

## **EMDR Therapy Protocols for Humanitarian Trauma Recovery Interventions in Latin America & the Caribbean.**

**Ignacio Jarero**

**Susana Uribe**

**Alaide Miranda**

*Latin American and Caribbean Foundation for Psychological Trauma Research*

This paper presents an overview of the Eye Movement Desensitization and Reprocessing (EMDR) therapy Protocols used in Humanitarian Trauma Recovery Interventions in Latin America & the Caribbean since 1998 to address natural disasters (e.g., flooding, landslides, and earthquake), man-made disasters, human massacre, ongoing geopolitical crisis, children and adolescents victims of severe interpersonal violence, first responders and cancer patients. The author's intention is to highlight and enlighten the reader about the existence of these modified EMDR therapy protocols in both, group and individual formats that present an auspicious answer for the treatment of acute trauma or acute trauma situations without a post-trauma safety period.

Key words: EMDR therapy; EMDR-Integrative Group Treatment Protocol; Trauma Recovery Programs; EMDR Early Interventions; Disasters; Human Massacre; Intensive EMDR therapy; Ongoing trauma; Cancer patients, Geopolitical Crisis; severe interpersonal violence.

Latin America has suffered natural disasters such as floods, hurricanes, catastrophic earthquakes and volcanic eruptions. Since the 1970's, it has also fallen victim of enormous levels of political violence, which peaked in the 1980's, and took form as wars, insurgencies, counterinsurgencies and other civil conflicts. The consequences of these were extreme violence, massacres, ubiquitous disappearances, rapes, torture, and burning of villages (Norris, 2009).

“Armed conflicts and natural disasters cause great psychological and social suffering upon the affected population. Psychological and social effects of emergencies can be acute on the short term, but can also deteriorate on the long term the mental health and psychosocial wellness of the affected populations. These effects can eventually threaten the peace, human rights and development of progress.” (WHO, 2007, p.1).

According to Biles & Cobos (2004) one of the most hazard-prone regions in the world is Latin America due to its geography located atop four major active tectonic plates with regular seismic activity. From 2006 to 2010 one fourth of all natural disasters - 442 of a total of 1915 - happened in the Americas. The affected number of inhabitants was of 48 million which is 5% of the 904 million people affected worldwide (PAHO; 2012).

In a recent survey of 858 students (aged 18-25) at four public universities in Mexico, in one of the many towns affected by the war between cartels for the control of areas where synthetic drugs are produced, researchers found that the prevalence of traumatic events associated to PTSD considered as shocking to their physical and emotional integrity was 78%. The most prevailing event was experiencing the sudden death of some member of the family and/or close friend (Mojica, Márquez, Guadarrama, & Ramos, 2013).

## **EMDR Therapy**

Eye Movement Desensitization and Reprocessing Therapy (EMDR) was developed by Dr. Francine Shapiro (F. Shapiro, 2001) and is an integrative eight-phase treatment approach guided by the adaptive information processing (AIP) model for the treatment of trauma, adverse life experiences or psychological stressors. The AIP theoretical framework, on which this psychotherapy is based, illustrates the broad application of the treatment.

This therapy is based on the idea that negative thoughts, feelings and behaviors are the result of unprocessed memories. The treatment involves standardized procedures that include focusing simultaneously on (a) spontaneous associations of traumatic images, thoughts, emotions and bodily sensations and (b) bilateral stimulation that is most commonly in the form of repeated eye movements.

EMDR therapy is recommended for the treatment of Posttraumatic Stress Disorder in children, adolescents and adults by the World Health Organization (2013) and by numerous international guidelines such as the Cochrane Review (Bisson & Andrew, 2007).

## **EMDR Therapy and Early Intervention**

The clinical experience and work in the field with EMDR early intervention (EEI) has been extensive (Maxfield, 2008). Results of published studies indicate that EEI is a brief intervention with rapid treatment effects that can be used in the field or emergency situations.

There is a body of research supporting the use of modified EMDR therapy protocols to treat acute trauma in both group and individual formats (Jarero, Artigas, & Luber, 2011; E. Shapiro, 2012). The primary reason for the modifications is that the extent of memory consolidation appears to change in the weeks and months following a critical incident.

