exposure therapy for PTSD
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Introductions

- Trainees
  - *Prior PE experience?*
  - *Prior exposure therapy experience?*

Agenda

- Emotional processing theory
- Sessions 0-2
- Sessions 3-Final
- Special topics

Prolonged exposure: Evidence

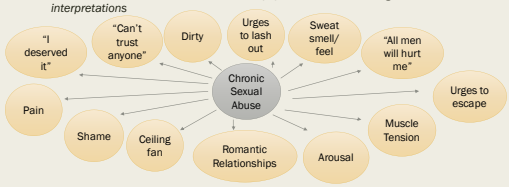
- Gold standard treatment for PTSD, dozens of RCTs demonstrating large effect sizes in primary and secondary measures (Powers et al., 2010)
- Meta-analysis demonstrates those who engaged in PE fared 86% better than controls at post-treatment (Powers et al., 2010)
- Equivalent outcomes to CPT, EMDR, SIT, etc. (Powers et al., 2010)
  - *Some studies suggest greater benefit for patients with prominent dissociation (Van Minnen et al, 2012)*
- No difference in efficacy for those with single or repeated trauma (Jerud et al., 2017)

Emotional Processing Theory

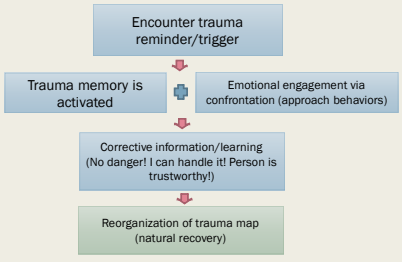
- Theory PE is based on
- Explains why PTSD symptoms are natural and *should* happen, why for some they remit, and for others they become chronic
- EPT is based on learning theory
  - *Classical conditioning*
  - *Operant conditioning*
  - *Inhibitory learning theory*
    - ***new- was not incorporated into original model

Emotional Processing Theory

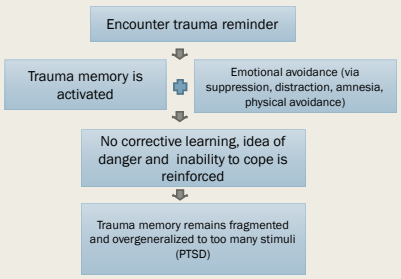
- EPT is the brain's representation of trauma-related stimuli, and a map for avoiding and escaping these stimuli
  - *Parts of network will be realistic and unrealistic*
  - *Includes info about trauma, emotional & physical reactions, & cognitive interpretations*



Natural Recovery according to EPT



PTSD according to EPT



Prolonged Exposure Therapy Components

- Psychoeducation about trauma
- Repeated exposure to trauma stimuli, while activating emotion network:
  - *Trauma memory (imaginal exposure, processing new learning)*
  - *Feared stimuli in the real world (in vivo exposure, new learning)*
- Prevention of avoidance/escape
- Repetition/generalization: to reinforce new learning in many contexts
- …. A word on habituation

Overview of sessions

- Session 0 – establishing PTSD diagnosis, safety, willingness/motivation
  - *Is this the time and place to do PE?*
- Session 1 – Explanation of PE, trauma interview, breathing
- Session 2 – Common reactions to trauma, SUDs, development of hierarchy
  - *Often broken up into 2 sessions*
- Sessions 3-5 – Imaginal Exposure
- Sessions 6-9 – Hot spotting
- Session 10 – Final session, relapse prevention

8-15 sessions typical, 90 minute sessions

Session 0

- Does the patient meet criteria for PTSD
  - *Possible assessment tools: PCL-5, PCL interview, LEC-5*
- Safety & Stability
  - *Does patient have safe, consistent housing and income?*
  - *Are patient's surroundings free from violence? Are previous perpetrators still a part of their life? Is a reasonable level of physical and emotional safety present?*
  - *Is patient demonstrating any significant behavioral dysregulation (violence, self-injury, suicidality, disordered eating) that is likely to pose a danger to themselves or others if exacerbated?*
  - *Does patient have skills needed to engage in exposures (e.g., if early childhood trauma, does patient have core interpersonal skills?)?*
- Motivation/Willingness/Time Commitment/Problem Solving
  - *Is patient willing to commit several hours per week to sessions and home practice?*
  - *What is likely to get in the way? How can we solve logistical difficulties?*
- Recording device?

