

Narrative Exposure Therapy (NET): A Short Term Treatment for Traumatic Stress Disorders





What is Narrative Exposure Therapy (NET)?

NET – an intervention for the treatment of complex traumatic stress in children and adults.

🗸 short-term

field-oriented

culturally
 sensitive

- science-based
- therapeutic &

human rights



Narrative Exposure Therapy (NET)

Combination of behavioral exposure and testimony therapy (Lira and Weinstein)

Diagnostic Assessment and Psychoeducation

Exposure to traumatic events

Documentation of biography

Use of the narration for human rights work or personal use of the client



Narrative Exposure Therapy (NET)

TWO GOALS:

1. Reduction of PTSD symptoms by confronting/exposing the client with the memories of the traumatic event.

EXPOSURE: Imaginative reliving, emotional processing, reweaving hot and cold memory. 2. Construction of a consistent document.

NARRATION of the client's biography, especially the consequences: survivor testimony.



Relevant Mechanisms

- *Chronological* reconstruction of the autobiographic/episodic memory
- Activation of the fear network through exposure to modify the emotional network
- Meaningful integration of hot and cold memories
- Reinterpretation of the memories; regaining a sense of dignity and the need for acknowledgement



Cumulative Effect of Traumatic Events and Adverse Life Experiences



More different types of stressful events, the more likely someone is to develop PTSD

(Catani et al., 2008, BMC Psychiatry)







NET, KIDNET, & FORNET: The Evidence



Effective Treatments for PTSD

- Cognitive behavioral treatment
- Trauma-focused CBT (TFCBT)
- Eye Movement Desensitization and Reprocessing (EMDR)
- Stress management
- Prolonged Exposure

Trauma-focused psychological treatments are most effective.



Randomized Controlled Trials of NET

- Refugees, internally displaced persons (IDPs), asylum seekers
 Romania, Uganda, Rwanda, Germany, Norway
- Living in their original homes, camps in their own countries, neighboring countries, or far from original home
- Individuals across the lifespan
 - Children \geq 7 years
 - Adolescents
 - Adults
- Simple and complex trauma

Effectiveness of NET Lely et al. (2019)



Table 1. Characteristics of the included studies.

			Male participants	Treatment					Dropout	
Study name	N NET	Age	(%)	dose	Professionals	Outcome	Language	Migration	NET	Control
Alghamdi et al. 2015	17	28.7	100.00	360	1	SR*	1	0	0.00	WLC*
Al-Hadethe et al. 2015	20	17.5	100.00	300	1	SR	1	0	0.05	EFT*
Bichescu et al. 2007	9	68.9	100.00	600	1	DI*	1	0	0.00	PED*
Ertl et al. 2011	29	18.66	44.8	840	0	DI	1	0	10.34	Catch-up*
Hensel-Dittmann et al. 2011	15	36.4	57.14	900	1	DI	0	1	20.00	SIT*
Hijazi et al. 2014	41	47.6	36.59	225	1	SR	1	1	4.88	WLC
Jacob et al. 2014	38	40.0	10.53	960	0	DI	1	0	2.63	WLC
Morath et al. 2014a	17	27.29	58.82	1080	1	DI	0	1	0,00	WLC
Morath et al. 2014b	19	28.7	67.65	1080	1	DI	0	1	21.05	WLC
Neuner et al. 2004	17	31.9	41.18	420	1	SR	0	0	5.88	SC*
Neuner et al. 2008	111	34.4	49.55	540	1	SR	1	0	3.6	TC*
Neuner et al. 2010	16	31.6	68.75	1055	1	SR	0	1	12.5	TAU
Schaal et al. 2009	12	19.42	38.46	540	1	DI	0	0	0.00	IPT*
Stenmark et al. 2013	51	34.51	66.67	900	1	DI	0	1	25.49	TAU
Zang et al. 2013	11	56.64	22.72	360	1	SR	1	0	0.00	WLC
Zang et al. 2014, NET* 2014	10	53.5	6.67	300	1	SR	1	0	0.00	WLC
Zang et al. 2014, NET-R* 2014	10	56.5	6.67	270	1	SR	1	0	0.00	WLC

