

EXPANDING THE HORIZONS OF EMDR- BASED EARLY INTERVENTIONS AND THE EMDR PROTOCOL FOR RECENT CRITICAL INCIDENTS AND ONGOING TRAUMATIC STRESS

**Ignacio (Nacho) Jarero & Lucina (Lucy)
Artigas**

April 20, 2018

Boston, MA.



EARLY PSYCHOLOGICAL *INTERVENTIONS*



Early psychological *interventions* is the term used by Roberts et al. (2010) for interventions that begin within the first 3 months after a traumatic event with the aim mostly of **preventing PTSD or ongoing distress** in those with traumatic stress symptoms, with acute stress disorder (ASD), or who are at risk for PTSD or other disorders.

Roberts, N. P., Kitchiner, N. J., Kenardy, J., & Bisson, J. I. (2010). Early psychological interventions to treat acute traumatic stress symptoms. *Cochrane Database of Systematic Reviews*, (3), CD007944.



To Scully (2011) **early**
intervention **is**
understood to **prevent**
later **psychological**
distress or **long-term**
psychological morbidity.

Scully, P. J. (2011). Taking care of staff: A comprehensive model of support for paramedic and emergency medical dispatchers. *Traumatology*, 17(4), 35–42.



Other authors (e.g., Kehle et al., 2010) spoke of early mental health treatment, which is an *intervention* comprising psychotherapy and psychopharmacotherapy treatment.

Kehle, S. M., Polusny, M. A., Murdoch, M., Erbes, C., Arbisi, P., Thuras, P., & Meis, L. (2010). Early mental health treatment-seeking among U.S. National Guard soldiers deployed to Iraq. *Journal of Traumatic Stress, 23*(1), 33–40.



Furthermore, the U.S. Department of Veterans Affairs and the Department of Defense (VA/DOD), called all treatment *interventions* for posttraumatic stress, acute stress reactions (ASR), ASD, and PTSD as *management of posttraumatic stress (2010) or management of PTSD and ASD (2017)*.

U.S. Department of Veterans Affairs and Department of Defense. (2010; 2017). *VA/DoD clinical practice guidelines for management of post-traumatic stress*.



As we can see in these examples, the word *intervention* could refer to a wide range of activities from addressing immediate psychological needs (e.g., PFA) to psychopharmacotherapy.





RAPID RESPONSE TEAM. HAITI, 2010 EARTQUAKE .

RECENT TRAUMA CLINICAL PRESENTATIONS



A. Acute stress syndrome: An acute traumatic event that occurred within a few days and is represented by significant levels of symptoms clusters (e.g., hyperarousal, avoidance, dissociation, and intrusion) that have not subsided for at least several days.

Jarero, I., Amaya, C., Givaudan, M., Miranda, A. (2013). EMDR Individual protocol for paraprofessional use: A randomized controlled trial with first responders. *Journal of EMDR Practice and Research*, 7(2), 55-64.



B. Recent event: An isolated individual trauma that has occurred within a three months period and which is then *followed by a post-trauma safety period.*

Jarero, I., Amaya, C., Givaudan, M., Miranda, A. (2013). EMDR Individual protocol for paraprofessional use: A randomized controlled trial with first responders. *Journal of EMDR Practice and Research*, 7(2), 55-64.



C. Cumulative trauma exposure memory network: An adverse experience *with related multiple external stressful events* that occurred *within a three or more months period* in which *there is no a post-trauma safety window for traumatic memory consolidation.*

Jarero, I., Amaya, C., Givaudan, M., Miranda, A. (2013). EMDR Individual protocol for paraprofessional use: A randomized controlled trial with first responders. *Journal of EMDR Practice and Research*, 7(2), 55-64.



For example: a car wreck with fatal, physical and legal consequences; cancer diagnosis and treatment; prolonged natural or man-made disasters, refugees; illegal immigrants, and so forth.

Jarero, I., Amaya, C., Givaudan, M., Miranda, A. (2013). EMDR Individual protocol for paraprofessional use: A randomized controlled trial with first responders. *Journal of EMDR Practice and Research*, 7(2), 55-64.



PREVENTION OF PTSD



“The most severely traumatized group of survivors may be in particular need of vigorous early treatment”. (p. 366)

Jonathan Davidson

Davidson, J. R.T. (2002). Surviving disaster: what comes after the trauma. British Journal of Psychiatry, 181, 366-368.