A word on comorbidities….

- Substance use:
  - *Consider use of the COPE protocol* (Concurrent Treatment of PTSD and Substance Use Disorders Using Prolonged Exposure; Back et al, 2014)
- Depression:
  - Symptoms of depression often attenuate with PTSD treatment
- Prominent emotional/interpersonal/behavioral dysregulation OR treatment interfering behaviors (imminent suicidality/homicidality, child abuse, NSSI):
  - *Consider DBT first*
- Panic/OCD/GAD
  - *Depending on the severity and it's relation to trauma symptoms, consider building into in vivo exposure hierarchy; leading with in session exposures*
- Dissociation
  - *Exposure-based interventions preferable to cognitive-based interventions*
- Active psychosis or mania:
  - *Need to be treated first, as these would interfere with learning. Perfectly okay and safe to treat PTSD once stable.*

(Van Minnen et al., 2012)

Session 1

- Start recording!
- Overview and rationale (25 minutes)
- Trauma-relevant information
  - *Index trauma/representative trauma*
  - *Potential start and stop points*
- Breathing retraining
- Home practice
  - *Breathing*
  - *Rationale handout (share with partner if possible)*
  - *Listen to full audio recording once*

Session 1- Overall rationale

- Treatment focuses on alleviating trauma-related distress
- Orient to factors which prolong PTSD:
  - *Avoidance of trauma-related situations*
  - *Avoidance of trauma-related thoughts and images*
  - *Presence of dysfunctional cognitions*
- Validate short term function of avoidance (relief), while highlighting long term consequences
  - *Avoidance prevents patient from emotionally processing the trauma & modifying cognitions*
  - *Avoidance prevents new learning*
- A word on safety

Session 1: Overall rationale (cont)

- Two main treatment procedures:
  (1) Imaginal exposure: repeated revisiting of the traumatic event.
  - *Benefits:*
    - Intrusive memories/thoughts/nightmares decrease
    - Memory organization and get new perspective about the trauma
    - Differentiation between "remembering" an event and "reliving" an event
    - Differentiation between the trauma event and similar events
    - Learning about your ability to cope with difficult emotions
    - ***Habituation
  (2) In vivo (real life) exposure: repeated engagement with
    - Trauma-related triggers (for example, certain sites or smells that bring on immediate anxiety),
    - People/places/things that you have avoided due to trauma-related beliefs (e.g., intimacy or safety related beliefs),
    - Values-consistent activities
  - *Benefits:*
    - Engaging in the things that are important to you and consistent with your values
    - Learning important information about avoided situations
    - Learning important information about your coping abilities
    - ***Habituation- decreased distress over time (due to learning new information)

Example of presenting to client:

Responding to client questions:

- What if I don't want to remember what happened? It might be better that way.
- What if I remember things that didn't actually happen? Could we "manufacture" memories?
- When I think about the trauma it is like I am reliving it all over again. Why would you want me to do that?
- Should _____ be an exposure?

Session 1 role plays

- Select pairs
- Each person has 10 minutes to be therapist (switch half way)
  - *Present treatment overview and rationale*
- Be reasonably cooperative- goal is not to trouble shoot most difficult patients

Preparing for imaginal exposure

- Index trauma
  - *Option of multiple exposures*
  - *Representative trauma*
- Start and stop points
  - *Starting (go wide initially)- Is context needed to understand the memory*
  - *Stopping – a bit past grave danger or when patient felt safe*

Breathing retraining

- Offer as a skill for baseline distress
- Explain link between bodily sensations and emotional/cognitive experience
- Purpose of breathing is to adjust baseline breathing and provide corrective experience for body by slowing down breathing
- Encourage practice at calm times vs. as emotion regulation
  - *Consider that this can be used as a form of avoidance!*

Session 2

- Set agenda, review home practice
- Common reactions to trauma
- Rationale for in vivo exposure
- SUDs
- In vivo hierarchy
- Instructions for in vivo assignments
- Assign first in vivo for home practice

**** Many clinicians divide this session into 2, with an entire session devoted to hierarchy construction and/or practice of in vivo exposure*

**** If patient does not complete home practice from this session, DO NOT move on with treatment*

Session 2 (cont.)