Catch-up, academic catch-up programme; DI, diagnostic interview; EFT, emotional freedom techniques; IPT, interpersonal psychotherapy; NET, narrative exposure therapy; NET-R, NET – revised; PED, psychoeducation; TC, Trauma Counselling; SC, supportive counselling; SIT, stress inoculation training; SR, self-report; TAU, treatment as usual; WLC, waiting-list conditions.



Effectiveness of NET cont. Nose et al. (2017)

Country of origin Intervention (No of Control Ν Design PTSD Follow-up Study Country sessions) (months) measure Africa, Middle East, Balkans Waiting 33 RCT CAPS 3 Adenauer Germany NET (12) 2011 list Buhmann Denmark Iran, Iraq, Afghanistan, CBT (16) Waiting 142 RCT HTQ 6 2016 Balkans list Drozdek 2010 Netherlands Iran, Iraq, Afghanistan TFP (85) Waiting 82 CCT HTQ 12 list 2 Hijazi 2014 USA Iraq **NET (3)** Waiting 63 RCT HTQ list Hinton 2004 USA CBT(11) Waiting 12 RCT HTO 3 Vietnam list Hinton 2005 USA RCT HTQ 3 Cambodia CBT (12) Waiting 40 list Kruse 2009 Bosnian TFP (25) TAU 70 CCT HTQ 12 Germany 3 Liedl 2011 Waiting 36 RCT PDS Germany Balkans, Turkey CBT (10) list Morath 2014 Germany Africa, Middle East NET (12) Waiting 34 RCT CAPS 4 list Turkey, Balkans, Africa RCT PDS 8 Neuner 2010 Germany NET (9) TAU 32 Otto 2003 USA Cambodia TAU RCT CAPS CBT (10) 10 Renner 2011 Chechnya **CROP (16)** Waiting 56 RCT HTQ 4 Austria list 6 Stenmark Norway Iraq, Afghanistan, Africa, NET (10) TAU 81 RCT CAPS 2013 Middle East Weine 2008 USA Bosnia FGI (9) TAU 197 RCT 6

Table 1. Selected characteristics of included studies.

Abbreviations: NET: Narrative Exposure Therapy; CBT. Cognitive Behavior Therapy; TFP: Trauma Focused Psychotherapy; CROP: Culture-Sensitive Oriented Peer; FGI: Family-Group Intervention; TAU: Treatment as usual; RCT: Randomised Controlled Trial, CCT: Controlled Clinical Trial; PTSD: Posttraumatic stress disorder; CAPS: Clinician-Administered PTSD Scale; HTQ: Harvard Trauma questionnaire, PDS: Post Traumatic Stress Diagnostic scale.

doi:10.1371/journal.pone.0171030.t001

Effectiveness of NET cont. Siehl et al. (2020)