Shapiro (2001) hypothesized that although “the memory of a recent traumatic event is consolidated on some level, since the client can give a serial description of the experience, but on a crucial stratum of information association the various aspects of memory are not integrally linked” (p.225). On the basis of clinical observation, she estimated that the period required for consolidation is approximately 2 to 3 months. She now thinks that the period may be longer if individuals are continuously exposed to danger and threat (Jarero, Artigas, & Luber, 2011).

In addition to treating present distress for a specific recent event, early interventions may be essential to help prevent sensitization, the progressive accumulation of trauma memories or negative associative links (Tofani & Wheeler, 2011), relieving from excessive suffering and latter complications (E. Shapiro, 2009). Jarero et al. (2011) have argued that EMDR early therapy intervention has a natural place in the crisis intervention and disaster mental health continuum of care context and may be a key to early intervention as a brief treatment modality. They advocated for providing acute interventions according to the unfolding phases of recovery and assessment of needs the survivors are experiencing (Solomon, 2008).

## **EMDR Therapy Protocols for Humanitarian Trauma Recovery Interventions in Latin America & the Caribbean.**

### **The EMDR Integrative Group Treatment Protocol**

The EMDR Integrative Group Treatment Protocol (EMDR-IGTP) for early intervention was developed by members of The Mexican Association for Mental Health Support in Crisis (AMAMECRISIS) to deal with the extensive need for mental health services after Hurricane Pauline ravaged the coasts of the states of Oaxaca and Guerrero in the year 1997 (Jarero & Artigas, 2009). This protocol combines the eight standard EMDR treatment phases (Shapiro, 2001) with a group therapy model and an art therapy format and uses the Butterfly Hug (Artigas & Jarero, 2014) as a form of a self-administered bilateral stimulation.

The justification for modifying the individual EMDR protocol was to provide mental health services in a disaster aftermath circumstances and fulfill the mental health population's needs. The protocol was originally designed for working with children (Artigas, Jarero, Alcalá & López Cano, 2014) and was later modified for use with adults (Jarero & Artigas, 2014a). This protocol compares favorably with group treatment of other models in terms of time, resources, and results (Adúriz et al., 2009).

The protocol is also variously known as the Group Butterfly Hug Protocol, the EMDR Group Protocol and The Children's EMDR Group Protocol.

This protocol has been used in its original format or with adaptations to suit the cultural circumstances, in numerous places around the world (Gelbach & Davis, 2007; Maxfield, 2008) for thousands of survivors of natural or man-made disasters (Jarero & Artigas, 2012).

Anecdotal reports (Gelbach & Davis, 2007; Luber, 2009), nine pilot field studies with both, children and adults, after natural mass disasters in Mexico, Nicaragua, El Salvador, Colombia and Venezuela (Artigas et al., 2000; Jarero et al., 1999; Jarero, Artigas, & Hartung, 2006); case reports and field studies have documented its effectiveness with children and adults after natural or man-made disasters, during ongoing war trauma, ongoing geopolitical crisis, war refugee children, work accidents that produce Acute Stress Disorder, rape victims, children and adolescents victims of severe interpersonal violence and cancer patients (Adúriz, Knopfler, & Blüthgen, 2009; Allon, as cited by F. Shapiro, 2011; Aránguiz & Cattoni, 2013; Adúriz & Salas, 2014; Birnbaum, 2007; Chung et al., (in press); Errebo, Knipe, Forte, Karlin, & Altayli, 2008; Fernandez, Gallinari, & Lorenzetti, 2005; Jarero & Artigas, 2010; Jarero, Artigas, & Hartung, 2006; Jarero, Artigas, & Montero, 2008; Jarero, Roque-López, & Gomez, 2013; Jarero, Roque-López, Gómez, & Givaudán, 2014a; Jarero, Roque-López, Gómez, & Givaudán, 2014b; Jarero, Artigas, Uribe, García, Cavazos & Givaudán, 2014; Korkmazlar-Oral and Pamuk, 2002; Mehrotra (in press), Monteiro, 2014; Salas, 2014; Wilson, Tinker, Hoffmann, Becker, & Marshall, 2000; Zaghrouh- Hodali, Alissa, & Dodgson, 2008).