To Davidson (2002), prevention can be:

- **PRIMARY.** Preventing exposure to trauma.
- **SECONDARY.** Preventing development of PTSD immediately after exposure to trauma, and
- **TERTIARY.** Prevention of worsening once PTSD has emerged.

Davidson, J. R.T. (2002). Surviving disaster: what comes after the trauma. British Journal of Psychiatry, 181, 366-368.



EMDR-BASED EARLY INTERVENTIONS



Several EMDR-based protocols have been developed to treat individuals after a critical incident. The primary reason for the modifications is that memory consolidation (*transition from short- to long-term memory*) appears to change in the weeks and months following a critical incident.

Jarero, I., Artigas, L., & Luber, M. (2011a). The EMDR protocol for recent critical incidents: Application in a disaster mental health continuum of care context. *Journal of EMDR Practice and Research*, 5(3), 82–94.



From a neurobiology perspective, **Consolidation** is believed to follow the transformation of temporary alterations in synaptic transmission into persistent modifications of synaptic architecture in specific brain areas.

Kandel E. R. (2001) The molecular biology of memory storage: a dialogue between genes and synapses. *Science* **294**, 1030–1038.



On the other hand, **Reconsolidation** refers to a process in which an old memory is re-activated and returns to a labile state, which undergoes another round of consolidation similar to that occurring after new learning.

Przybylski J. and Sara S. J. (1997) Reconsolidation of memory after its reactivation. *Behav. Brain Res.* 84, 241–246.



Thus, instead of occurring only once, memory storage is a process that is reiterated with each use of the memory. Therefore, memories can be continually updated, modified and even erased.

Przybylski J. and Sara S. J. (1997) Reconsolidation of memory after its reactivation. *Behav. Brain Res.* 84, 241–246.



After the 1989 San Francisco Bay Area earthquake, Dr. Francine Shapiro developed her **Recent Event Protocol** that could be considered as the first protocol for EMDR Early Intervention.

Dr. Francine Shapiro recommends this protocol for an **isolated individual trauma** that has occurred within the last 2–3 months -and which is then **followed by a period of relative safety and calm.**

Shapiro, F. (2018). *Eye movements desensitization and reprocessing. Basic principles, protocols, and procedures* (Third edition). Guilford Press.



To Jarero, Artigas & Lubber (2011), **Early EMDR therapy interventions (EEI)** has a natural place in the crisis intervention and disaster mental health continuum of care context and may be key to early psychological interventions as a *brief treatment modality*.

Jarero, I., Artigas, L., & Lubber, M. (2011). The EMDR Protocol for recent critical incidents: Application in a disaster mental health continuum of care context. *Journal of EMDR Practice and Research*, 5(3), 82–94.



To Elan Shapiro (2009), the use of EMDR-based Protocols for Early Intervention, could be a Window of Opportunity to:

- a) The adaptive processing of trauma memories.**
- b) The prevention of the accumulation of negative associated memories.**

Shapiro, E. (2009). EMDR treatment of recent trauma. *Journal of EMDR Practice and Research*, 3(3), 41–151.



c) The prevention of later mental and physical health complications.

d) The reduction of trauma suffering.

e) The promotion of mental Health and resilience.





HAITI 2017 .EMDR- IGTP WITH HURRICANE MATTHEW SURVIVOR'S



**AIP MODEL-BASED
ACUTE TRAUMA AND
ONGOING TRAUMATIC
STRESS CASE
CONCEPTUALIZATION**



Jarero & Artigas have argued that, from a memory network's perspective, acute trauma situations are related not only to a time frame (days, weeks, or months), but also to a *post-trauma safety period*.

In their case conceptualization based in the AIP model, they assert that for individuals with ongoing external traumatic events in which *there is not a post-trauma safety window for traumatic memory consolidation*, the consolidation of the traumatic memory is prevented and the patient's memory network remains in a permanent excitatory state as a short-term memory.

Jarero, I., Artigas, L., (2018). AIP model-based Acute Trauma and Ongoing Traumatic Stress Theoretical Conceptualization. *Iberoamerican Journal of Psychotrauma and Dissociation* , 10(1), 1-9



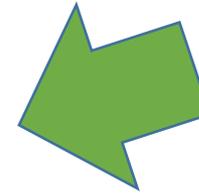
They view this as a continuum (analogous to the ripple effect of a pebble thrown into a pond), creating a cumulative trauma exposure memory network.