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	NET	Co	ntrol		
Study	Std-M Std-S	SD Std-M	Std-SD	in favour of NET in favour of Control	SMD [95% CI]
Adenauer et al., 2011	-2.6 0.4	1.02	0.19	, <u> </u>	-3.62 [-5.13, -2.12]
Alghamdi et al., 2015	-0.69 0.0	4 -0.04	0.06	⊢	-0.65 [-1.25, -0.04]
Crombach & Siehl, 2018	-1.98 0.2	3 -0.77	0.08	·	-1.21 [-2.30, -0.12]
Erti et al., 2011	-1.34 0.0	7 -0.63	0.04	·	-0.71 [-1.35, -0.06]
Hensel-Dittmann et al., 2011	-1.17 0.1	1 -0.18	0.08	·	-0.99 [-1.85, -0.13]
Hijazi et al., 2014	-0.38 0.0	3 0	0.05	⊢ ∎∔1	-0.38 [-0.90, 0.14]
Lely et al., 2019	-0.26 0.0	6 -0.87	0.09	·	0.61 [-0.15, 1.36]
Morath, Gola et al., 2014	-2.15 0.1	9 -0.14	0.06	·	-2.01 [-3.00, -1.03]
Morath, Moreno-Villanueva et al., 2014	-2.52 0.2	2 -0.6	0.06	·•	-1.92 [-2.96, -0.88]
Neuner et al., 2004	-0.78 0.0	8 -0.26	0.07	⊢_ ∎i	-0.53 [-1.29, 0.23]
Neuner et al., 2008	-1.54 0.0	2 -1.7	0.02	⊢ ∎1	0.16 [-0.24, 0.56]
Orang et al., 2018	-2.26 0.2	1 -1.09	0.09	·	-1.17 [-2.25, -0.09]
Schaal et al., 2009	-0.78 0.1	1 -0.74	0.09	⊢	-0.04 [-0.92, 0.83]
Stenmark et al., 2013	-1.73 0.0	8 -0.6	0.06	⊢ − ∎ −−1	-1.13 [-1.84, -0.42]
Zang et al., 2013	-3.01 0.5	-0.12	0.09	·	-2.90 [-4.41, -1.38]
Zang et al., 2014	-2.91 0.5	2 -0.18	0.1	· · · · · · · · · · · · · · · · · · ·	-2.73 [-4.28, -1.18]
RE Model for PTSD (Q = 76.78, df = 15, p = 0.000;	; I ² = 84.9%)			JJ	-1.06 [-1.58, -0.55]
а			-6	-4 -2 0 2	

Standardized Mean Difference (SMD) - PTSD



KIDNET: Randomized Controlled Trials with Children and Adolescents

 Children with PTSD of asylum seekers in Germany Ruf et al., Journal of Traumatic Stress (2010)

PTSD severity (UPID score)	pre	6 months post	1 year follow-up
KIDNET <i>Effect sizes</i>	42.33	18.08 <i>d= 1.85</i>	18.92 <i>d=1.74</i>
Waiting-list	38.31	33.77	

- Tamil children traumatized by war and Tsunami treated by trained local counsellors (former school teachers) *Catani et al. (2009), BMC Psychiatry*
- Former child soldiers treated by local counsellors Ertl et al. (2011), JAMA



NET with Sudanese Refugees Imvepi Camp, Uganda





Affective Picture Processing in PTSD





Effects of NET on the Brain

Time effect of each group



Changes within the group (pre-post):

Significant increase of left occipital activity selectively towards threatening cues

NET vs Waiting-list:

Significant increase of superior-parietal activity in the NET group selectively towards threatening pictures.



(Adenauer et al., BMC Neuroscience, 2011)



Processing of Aversive Stimuli in PTSD

- rapid and strong reaction of the autonomic nervous system
- very early frontal activation ("alarm")
- Reduced processing in posterior brain areas ("avoidance")

Narrative Exposure Therapy

- enhanced activation in occipital cortical areas
 - ➔ increased visual processing
- enhanced activity in parietal areas
 - selective attention and episodic memory retrieval evaluation of the situation by taking into account the actual context
 - → reduction of the fear response



Refugees Becoming Therapists

- Therapies with Sudanese and Rwandese refugees in Nakivale Refugee Camp, Uganda
- Training of refugees without any medical/ psychological background as NET therapists
- Randomized controlled trials comparing NET, "Trauma Counseling" and a "Monitoring Group"

(Neuner et al. 2008)



Kaltenbach *et al. BMC Psychiatry* (2020) 20:312 https://doi.org/10.1186/s12888-020-02720-y

RESEARCH ARTICLE

Trajectories of posttraumatic stress symptoms during and after Narrative Exposure Therapy (NET) in refugees

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BMC Psychiatry

Open Access





Traumatic Stress and Posttraumatic Stress Disorder

Etiological Model and Diagnostic Aspects

Traumatic Event (DSM-5)
 Criterion A. Stressor

- Exposure to actual or threatened death, serious injury, or sexual violence in one (or more) of the following:
 - Direct experience
 - Witnessing, in person
 - Indirectly (to close family member or friend)
 - Repeated/extreme indirect exposure to aversive details:
 - Through professional duties (e.g. first responders, treatment providers)
 - <u>Not</u> via media, TV, movies etc.