## **The EMDR Protocol for Recent Critical Incidents**

The EMDR Protocol for Recent Critical Incidents (EMDR-PRECI) was developed in the field by Jarero and Artigas (Jarero, Artigas, & Luber, 2011) originally to treat critical incidents (e.g., earthquake, flooding, and landslides) that were related to stressful events that continued for an extended period of time (often more than six months) and where there is not a post-trauma safety period for memory consolidation. Although it is a modified version of Shapiro's (2001) Recent Traumatic Events Protocol, it is also different in several important ways in order to accommodate the extended time frame with its continuum of stressful events, often along the themes of safety, responsibility and choice. Secondary stressors such as chronic problems in living and post-disaster adversities have not been adequately addressed, but in instances where they have been studied, these do seem to complicate post-disaster recovery (Norris, Galea, Friedman, & Watson, 2006).

For Jarero & Uribe (2011, 2012) acute trauma situations are not only related to a time frame (e.g., days or months) but also to a post-trauma safety period. They hypothesized that the continuum of stressful events with similar emotions, somatic, sensory and cognitive information does not give the state dependent traumatic memory sufficient time to consolidate into an integrated whole. Thus, the memory networks remains in a permanent excitatory state, expanding with each subsequent stressful event in this continuum, like the ripple effect of a stone thrown in the middle of a pond with the risk of PTSD and comorbid disorders growing with the number of exposures. See the scripted Protocol in Jarero & Artigas (2014b).

There is preliminary evidence supporting the efficacy of EMDR-PRECI in reducing symptoms of posttraumatic stress in adults and maintaining those effects despite ongoing threat and danger in a disaster mental health continuum of post-incident care context (Jarero, et al., 2011) and as an early intervention for traumatized first responders. It appeared that EMDR-PRECI helped to prevent the development of chronic PTSD and to increase psychological and emotional resilience (Jarero & Uribe, 2011, 2012).

### **The EMDR- Individual Protocol for Paraprofessional Use in Acute Trauma Situations**

The EMDR individual protocol for paraprofessional use in acute trauma situations (EMDR-PROPORA) is part of a project developed at the initiative of Dr. Francine Shapiro (personal communication, June 28, 2012). We have recognized that developing countries often lack the professional resources to adequately respond to large traumatic events, and that there may be poor or no psychological trauma professional care. However, such nations often have a cadre of trained paraprofessionals who are responsible to provide interventions and treatment. There are antecedents of CBT effectively delivered by paraprofessionals (nonmental health practitioners) with outcomes comparable to professionals (e.g., Hepner et al., 2012; Montgomery, Kunik, Wilson, Stanley, & Weiss, 2010).

This protocol is an adaptation for paraprofessional use of the EMDR Protocol for Recent Critical Incidents (EMDR-PRECI; Jarero, Artigas, & Luber, 2011). EMDR-PROPORA has preliminary support for his effectiveness in reducing severity of posttraumatic symptoms and subjective global improvement (Jarero, Amaya, Givaudán, & Miranda, 2013).

### **Humanitarian Trauma Recovery Programs in Latin America & the Caribbean.**

#### **Group EMDR Therapy Treatment after Natural Disasters**

A disaster is a complex emergency situation, a social catastrophe marked by the destruction of the affected population's political, economic, sociocultural, and health care infrastructures (Mollica et al, 2004).

Since 1998 hundreds of victims of natural disasters (e.g., flooding, landslides, earthquake) has been treated in Latin America with the EMDR-Integrative Group Treatment Protocol for early intervention (EMDR-IGTP; Adúriz, Knopfler, & Bluthgen, 2009; Adúriz & Salas, 2014; Artigas, Jarero, Mauer, López Cano, & Alcalá, 2000; Jarero, Artigas, & Hartung, 2006; Jarero, Artigas, & Montero, 2008; Jarero, Artigas, Mauer, López Cano, & Alcalá, 1999; Monteiro, 2014; Salas, 2014).

In all the studies the EMDR-IGTP has demonstrated to be a highly efficient intervention in terms of time, resources, cost, and lasting results. There are a number of advantages to using this protocol. The group administration can involve large segments of an affected community, agency, or organization and reach more people in a time-efficient manner. The protocol is adaptable to a wide age range: from 7 years to the elderly. It is cost-efficient, as it requires just a place in which to write, as well as paper and crayons or pencils. It can be used in non-private settings such as a shelter, an open-air clinic, or even under a mango tree as was done in Acapulco, Mexico. Clients in the group do not have to verbalize information about the trauma and the treatment appears to be well tolerated in situations of exposure to ongoing crisis. Therapy can be done on subsequent days and there is no need for homework between sessions. The treatment identifies individuals with more severe symptoms who may require individual attention. The protocol is easily taught to both, new and experienced EMDR practitioners. It respects the client's cultural values and seems to be equally effective cross-culturally. A single clinician can administer it with the assistance of paraprofessionals, teachers, or family members, thus allowing for the wide application of this protocol in societies with few mental health professionals (Jarero & Artigas, 2012).