Jarero, I., Artigas, L., (2018). AIP model-based Acute Trauma and Ongoing Traumatic Stress Theoretical Conceptualization. *Iberoamerican Journal of Psychotrauma and Dissociation* , 10(1), 1-9





**CUMULATIVE TRAUMA
EXPOSURE MEMORY
NETWORK THAT CLINICALLY
BEHAVES AS A SHORT-TERM
NON-CONSOLIDATED
MEMORY.**



**DEEP EARLY TRAUMATIC
MEMORY NETWORKS.
LONG-TERM CONSOLIDATED
MEMORIES.**



**ONGOING TRAUMATIC STRESS-CUMULATIVE TRAUMA EXPOSURE MEMORY
NETWORK ANALOGY**

They argue that it extends into the present moment, often producing maladaptive/catastrophic concerns about the future or flash-forwards.

They believe that these type of ongoing traumatic stress situations require a different kind of EMDR treatment approach than the one used for events *with* a post-trauma safety period.

Jarero, I., Artigas, L., (2018). AIP model-based Acute Trauma and Ongoing Traumatic Stress Theoretical Conceptualization. *Iberoamerican Journal of Psychotrauma and Dissociation* , 10(1), 1-9





CUMULATIVE TRAUMA EXPOSURE MEMORY NETWORK ANALOGY

EXPANDING THE HORIZONS OF THE EMDR EARLY INTERVENTIONS



These case conceptualizations could serve as a working hypothesis to expand the clinical and research horizons of the EMDR early interventions for individuals and groups.

Jarero, I., Artigas, L., (2018). AIP model-based Acute Trauma and Ongoing Traumatic Stress Theoretical Conceptualization. *Iberoamerican Journal of Psychotrauma and Dissociation* , 10(1), 1-9



The arbitrary first three months early intervention frame (which is not based on empirical research) could now be extended to include ongoing traumatic stress situations with *no post-trauma safety period for memory consolidation.*



EMDR early intervention could be conceptualized, *for clinical practice and research purposes*, as those interventions provided *within* a continuum of care context during the first 3 months after the adverse experience, or later in case of ongoing traumatic stress situations with *no post-trauma safety period for memory consolidation*.

Jarero, I., Artigas, L., (2018). AIP model-based Acute Trauma and Ongoing Traumatic Stress Theoretical Conceptualization. *Iberoamerican Journal of Psychotrauma and Dissociation* , 10(1), 1-9



EXPANDING THE EMDR THERAPY HEALING POWER



Rosenblum et al (2017) propose an expanded concept of and work with disasters beyond the traditional definition of “big D” Disaster to include ongoing stressful and traumatic community events or “little d” disasters.

Rosenblum, R., Dockstader, D., Martin, S. (2017). EMDR, community psychology and innovative applications of a trauma recovery network as a toll of social change. *Journal of EMDR Practice and Research*, 11(4), 206-216



They believes that “by serving those affected by little d disasters, the field of disaster response can be broadened in powerful ways” (p.206).

Rosenblum, R., Dockstader, D., Martin, S. (2017). EMDR, community psychology and innovative applications of a trauma recovery network as a toll of social change. *Journal of EMDR Practice and Research*, 11(4), 206-216



We believe that the healing power of EMDR therapy could be expanded with EMDR therapy-based early interventions for individuals and groups specially designed for acute trauma and ongoing traumatic stress situations like...