The Function of Fear

- Brain takes cues from environment and activates body for an appropriate response to potential danger/threat
- Quick response to threat is evolutionarily adaptive
- Brain triggers the secretion of stress hormones and prepares body system for rapid (alarm) response to threat:
 - FLIGHT or FIGHT

https://www.youtube.com/watch?v=i3agHc02aPo

https://www.youtube.com/watch?v=I7LdW2KQCSE





Key Brain Structures

- Thalamus: relay station between midbrain to cortex, sleep/wake, arousal
- *Hypothalamus:* Central to neuroendocrine functioning, hormones, HPA Axis activation
- Association cortex: higher order cognition, complex
- Prefrontal cortex: executive functions, personality, emotion regulation
- Hippocampus: episodic memory (autobiographical), consolidation of short-term to long-term memory
- Amygdala: emotion facilitated memory, memory consolidation
- Anterior cingulate gyrus: modulates emotional expression

Slide credit: Mandi Burnette, PhD, University of Rochester

The Alarm Response to Stress





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(Suggested) Effects of Stress/Trauma on Brain Structures





Remembering the Trauma



"First time I rode a bicycle …" "First time I drove a car/ driving license exam…" "My first public presentation…" "My first romantic kiss …"





Taxonomy of Memory





Memory Theory

Non-declarative memory (Hot Memory)

- Automatically activated by cues
- Sensory, emotional & physiological perceptions
- Fragmentary reports
- Sensation of "Here and Now"

Declarative memory (Cold memory)

- > Deliberately retrievable
- Knowledge about the event in the context of life, time & space
- > Chronological report







Knowledge about...

I can remember that it was a warm day in spring. It was near my parent's house, someday in the 80s, I was not yet going to school. I had a blue bike, it was a friend's bike who lived next to us at this time. My father was pushing me and I can remember well the feeling I had when I started rolling on my own.

Lifetime periods

General Events

Specific event

Emotional/Sensory Network





Stress and Memory



stress level





>6

Dose-Effect of Traumatic Stress

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Number of traumatic event types

Sudanese refugees, Imvepi refugee camp, Uganda (Neuner et al. 2004, BMC Psychiatry)

Tamil school children, North-East Sri Lanka (Catani et al., 2005, ESTSS)


Cumulative Effect of Traumatic Events and Adverse Life Experiences



(war, family violence & Tsunami)

(Catani et al., 2008, BMC Psychiatry)

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Posttraumatic Stress Disorder (PTSD)

- DSM-5: "Trauma-and Stressor Related Disorders"
- 8 diagnostic criteria
- Enduring reaction to trauma
- "Stuck" in this past traumatic memory



 Unable to integrate sensory, cognitive, emotional, and physiological aspects of the experience into the particular declarative memory of the event

Criterion A.

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Exposure to actual or threatened death, serious injury or sexual assault through ONE of the following:

- Directly experiencing the event
- Witnessing the event in person as it occurred to others
- Learning that the traumatic event(s) occurred to a close family member or friend
- Experiencing repeated or extreme exposure to aversive details of the traumatic event(s)



+ Criterion B. Intrusion Symptoms



- Event is re-experienced (at least ONE)
 - Recurrent, involuntary, intrusive memories
 - Traumatic nightmares
 - Dissociative reactions/flashbacks
 - Vary from brief to full loss of consciousness
 - Intense distress after exposure to reminders
 - Physiological reactivity after exposure to reminders