### **Group EMDR Therapy Treatment after Man-Made Disaster**

Children and adolescents make up almost one half of the population of the 49 poorest countries in the world and more vulnerable to man-made or natural disasters than children living in industrialized countries (Morris, van Ommeren, Belfer, Saxena, & Saraceno, 2007). The EMDR-IGTP for early intervention was administered in a natural setting to a group of 16 traumatized and bereaved children following a mine human-provoked disaster in the Mexican State of Coahuila in 2006. Results showed a significant decrease in scores on the Child's Reaction to Traumatic Events Scale that was maintained at a 3-month follow-up. These results are consistent with the findings of other studies that have investigated the application of EMDR-IGTP with groups of children subsequent to man-made disasters (e.g., Fernandez, Gallinari, & Lorenzetti, 2005). Results suggest that EMDR-IGTP may be an effective mean of providing treatment to large groups of people impacted by human-provoked disasters (Jarero, Artigas, & Montero, 2008).



## **Individual EMDR Therapy Treatment after a 7.2 Earthquake**

A randomized, controlled group field study was conducted subsequent to a 7.2 earthquake in North Baja California, Mexico. Treatment was provided according to continuum of care principles. Crisis management debriefing was provided to 53 individuals. After this, the 18 individuals who had high scores on the Impact of Event Scale (IES) were then provided with the eye movement desensitization and reprocessing (EMDR) Protocol for Recent Critical Incidents (EMDR-PRECI). Participants were randomly assigned to two groups: an immediate treatment group and a waitlist/delayed treatment group. There was no improvement in the waitlist/delayed treatment group, and scores of the immediate treatment group participants were significantly improved, compared with waitlist/delayed treatment group participants. One session of EMDR-PRECI produced significant improvement on symptoms of posttraumatic stress for both, the immediate-treatment and waitlist/delayed treatment groups, which results were maintained at a 12-week follow-up, even though frightening aftershocks continued to occur frequently. This study provides preliminary evidence in support of the protocol's efficacy in a disaster mental health continuum of care context (Jarero, Artigas, & Luber, 2011).

## **Individual EMDR Therapy Treatment after a Human Massacre**

Going to the scene of a disaster is a great service to those in distress. However, the survivor's narratives, the sights, smells, sounds and feelings that assault the sensorium of the responders could be overwhelming and severely affect their lives. It is because of that the paramount importance of having adequate preparation and self-care before, during and after deployment (Jarero & Uribe, 2014b).

An EMDR-PRECI field study investigated early intervention in what Jarero calls "urban disasters" provoked by narco-war, guerrilla, and paramilitary operations with grenade attacks, kidnapping, murder, rape, and so forth. The field study was conducted in Mexico after a human massacre. A single individual session was provided to 32 forensic personnel employed by the State Attorney General in the Mexican state of Durango who had been working with 258 bodies recovered from clandestine graves. Pre-post results showed significant improvement for both, immediate treatment and waitlist/delayed treatment groups, on the Impact of Event Scale (IES) and Short PTSD Rating Interview (SPRINT). Follow-up assessments conducted 3 and 5 months post-treatment, 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, including ongoing threats to their own safety. The results suggest that EMDR-PRECI was an effective early intervention, reducing traumatic stress for a group of traumatized adults continuing to work under extreme stressors in a human massacre situation. It appears that the treatment may have helped to prevent the development of chronic PTSD and to increase psychological and emotional resilience (Jarero & Uribe, 2011, 2012).

### **Group EMDR Therapy Treatment during Ongoing Geopolitical Crisis**

According to Norris, Friedman & Watson (2002) disasters of mass violence are more likely to have serious mental health consequences than natural disasters where intentional harm becomes a critical factor. The EMDR-IGTP for early intervention was administered during three consecutive days to a group of 20 adults during ongoing geopolitical crisis in a Central American country in 2009. Results in this uncontrolled study showed significant decreases in scores on the Subjective Unit of Disturbance Scale and the Impact of Event Scale (IES). Changes on the IES were maintained at a 14 weeks follow-up, even though participants were still exposed to ongoing crisis (Jarero & Artigas, 2010).