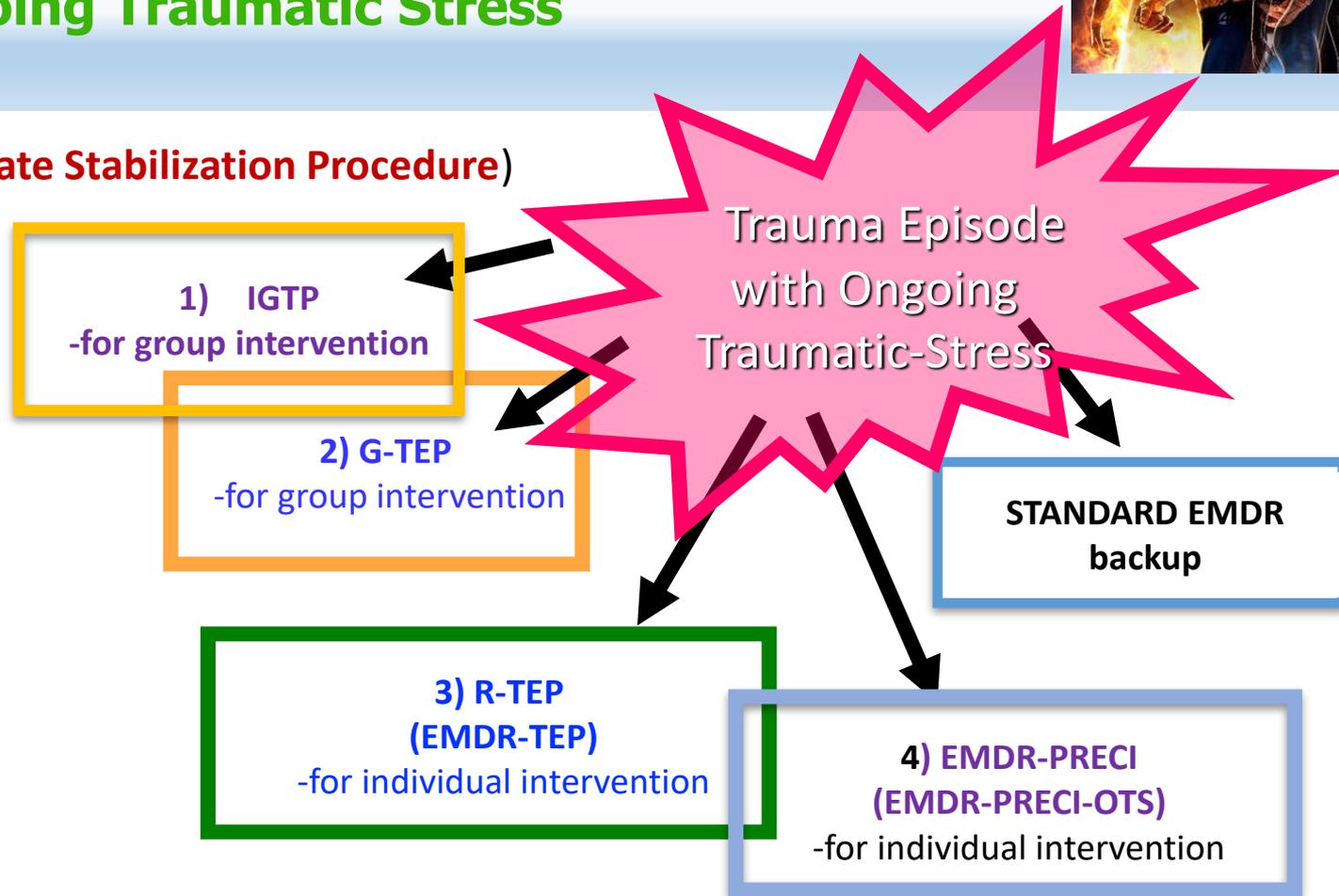
Jarero, I., Artigas, L., (2018). AIP model-based Acute Trauma and Ongoing Traumatic Stress Theoretical Conceptualization. *Iberoamerican Journal of Psychotrauma and Dissociation* , 10(1), 1-9



The Fantastic 4+1 EMDR Intervention Strategies for Ongoing Traumatic Stress



(Immediate Stabilization Procedure)



**These protocols
could be used with:**



- a) The same type of ongoing or prolonged traumatic events or circumstances. These include: victims of constant violence (e.g., sexual abuse or severe interpersonal violence).*
- b) At-risk personnel (e.g., agency and NGO staff dealing with natural disasters, violent conflicts, rape and domestic violence; emergency response personnel, military on duty),*

- c) *People undergoing life-changing experiences with ongoing traumatic stress or extreme stressors* (e.g., refugees, internally displaced persons, long term disasters, prolonged violent conflicts or terrorism).**
- d) *People with diverse ongoing trauma histories with similar circumstance in common* (e.g., chronic or severe illness; individuals, couples and families with ongoing domestic violence situations that have not been resolved and are still unsafe to some degree).**

***You can download at no cost
the complete article about
this case conceptualization in***

<http://revibapst.com>

Vol. 10, Number 1, 2018



**EMDR PROTOCOL FOR
RECENT CRITICAL
INCIDENTS AND
ONGOING TRAUMATIC
STRESS
(EMDR-PRECI)**



EMDR-PRECI was developed in the field to treat natural or human provoked disasters survivors *where related stressful events continue for an extended time and there is not a post-trauma safety period for memory consolidation.*



It contains some **unique elements** developed by Jarero and Artigas derived from their observations during their many years of experience working in the field with disasters survivor's around the world.