- Common reactions to trauma- see handout
  - *Use a discussion based format*
- Rationale for in vivo exposure
  - *Breaks the cycle of anxiety reduction in response to avoidance (negative reinforcement)*
  - *Results in habituation (sometimes) and new learning*
    - Beliefs become more realistic
    - Perception of competence and self-esteem goes up (because distress doesn't go out of control or last forever)

Session 2 (cont.)

- SUDS: a language for distress (think pain scale)
  - *Anchors are important: 0, 25, 50, 75, 100*
  - *NO ONGOING SITUATIONS*
  - *Should be specific and discrete memories*
- What's wrong with these anchors?
  - *0: When I am home alone*
  - *25: When I have to go to the doctors office*
  - *50: When I see a movie with a rape scene*
  - *75: The mall on a Saturday*
  - *100: The times I was abused.*

Session 2 (cont.)

- Creating a hierarchy
  - *A living, changing document*
  - *At LEAST 15 items, preferably repeatable, that can be practiced for 30 mins or so*
  - *Wide range of SUDs (consider ways of scaffolding, eliminating safety behaviors)*
  - *Discuss objective safety*
  - *Looking for:*
    - Things avoided because they trigger trauma-related distress
    - Things avoided because they cause re-experiencing of trauma memories
    - Values-consistent activities (behavioral activation and social contact)
  - *Every item needs to be tied to a goal of the patient*
  - *Consider "themes" that the patient presents with, and try to hit on each one*

- Sample hierarchies

Sexual Assault/ Rape

- 30 - Feeling dizzy
- 30 - Holding hands
- 40 - Having partner come up behind me
- 40 - Saying no to someone (not partner, nonsexual advance)
- 45 - Wearing non-black colors
- 50 - Wearing shorts/skirts/short sleeves/ v-neck t-shirts
- 50 - Seeing Pepsi logo/commercial/ advertisement
- 55 - Working out in gym (midmorning)
- 60 - Walking to neighborhood park (daytime)
- 60 - Saying no to partner (nonsexual)
- 65 - Drinking beverage purchased at restaurant/shop
- 70 - Parking in parking garage during the day, no cars around
- 70 – Drinking Pepsi
- 70 - Working out in gym (evening)
- 70 - Having weight on top of me (weighted blanket)
- 75 - Having weight on top of me (pet)
- 80 - Saying no to partner's request for sexual intimacy
- 80 - Parking in parking garage next to cars
- 80 - Going out to dinner with friends, evening
- 85 - Having weight on top of me (partner cuddling, partially on side)
- 90 - Initiating consensual intimacy with partner
- 95 - Sleeping without lights on in house
- 95 - Sleeping w/o multiple layers of clothing on

Pre-eclampsia/Life-threatening prematurity

- 40 - Feeling woozy
- 50 - Feeling headache tension
- 40 – Talking to MIL
- 40 - Driving to doctor building, standing in waiting room
- 50 - Making requests of husband
- 50 - Being around other young babies
- 55 - Eating food high in salt content
- 60 - Looking at pictures of pre-term babies
- 60 - Attending doctor appointments
- 70 - Going on NICU support forums
- 70 - Going to Rex hospital
- 70 - Allowing students to hug her (fear of getting germs on her and spreading to baby)
- 75 - Taking baby to playdates (fear of germ exposure d/t NICU status)
- 80 - Feeling panicky (heart racing/flushing)
- 85 - Not changing clothes/showering immediately when she comes home
- 90 - Considering having a 2nd baby
  - 70 - looking up risks,
  - 80 - talking to doctors about possibility,
  - 80 - talking to partner about possibility
- 90 - Engaging in pre-term advocacy
- 90 - Hearing people cough/sneeze/appear ill
- 90 - Not checking blood pressure when urge occurs
- 95 - Talking to husband about what occurred (including resentment)