### **Group EMDR Therapy Treatment for Children and Adolescents Victims of Severe Interpersonal Violence.**

A substantial number of children and adolescents in Latin America & the Caribbean experience poly-victimization: severe, multiple, interpersonal, and prolonged traumas. One study found that 22% of surveyed children had experienced four or more different kinds of victimization within a single year (Finkelhor, Ormrod, & Turner, 2007). However this subset of survivors has received little attention regarding their unique needs (Wamser-Nanney & Vandenberg, 2013).

During 2011, 2012 and 2013, a modified version of the EMDR Integrative Group Treatment Protocol (EMDR-IGTP) for early intervention, and the EMDR standard Individual Therapy Protocol were administered to six groups (n=89) of boys (n=44) and girls (n=45), aged between 9 and 17 years who were victims of severe interpersonal trauma (e.g., rape, sexual abuse, physical and emotional violence, neglect, abandonment). The application of Group and Individual EMDR therapy for the resolution of traumatic memories was carried out within the context of a multicomponent phase-based trauma treatment approach during a week-long Trauma Recovery Camps in Colombia (Jarero, Roque-López, & Gomez, 2013; Jarero, Roque-López, Gómez, & Givaudán, 2014a; Jarero, Roque-López, Gómez, & Givaudán, 2014b).

The Short PTSD Rating Scale SPRINT was used to measure PTSD symptoms clusters. The SPRINT performs similarly to the Clinician-Administered PTSD Scale (CAPS) rating scale in the assessment of PTSD symptoms clusters and total scores and can be used as a diagnostic instrument (Vaishnavi et al., 2006). In the SPRINT, a cutoff score of 14 or more was found to carry a 95% sensitivity to detect PTSD and 96% specificity for ruling out the diagnosis, with an overall accuracy of correct assignment being 96% (Connor & Davidson, 2001).

The results obtained with the SPRINT scale for all groups showed a significant statistical improvement in participants after treatment with treatment results continuing to improve at follow-up. The results also exhibit a global subjective improvement in the participants.

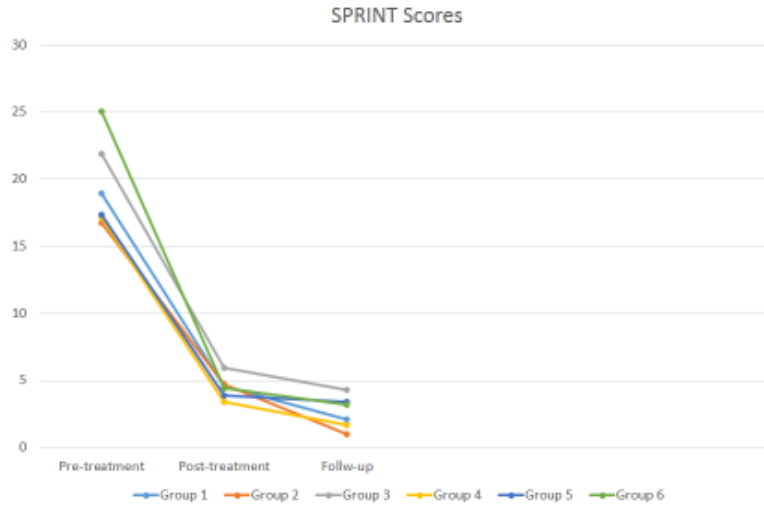


It is important to notice that the activities conducted prior to EMDR therapy reprocessing sessions (e.g., sports, soft gymnastics, hatha yoga, storytelling, painting workshop, dance, theatre workshop, and mindfulness) did not show statistically significant effect reducing the severity of PTSD symptoms measured with the SPRINT.

One-way analysis of variance (ANOVA) to test whether the SPRINT means differs among the six groups of participants at pre, post-treatment and follow-up. Results showed an extremely significant difference between groups at pre-treatment (P=0.0004) but not a significant difference at post-treatment (P=0.4427). Based on these results we can conclude that despite the extremely significant difference between groups at pre-treatment, the EMDR therapy had similar beneficial effects in all participants at post-treatment (Jarero, Roque-López, Gómez, & Givaudán, 2014b). See Table 1 and Figure 1.