Dr. Francine Shapiro (2018) recommends the EMDR-PRECI “for an extended post-disaster period to address situations in which there is ongoing trauma and therefore no subsequent period of safety” (p. 397).

Shapiro, F. (2018). *Eye movements desensitization and reprocessing. Basic principles, protocols, and procedures* (Third edition). Guilford Press.





Dr. Jarero using the EMDR-PRECI after and earthquake in Ecuador 2016



EMDR-PRECI

Research Evidence



EMDR-PRECI

Neurophysiological and Neuropsychological changes in female patients with cancer-related PTSD

México

Coordinated by
Dr. Benito Estrada





Researchers from the San Luis Potosi Autonomous University in Mexico, headed by Dr. Benito Estrada, are conducting a study to understand the neurophysiological and neuropsychological effects of the EMDR-PRECI on 20 female patients with cancer-related full PTSD diagnosis.





During this study, participants completed Phase 1 and 2 at the EMDR clinician's office and reprocessed (Phase 3 and 4) **their worst cancer-related memory** inside a functional magnetic resonance imagining machine (fMRI) using the **Butterfly Hug (BH)** as their method for bilateral stimulation (BLS).



**The Butterfly Hug (BH) is
an EMDR Therapy
Method for Self-
Administered Bilateral
Stimulation that
facilitates traumatic
memory reprocessing.**





Functional magnetic resonance imaging (fMRI) is a safe and noninvasive imaging modality that literally allows researchers and clinicians to watch the brain in action.





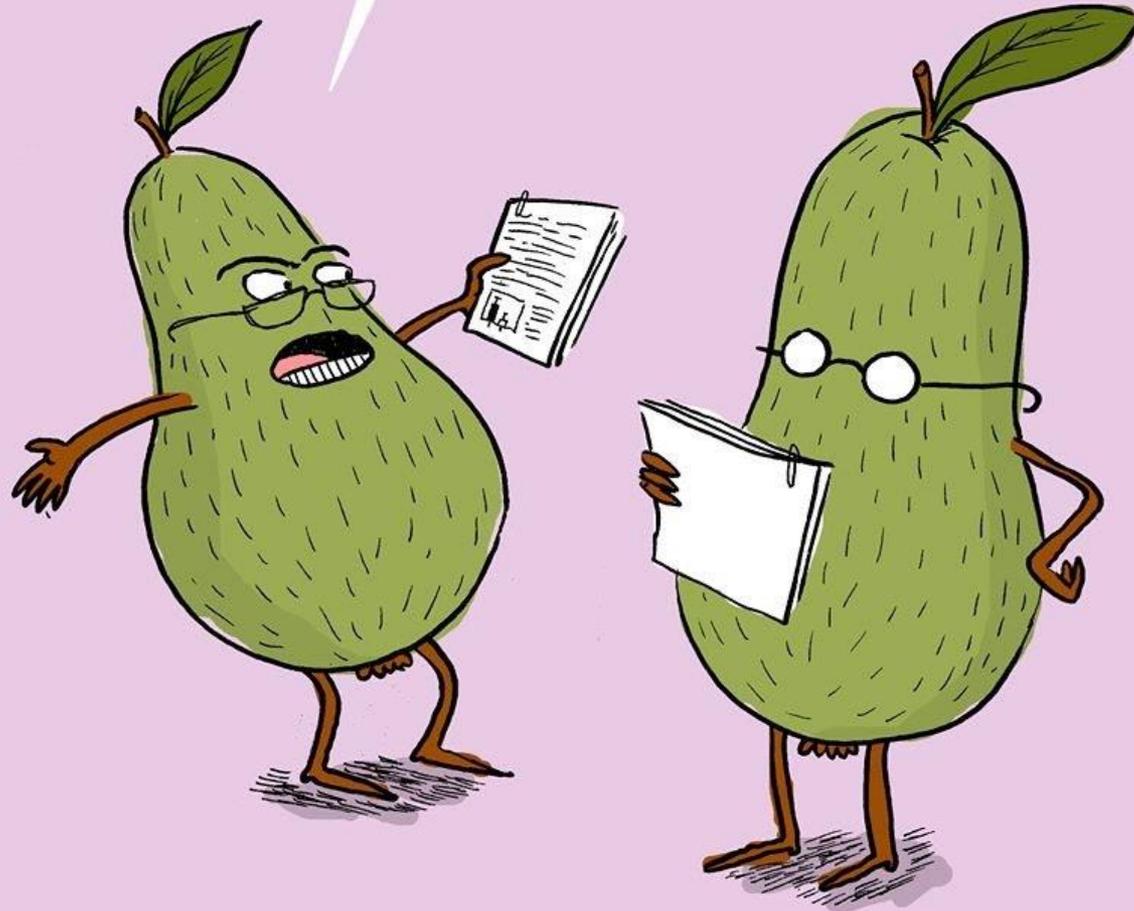
DR NACHO JARERO GIVING THE INSTRUCTIONS TO THE FEMALE CANCER PATIENT INSIDE THE fMRI MACHINE