Source: APA, 2013; Photo credit: anxietytreatmenthub.com; Slide credit: Mandi Burnette, PhD, University of Rochester

Criterion C. Avoidance Symptoms

- Persistent effortful avoidance of distressing trauma-related stimuli (at least ONE)
 - Trauma-related thoughts or feelings
 - Trauma-related external reminders (e.g., people, places, things)

Source: APA, 2013; Photo credit: Psychcentral.com Slide credit: Mandi Burnette, PhD, University of Rochester



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Criterion D. Negative Alterations in Cognition & Mood



- Negative alterations in cognitions and mood that began or worsened after the trauma (at least TWO)
 - Inability to recall key features of event (not due to head injury, alcohol or drugs)
 - Persistent (often distorted) negative beliefs and expectations about oneself and the world
 - Feeling alienated from others
 - Persistent negative trauma-related emotions (e.g., fear, horror, anger, guilt, shame)
 - Markedly diminished interest
 - Constricted affect: inability to experience positive emotions

Source: APA, 2013; Photo credit: anxietytreatmenthub.com; Slide credit: Mandi Burnette, PhD, University of Rochester

Criterion E. Alterations in Arousal and Reactivity Symptoms

- Trauma-related alterations in arousal and reactivity that began or worsened after the traumatic event (at least TWO)
 - Irritable or aggressive behavior
 - Self-destructive or reckless behavior
 - Hypervigilance
 - Exaggerated startle response
 - Problems in concentration
 - Sleep disturbance

Source: APA, 2013; Photo credits:Psychcentral.com Slide credit: Mandi Burnette, PhD, University of Rochester



Other Criteria

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- Criterion F. Duration of symptoms is more than 1 month.
- Criterion G. Causes <u>clinically significa</u> <u>distress</u> or <u>impairment</u> in the individua
 - social interactions
 - capacity to work
 - or other important areas of functioning.
- Criterion H. Not the physiological res of another medical condition, medicatidrugs or alcohol.



Source: APA, 2013; Slide credit: Mandi Burnette, PhD, University of Rochester





- With dissociative symptoms:
 - Depersonalization: experience of being outside observer of or detached from oneself (feeling as if this were a dream)
 - Derealization: experience of unreality, distance, or distortion
- If happens more than 6 months after trauma called *delayed expression*

Source: APA, 2013; Photo credit: anxietytreatmenthub.com; Slide credit: Mandi Burnette, PhD, University of Rochester



The Defense Cascade



Schauer & Elbert (2010). Dissociation Following Traumatic Stress, Journal of Psychology



Increasing dissociation during cascade progression



Characteristics of Events That May Elicit Dissociative Fright, Flag, or Faint

- Imminence of threat/aggressor and total helplessness (e.g., direct body contact with perpetrator, being constrained, and danger of skin penetration by sharp objects
- Rapid arousal peak and startle response due to unexpected and sudden proximity of threat or aggressor
- Presence of fresh blood or mutilated bodies
- Being contaminated and contact to infectious material (e.g., body fluids, sperm, feces)
- Anal, vaginal, or oral penetration of the victim
- Severe pain being inflicted on the victim



PTSD Prevalence Rates in the U.S: The National Comorbidity Survey (NCS)

(Kessler et al., 1995; NCS, Kessler et al., 2008)

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	Women	Men
"lifetime prevalence" (7.8% on average)	10.4 %	5.0 %
development of PTSD after confrontation with a traumatic event (depending on trauma type)	20.4% up to 48.8% (rape)	8.2 % up to 38.8% (war combat)
most frequent trauma types	 sexual violence physical assault being threatened with a weapon childhood physical abuse 	 participation in a combat situation childhood physical abuse
Comorbid disorders present?	79%	83%
Types of comorbid disorders	anxiety disorders, substance abuse, mood disorders	