Military

- 30 – Sitting in car alone (locked) listening to music
- 35 - Sitting/studying on front porch without scanning
- 40 – Looking at pictures from Afghanistan, uniform, or other items
- 45 – parking in a **safe** lot at school with no other cars around
- 50 – Going to the grocery store in the morning
- 50 – Studying in the library while other people around (back not to wall)
- 55 – Playing basketball with a friend at school
- 55 – Talking with a friend or fellow vet about military experiences
- 60 – sitting in parking lot with cars on both sides
- 60 – parking 100 yards from trash on side of road
- 65 - Going to restaurant with partner and sitting without back to wall
- 65 – Going to movies and sitting in the back
- 70 – Being around people who resemble Middle Eastern appearance
- 70 – Being in a crowded mall or store with a trusted friend
- 70 - Smelling gasoline
- 75 – Listening to MP3 of mortar exploding/AK-47 fire
- 80 – Going to the grocery store during the evening
- 85 – Going to the movies and sitting in the middle
- 90 – Park next to trash on side of the road
- 95 – Watching war movie or documentary clip

Session 2: How to do an in vivo exposure

- Start around SUDs of 50
- PE protocol: stay for around 30-45 mins, or until SUDs decrease by 50% (Foa et al, 2007)
  - *Alternative: shaping toward increasing expectancy violations, incorporating variability, multiple contexts, deepened extinction & removal of safety signals (Craske et al., 2014; Foa, 2017);*
  - *Later in treatment, may consider strategies that would directly impede habituation for in vivo exposure (even if for just 1-2 attempts)*
  - *One-offs*
- Explain the importance of repetition (Repeatedly)
  - *Generalization/inhibiting old learning pathways with new, deeply learned information*
- Plan for problems
  - *Avoidance, safety behaviors, or opposite (jumping the hierarchy, unpredictable exposures)*
  - *Ask patient to use HW sheet or PE coach*

Role plays

- 15 minutes each
- Review rationale for in vivo exposure
- Construct SUDs scale
- Begin a hierarchy

Session 3

- Discuss homework (10 minutes)
  - *Do not proceed if still not doing home practice*
  - *Look for safety behaviors*
  - *Reinforce new learning, competence, more realistic view of the world*
- Rationale for imaginal exposure (10 minutes)
- Conduct imaginal exposure (30-45 minutes)
- Process imaginal exposure (15 minutes)
- Assign home practice
  - *Breathing*
  - *Audiotape of imaginal 1x/day*
  - *In vivo exercises daily*
  - *Full tape once*

Session 3: Rationale for Imaginal

- Organization: what happened and how does this fit into my life story? Making sense.
  - *New perspective*
- Remembering vs. Re-encountering
- Habituation
- Competence and confidence: I can think about the trauma and nothing terrible will happen

Session 3: Imaginal instructions

- New audio file
- Eyes closed, as if its happening now, allow feeling, present tense, all events, thoughts, feelings, sensory details
  - *Concrete interpreters: Use PB&J example*
- Will repeat as many times as time permits
- Give SUDs when asked, then continue

Session 3: Role plays

- 20 minutes total, 10 for each participant

Session 3

- What does the therapist do?
  - *Record SUDs*
  - *Listen for gaps*
  - *Listen for new information*
  - *Gauge emotional response and help titrate*
  - *Monitor changes across repetitions*
  - *PROCESS the experience (15 minutes)*

Session 3: Processing

- This is NOT when you do CPT or other cognitive restructuring
- Offer praise and reinforce courage
- Use short, open ended questions to elicit statements of new learning
  - *What was that like?*
  - *What did you notice/learn?*
  - *What was avoided, hardest, different from the actual trauma?*
  - *What part of the memory led you to that?*
  - *STICK WITH EMOTIONS AND LET THE PATIENT GUIDE YOU. DO NOT TRY AND CHANGE THEIR EMOTIONS. DO NOT POINT OUT WHAT YOU THOUGHT WAS MOST IMPORTANT.*
  - *Highlight that patient is safe.*
  - *Ask if coming back next week?*