Data analysis is currently ongoing and in a short time we will have the results comparing brain activity during symptom provocation (remembering the worst part/fragment) before BLS with the BH and after reprocessing.



This manuscript is horrendous!



PEAR REVIEW

EMDR-PRECI

Application in a Disaster Mental Health Continuum of Care Context

Jarero, I., Artigas, L., & Luber, M. (2011). The EMDR protocol for recent critical incidents: Application in a disaster mental health continuum of care context. *Journal of EMDR Practice and Research*, 5(3), 82-94.



In this RCT using a delayed treatment controlled design, 18 adults were treated within 30 days following a 7.2 earthquake in North Baja California, Mexico in 2010 by means of a single (80- to 130-minute) session of EMDR-PRECI.



Despite frequently occurring aftershocks, both groups (immediate-treatment group and delayed-treatment control group) showed substantial (30 points) reductions of trauma symptoms on the Impact of Event Scale (IES), effects that were maintained at a 12-week follow-up.



**No participant
developed PTSD
during this
period.**



EMDR-PRECI

In a Human Massacre Situation with First Responders Forensic Personnel

Jarero, I., & Uribe, S. (2011). The EMDR protocol for recent critical incidents: Brief report of an application in a human massacre situation. *Journal of EMDR Practice and Research*, 5(4), 156–165.

Jarero, I., & Uribe, S. (2012). The EMDR protocol for recent critical incidents: Follow-up Report of an application in a human massacre situation. *Journal of EMDR Practice and Research*, 6(2), 50-61.



In this delayed treatment control design a single individual session (90-120 minutes) was provided within 8 weeks post-event to 32 first responders forensic personnel in a Human Massacre Situation Context.



Pre-post results showed significant improvement for both immediate treatment and waitlist/delayed treatment groups on the Impact of Event Scale (IES) and the Short PTSD Rating Interview (SPRINT).



Follow-up scores at 3 and 5 months posttreatment showed that the original treatment results were maintained, with a further significant reduction of self-reported symptoms of posttraumatic stress and PTSD between posttreatment and follow-up.



During the follow-up period, the employees continued to work with the recovered corpses and were continually exposed to horrific emotional stressors, with ongoing threats to their own safety.

The power and cruelty of the Mexican drug cartels does not know limits and they had already attacked the Police Academy and the General Attorney offices.



Therefore, for security reasons, the clinicians worked inside the police academy and were **provided with training** on how to respond if an armed attack should occur.





IGNACIO JARERO AKA DR NACHO





SUSANA URIBE AKA LA SUS



ALAIDE MIRANDA AKA LA ALAIDE



It appears that the treatment may have helped to prevent the development of chronic PTSD and to increase psychological and emotional resilience.



EMDR-PRECI

A Randomized Controlled Trial in a Technological Disaster Context

Jarero, et al. (2015). EMDR Protocol for Recent Critical Incidents: A Randomized Controlled Trial in a Technological Disaster Context. *Journal of EMDR Practice and Research*, 9(4). 166-173



In this RCT using a delayed treatment controlled design, the EMDR-PRECI was administered within 34 days of an explosion in an explosives manufacturing factory in Mexico that killed 7 employees.



25 survivors who had posttraumatic stress symptoms related to the critical incident received two 60-minutes sessions on consecutive days.