PTSD in Survivors of Organized Violence

Population	n	PTSD
Sudan	664	49%
Uganda	1419	19%
Sudanese refugees in Uganda	1240	48%
Rwandese refugees in Uganda	959	31%
Somali refugees in Uganda	527	51%
Tamil children in Sri Lanka	425	24%
Sri Lankan children after Tsunami	265	18 - 41%
Afghan children in Kabul	287	19%
Asylum seekers in Germany	40	40%
Children of Asylum seekers in Germany	120	20%



Disorders Frequently Comorbid with PTSD in Adults (National Comorbidity survey)

diagnosis	lifetime prevalence (women vs men)
major depressive disorder	48%
dysthymia	22%
GAD	16%
simple phobia	30%
social phobia	28%
panic disorder	13 vs 7 %
alcohol abuse	28 vs 52 %
drug abuse	27 vs 35%
conduct disorder	15 vs 43 %
	Kessler et al. (1995)





TREATMENT OF PTSD with NET

Overview

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Diagnostic Assessment

Assessing PTSD in Adults

VIVO international

Self-report measures

Impact of Event Scale (IES) Impact of Event Scale – revised (IES-R) Posttraumatic Stress Diagnostic Scale (PDS) Penn Inventory for Posttraumatic Stress

Clinical Interview (specific for PTSD) Clinician Administered PTSD Scale (CAPS) Structured Interview for PTSD (SI-PTSD) PTSD Symptom Scale-Interview

Tools for specific populations:

Mississippi Scale for Combat-Related PTSD PTSD-Scale – Military

Standardized Clinical Interview (general)

Composite International Diagnostic Interview (CIDI) Structured Clinical Interview for DSM-IV Axis I Disorders (SCID) Mini International Neuropsychiatric Interview (M.I.N.I.)



Assessing PTSD in Children

PTSD Instruments

Self report: UCLA Child PTSD Index (UPID)

PTSD interview: CAPS-CA

Clinical Interview: M.I.N.I. KID

Instruments to assess childhood trauma (family violence)

- Early Trauma Inventory ETI (Bremner, 2000)
- Childhood Trauma Questionnaire CTQ (*Bernstein, 1994*)
- Conflict Tactics Scales Revised CTS (Murray Strauss)
- Event Checklist for Family Violence (Catani, 2008)



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- 49 item self-report instrument based on the DSM-IV diagnostic criteria for PTSD
- allows diagnosis of PTSD and provides a severity rating of PTSD symptoms

DSM IV – Diagnosis

- 1) Event list
- 2) Worst Event & A-Criterium
- 3) Criteria B, C & D:
 - Intrusions (5 Items)
 - Avoidance (7 Items)
 - Hyperarousal (5 Items)
- 4) duration & onset of symptoms
- 5) level of impairment in functioning

Severity rating

Frequency of symptoms: 0 = not at all / only one time 1 = once a week / once a while 2 = 2-4 times a week / half the time 3 = 5 or more times a week/ almost always

Cut-offs for symptoms severity rating categories:

<10	= mild
> 11 and <20	= moderate
> 21 and < 35	= moderate to severe
> 36	= severe

Foa et al. (1997). Psychological Assessment



Diagnostic Assessment: Tips

- Acknowledge the client's worst fear
- Sensitivity and trust
- Remember: The clinician is asking the client to take a tremendous risk and abandon avoidance and protection
- Ask clients to let you know when interview becomes upsetting
- Keep clients informed psychoeducation, why you are doing this
- Confidentiality

TREATMENT OF PTSD

Pyschoeducation

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Psychoeducation

Part 1

- 1. What is PTSD?
 - a. Connect to client's
 - symptoms
 - b. Normalize
 - c. Legitimize



Stress and Memory

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Portugue de la construction de l

stress level



Source: Vivo (2013)

Psychoeducation



Part 2

Introduce NET

- Explain the process, imaginative exposure, written narrative
- **b.** 70-80% effective at decreasing symptoms
- ^c Symptoms may get worse before they get better
- d. Some relief right away, some after 3-6 months
- Stress importance of coming regularly and following through on process