Mid Sessions & Hotspotting

- Review homework- learning related to in vivo and imaginal exposures (10 min)
- Conduct imaginal (30-45 min)
  - *Focusing on hotspots as early as session 5*
- Processing (15-20 min)
- Discuss/plan in vivo exposure (10-20 min)
- Assign homework
  - *Continue breathing*
  - *Listen to imaginal daily*
  - *Continue in vivo exposures*
  - *Listen to full tape once*

When to Hotspot

1. Evidence of habitation from full memory
2. Avoidance of one (or more) pieces of memory
3. Memory is fully fleshed out/new learning has been maximized
   - *Full context discovered*
   - *No movement in processing- no new learning (prominent)*
   - *Themes of processing all been captured*
4. Chose from the beginning of session (do not start hotspotting midway)

Hotspotting Procedures

- Goal is to identify the most distressing parts of the memory by:
  - *Self-report*
  - *SUDs*
  - *Non-verbal data collecting during imaginals*
- Establish beginning and end of worst hot spots- start there
- Allows for more repetitions of single hot spot
- Assist in expanding detail while remaining engaged
- Move on after sufficient processing and/or habituation

Processing in Later Sessions

- During early sessions, begin to assess for themes
  - *Ex. Safety/danger, self-blame, trust, helplessness, feeling out of control of body, anger*
  - *What are they struggling with? Processing will provide clues.*
  - *What are themes in the in vivos that remain?*
- Prompt during processing, still with open ended questioning
  - *Avoid directive statements*
  - *Focus on patient's reflections*
  - *Remind of previous conclusions*
  - *Ask about points in the memory, differences in affect, ties to past/future*
  - *Worries: redirect, "What part of memory is this associated with?"*

Final session

- Review homework (10 minutes)
- Conduct imaginal exposure of full trauma (20-30 minutes)
  - *No hotspotting*
- Process imaginal exposure, focusing on how trauma memory has changed
- Evaluate differences in SUDs from in vivo hierarchy at start vs. now
- Evaluate utility in different procedures, what was learned about exposure
- Assign home practice – focusing on continued exposure and generalization for relapse prevention purposes

Special Topics

- Under-engagement
- Over-engagement
- Sexual/intimacy based hierarchies
- Individualization for comorbid disorders and complex trauma
- Self-care, supervision, and consultation
- Others?

References

Craske, M. G., Treanor, M., Conway, C. C., Zbozinek, T., & Vervliet, B. (2014). Maximizing exposure therapy: an inhibitory learning approach. *Behaviour research and therapy*, *58*, 10-23.

Foa, E. B., Hembree, E. A., and B. O. Rothbaum. (2007). Prolonged exposure therapy for PTSD : emotional processing of traumatic experiences: therapist guide. Oxford ; New York : Oxford University Press.

Foa, E. B. (2011). Prolonged exposure therapy: past, present, and future. *Depression and anxiety*, *28*(12), 1043-1047.

Jerud, A. B., Farach, F. J., Bedard-Gilligan, M., Smith, H., Zoellner, L. A., & Feeny, N. C. (2017). Repeated trauma exposure does not impair distress reduction during imaginal exposure for posttraumatic stress disorder. *Depression and Anxiety, 34*(8), 671-678. doi:10.1002/da.22582

Harned, M. S., Korslund, K. E., Foa, E. B., & Linehan, M. M. (2012). Treating PTSD in suicidal and self-injuring women with borderline personality disorder: Development and preliminary evaluation of a dialectical behavior therapy prolonged exposure protocol. *Behaviour research and therapy, 50*(6), 381-386.

Powers, M. B., Halpern, J. M., Ferenschak, M. P., Gillihan, S. J., & Foa, E. B. (2010). A meta-analytic review of prolonged exposure for posttraumatic stress disorder. *Clinical Psychology Review, 30*(6), 635-641. doi:10.1016/j.cpr.2010.04.007

Van Minnen, A., Harned, M. S., Zoellner, L., & Mills, K. (2012). Examining potential contraindications for prolonged exposure therapy for PTSD. *European Journal of Psychotraumatology*, *3*(1), 18805.