Initial scores for both groups were in the severe range for trauma symptoms, as measured by the Short PTSD Rating Interview (SPRINT), and declined to low levels after treatment (from 22 to 2).



Treatment effects were maintained 106 days after the explosion and no participant developed PTSD during this period.



EMDR-PRECI

Ongoing and Planned Humanitarian Trauma Recovery and Research Projects



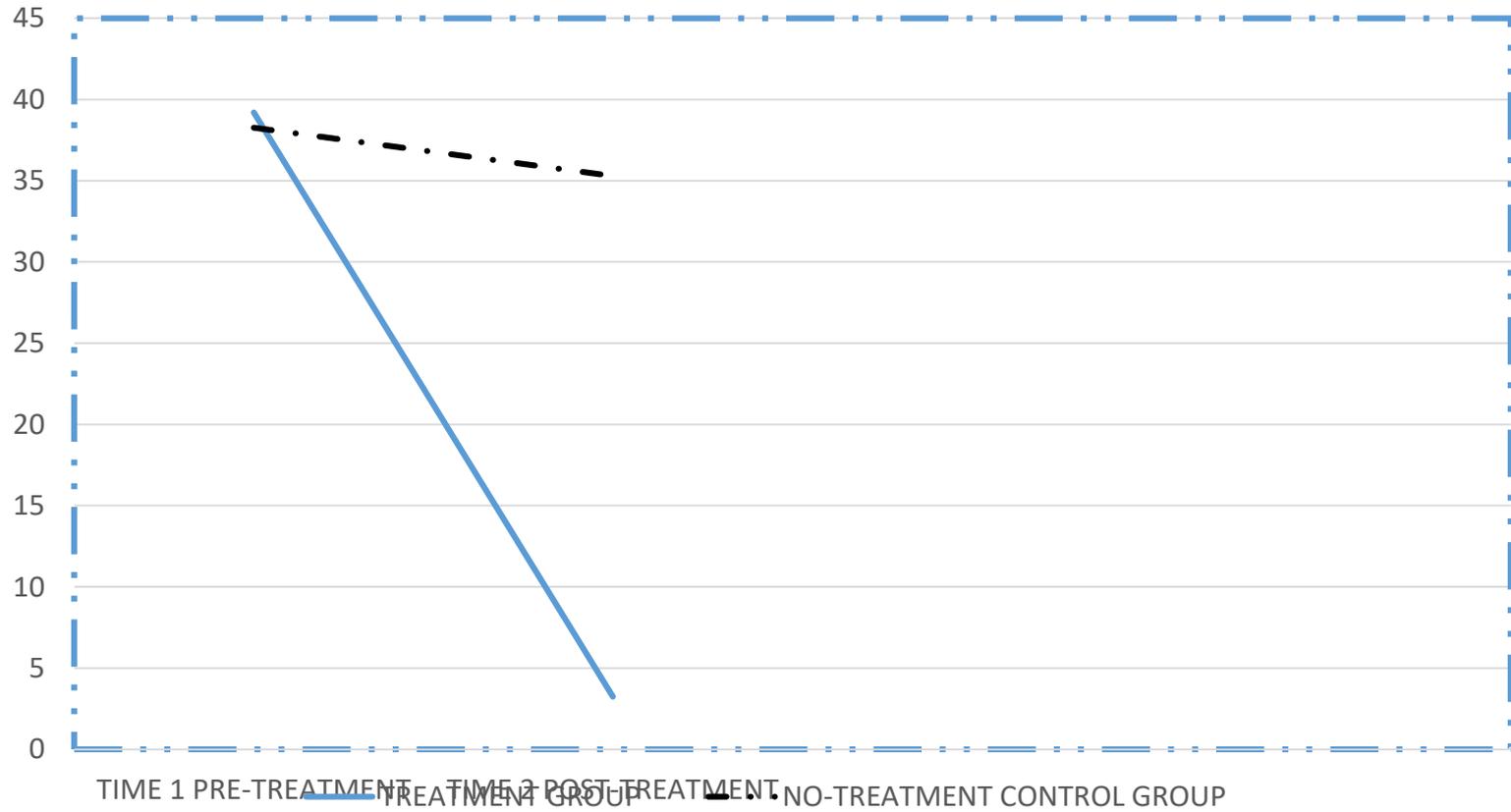
EMDR-PRECI

Ongoing RCT with First Responders México

Coordinated by
Susana Schnaider



PCL-5 MEANS SCORES



PRE AND POST PCL-5 MEAN SCORES

EMDR-PRECI KEY PROCEDURES



Phase 1: Patient History (cont.)