Why does NET work? - Therapeutic vivo Agents

- Active chronological <u>reconstruction</u> of the autobiographic/episodic memory
- Prolonged <u>exposure</u> to the 'hot spots' and full activation of the fear memory in order to modify the emotional network
- Meaningful linkage and <u>integration</u> of psycho-physiological and somato-sensory responses to the time-, space-, and life-context
- The <u>cognitive re-evaluation</u> of behavior and patterns, as well as reinterpretation of the meaning-content through reprocessing of negative, fearful and traumatic events
- Regaining of survivors dignity and satisfaction of the need for <u>acknowledgement</u>. Explicit human rights orientation of `testifying.'



Psychoeducation on Lifeline and Exposure

- Safety within the client/therapist contact
- Treatment and therapist behavior is transparent and predictable
- Physical integrity is respected
- Therapist shows compassion
 - Understanding and non-judgmental acceptance
- Confidentiality

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The Lifeline

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Flow of sessions

Session #1:

- Assessment and psychoeducation

Session #2:

- Psychoeducation and Lifeline

Session #3 - ? (end of lifeline):

- re-read preliminary narration
- fill in more details
- continue with narration
- slow down whenever you approach a traumatic "stone"

Last session:

- re-read the entire narration for the last time (maybe add hope for the future)
- signing ritual and handing over of narration (if appropriate)



Lifeline

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- 1. Create a "map" of significant life events on the rope, using flowers and stones to identify traumatic events in chronological order
 - a. Rope as symbol of life
 - b. Flowers as symbols for joyful/happy/good events
 - c. Stones as symbols for horrific/painful/bad events



Lifeline

- Only asking for a "headline" for each significant event
 - No elaboration
- Ask for main thoughts and feelings of each event
 - If it is a clear traumatic event, do not ask for main thoughts and feelings b/c it risks client becoming overwhelmed/dissociating



Re-reading and Exposure
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Re-reading and Exposure

- 1. Start at the beginning of lifeline and develop the narrative
 - a. can pause briefly at non-traumatic events to ask if they would like to change or add to what was written down in the lifeline
- 1. Exposure: Slow down at each/most traumatic events to complete an exposure session
 - a. Typically, one traumatic event exposure occurs in each NET session
- 1. At the following session re-read narrative from previous exposure session and continue forward on the lifeline until the next traumatic event/exposure



Flow of sessions

Session #1:

- Assessment and psychoeducation

Session #2:

- Psychoeducation and Lifeline

Session #3 - ? (end of lifeline):

- Exposure sessions: One for each traumatic event
- 2nd exposure session and on: Re-read preliminary narration and make corrections if applicable
- Continue with narration
- Slow down whenever you approach a traumatic "stone"

Last session:

- Signing ritual and handing over of narration (if appropriate)
- Optional: Re-read the entire narration for the last time (maybe add hope for the future)



Beginning an Exposure Session

- Start to slow down and try to get a clear picture about the situation **before** the hot spot happened (e.g., two hours before)
- Know or observe that you are approaching a hot spot
 - Client becomes impatient, aroused and tries to speed up
 - Story gets fragmented



Exposure - Overview

Create a very detailed "movie" of the event by: Weaving the hot and cold memories together in the hot spot

While weaving, reinforcing reality by: comparing "then" and "now"

Exposure - Overview

- Hot Memory (Associative memory)
 - Automatically activated by cues
 - Sensory, emotional, and physiological perceptions
 - Sensation of the "here and now"
 - Iocated in the Amygdala

Cold Memory (Context memory)

- Deliberately retrievable
- knowledge about the event in the context of life, time, and space
- Chronological report
 - located in the Hippocampus



COLD memory

<u>Space</u>: Where did it happen?

<u>Time</u>: When did it happen?

<u>Chronology</u>: What happened? What happened next?

HOT memory

<u>Cognitive</u>: What did you think?

Emotional: What did you feel?