The clinician asks the patient to give a brief (less than 10 minutes) description from right before the adverse experience occurred until the present moment and not just until the adverse experience was over.

Phase 1: Patient History (cont.)

EMDR Clinicians Do Not:

- a) Identify the sequence frame by frame of the entire event.
- b) Ask or probe for early client history.
- c) Identify at this moment the most disturbing aspects of the event.
- d) Do BLS during this phase (to prevent early processing).



Phase 2: Preparation (cont.)

In this protocol Eye Movements are the first option for Bilateral Stimulation.

Authors specifically suggest the use the Butterfly Hug (BH) as an alternative BLS in patients with a narrow window of tolerance.



Phase 2: Preparation (cont.)

Clinicians teach at least one of the following fast and easy post-disaster self-soothing strategies:

- Abdominal Breathing.
- Concentration Exercise.
- Pleasant Memory.





DR. NACHO PROVIDING THE EMDR-PRECI TO A BOY IN POSOLTEGA, NICARAGUA AFTER A LANDSLIDE IN 2000.

Phase 3: Assessment

Clinicians **do not** obtain a narrative history of the event/trauma episode or use bilateral stimulation during the narrative.



Phase 3: Assessment

To encompass the whole OTS spectrum clinician asks the client to *“run a mental movie of the whole event from right before the beginning until today, or even looking into the future, and at the end please let me know the worst part, the worst fragment.”*



Phase 3: Assessment

The instruction *... or even looking into the future*” allow us to detect maladaptive/catastrophic concerns about the future or flash-forwards (Logie & de Jongh, 2014)

Logie, R., & de Jongh, A. (2014). The flashforward procedure: Confronting the catastrophe. *Journal of EMDR Practice and Research*, 8, 25–32.



Phase 3: Assessment (cont.)

Clinicians **do not** use Phase 3 full assessment. Instead, clinicians:

- Access the fragment Image (or other distressing sensory information).
- The Negative Cognition (if possible for the patient).
- Emotion, SUDs, and Location of Physical Sensation.
- **DO NOT ASK FOR THE PC or VoC .**





**EMDR-PRECI DEMONSTRATION IN SHANGHAI, CHINA. 2017
PATIENT WITH 15 YEARS CANCER-RELATED PTSD SYMPTOMS**



Phases 3 & 4 Reprocessing Sequence

Clinicians Target and Reprocess (**only using Phases 3 & 4 procedural steps**) in the Following Sequence:

- a. Elicit worst fragment .
- b. After patient have processed the worst fragment/part always elicit other disturbing fragments/parts using the run the movie procedure.
- Clinician don't target the remaining fragments one by one in chronological order **but only disturbing fragments.**



During the Reprocessing Phases (4, 5 & 6), clinicians uses the free associative processing of standard EMDR therapy and **do not** use strategies to confine associations (e.g., EMD or EMDr).



Phase 5: Global Installation

The Positive Cognition **is not** identified or installed for each memory fragment but rather for the Entire Event.



Phase 5: Global Installation (cont.)

Installation of the PC does not use frequent checking of VOC but full reprocessing doing BLS while information is moving.

Phase 5: Global Installation (cont.)

In the Supplemental Step suggested by Dr. Francine Shapiro (2010, personal communication).

Clinician Say, *“Close your eyes, think of the positive cognition, and review the whole sequence in your mind as you are holding the PC.”*



Phase 6: Body Scan (cont.)

Reprocess any
disturbance and/or
strengthen positive

affect or **body**

sensations with

standard sets of BLS



Phase 7. Closure

Uses Jarero and Artigas's postdisaster self-soothing strategies.



Phase 7: Session Closure/Stress Management Information

Give some stress management education

- Balancing work and rest.
- Exercise.
- Healthy eating.
- Water.
- Careful with caffeine, alcohol, sugar.
- Rest / leisure / fun.
- Sleep.
- **Be extra nice to yourself...**



Three- Pronged Approach and Posttraumatic Growth

EMDR-PRECI uses the Three-Pronged Approach (Past-Present-Future) and specifically ask for Posttraumatic Growth.



*If you have interest in
conducting research using this
protocol, please send me an
email to*

nachojarero@yahoo.com