<u>Physiological</u>: How did your body react?

<u>Sensory</u>: What did you see smell, taste, hear?

THEN

And

Now



Exposure

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Stay in the HOT SPOT until client has experienced at least some relief

Reinforce reality

- Constantly compare "then" and "now"
- Be attentive to prevent
 - Dissociation
 - Avoidance
 - Flashbacks

□ If it's supportive: May use creative tools for exploration (e.g. body position, drawings)



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Closing

- 1. May re-read entire narrative
- 2. Give the client the narrative (if they would like it)
- 3. Honor the end of the process however the client would like
 - a. Hopes/dreams for the future
 - b. Identifying goals for therapy that arose during NET

























cognitive re-organization:

integration in autobiography, reprocessed meaning, changes in self-concept, awareness of patterns of coping

associated features:

shame, guilt, de-realization, de-personalization, and de-attachment





Dealing with Stones: THE WORST MISTAKES



Stopping at the height if fear

Allowing de-realization/dissociation and avoidance





Behavioral Changes Associated With Dissociation ("Shut-Down" Reaction)

- Sensory-afferent signs: person may become unresponsive, with unfocused gaze
- Motor-afferent signs: visible decrease of bodily movements and immobility
 - Bodily numbing and slight paralysis (mainly in legs)
 - Yawning in the middle of the arousing exposure (in order to get blood to muscles and increase heart rate)
 - Dizziness, blurred vision, weakness of the muscles
- Language processing: unclear/confused speech, fragmented sentences, or inability to speak
 - Almost no or delayed response to sounds

Therapeutic Intervention for Shut Down" Reactions



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Sensory-afferent:	Stimulate the senses in the here & now, turn on bright, present tactile sensations (e.g., fabric, ice-pack), focus attention to sounds in the room
Motor-afferent:	Activate skeletal muscles & enhance blood pressure & muscle tone (e.g., applied tension, physical exercises, leg crossing; body balancing tasks)
Language processing:	Emphasize the narration of the PAST traumatic scene, supported by the facilitation of continuous narrative engagement in the PRESENT (e.g., active communication; enhance speech production)



Things to Avoid (Both PTSD Subtypes)

- Ending exposure session prematurely before the event has been contextualized and integrated into cold memory
- Disengagement from here and now
- Relaxation instead of activation
- Sensory similarities between the trauma context and the therapeutic setting
- Stimuli that are associated with disgust or similar to body fluids and feces
- Threat cues in the here and now (present safety signals instead)
- Semi-darkness in the room and objects for hiding behind (e.g., furniture, large plants)



Therapeutic Agents of NET

- Active chronological <u>reconstruction</u> of the autobiographic/episodic memory
- Prolonged <u>exposure</u> to the 'hot spots' and full activation of the fear memory in order to modify the emotional network
- Meaningful linkage and <u>integration</u> of psycho-physiological and somato-sensory responses to the time-, space-, and life-context
- The <u>cognitive re-evaluation</u> of behavior and patterns, as well as reinterpretation of the meaning-content through reprocessing of negative, fearful and traumatic events
- Regaining of survivors dignity and satisfaction of the need for <u>acknowledgement</u>. Explicit human rights orientation of `testifying.'



Levels of Parallel Processing During NET

- 95
- The Incident what happened then and at the time of the incident?
- Here and now what happens now during the session?
- Present What is going on now in the life of the client and how does it influence therapy?
- The narrative of the narrative during the session and when updating the testimony.
- The therapeutic contact how are "we" doing during and between sessions?
- The therapist how am "I" doing during and between sessions?
- Cognitive and emotional reorganization during and between sessions.
- Admin timing, appointments, during and between sessions.



Questions to Therapists

- Am I convinced that it is good for the client to be exposed again to the traumatic memories?
- Do I want to hear "it"?
- What about my fear, that "it" will be horrible to listen to?

Be aware of two snares:

Conspiracy of silence and over-identification