Means and Standard Deviations	Group 1 2011 Foster Home n=19	Group 2 2011 Living in Family n=15	Group 3 2012 Foster Home n=11	Group 4 2012 Living in Family n=14	Group 5 July, 2013 Foster Home n=14	Group 6 Dec, 2013 Living in Family n=16
Mean (SD) at Pre-Treatment	18.95 (6.78)	16.73 (5.82)	21.91 (3.3)	17.14 (5.86)	17.35 (6.90)	25.06 (3.88)
Mean (SD) at Post-Treatment	4.53 (3.65)	4.73 (2.96)	5.91 (2.50)	3.38 (1.44)	3.85 (2.07)	4.43 (4.06)
Mean (SD) at Follow-up	2.11 (2.72)	1.00 (1.25)	4.29 (3.20)	1.69 (1.37)	3.42 (3.13)	3.2 (2.70)
Groups ANOVA Comparison at Pre-treatment.	P value	is	0.0004	considered	extremely	significant
Groups ANOVA Comparison at Post-treatment	P value	Is	0.4427	considered	NO	significant
Groups ANOVA Comparison at Follow-up	P value	Is	0.0202	considered		significant

**Table 1. One-way Analysis of Variance (ANOVA) comparison between all groups at pre, post-treatment and follow-up.**



**Figure 1. All groups means SPRINT scores at pre, post-treatment and follow-up**

### **Group EMDR Therapy Treatment for Cancer Patients**

In a pilot study conducted by Capezzani et al., (2013) with cancer patients, results showed that EMDR therapy had the same efficacy both, in the active cancer treatment patients and in patients undergoing follow-up care. Also, EMDR therapy was significantly more effective than Cognitive Behavioral Therapy (CBT) in reducing scores on the Impact of Event Scale-Revised (IES-R) and the Clinician-Administered PTSD Scale (CAPS) intrusive symptom sub-scale, whereas anxiety and depression improved equally in both treatment groups.

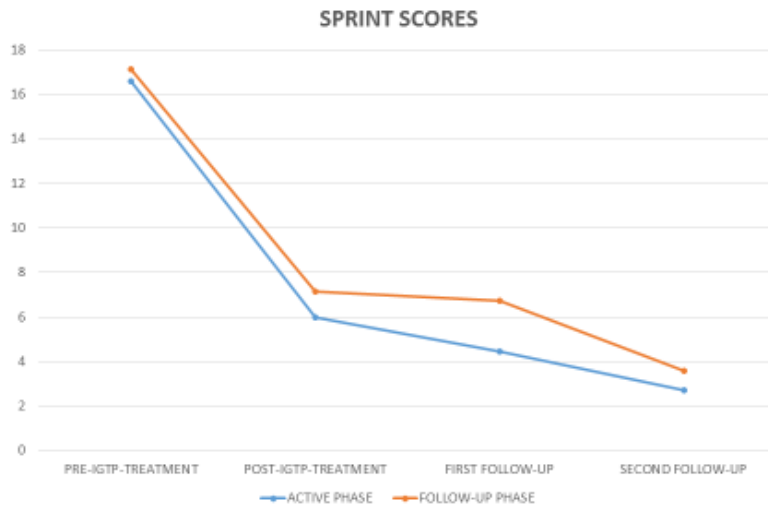
In a pilot study conducted in 2014 by Jarero, Artigas, Uribe, García, Cavazos, & Givaudán, (2014), intensive EMDR therapy (Abel, 2011; Grey, 2011; Jarero, Roque-López, Gómez, & Givaudán, 2014b; Wesson & Gould, 2009) was administered to 24 adult female cancer patients. Group 1 (n=17) in the active cancer treatment phase and Group 2 (n=7) in the followed-up cancer treatment phase; with different types of cancer (e.g., cervical, breast, colon, bladder, skin and breast) and cancer-related posttraumatic stress symptoms in Monterrey, Mexico. The participant's age was from 36 to 68 years (N=54.16 years) and the timeline in which the cancer was first diagnosed was from July 2006 to October 2013.

During February 27<sup>th</sup>, 28<sup>th</sup> and March 1<sup>st</sup> of 2014, The EMDR clinicians provided six sessions of the EMDR-IGTP adapted for ongoing traumatic stress on three consecutive days (one in the morning and one in the afternoon). Results showed a statistical significant reduction on the participant's SPRINT scores between pre-treatment and first follow-up and pre-treatment and second follow-up at three months. See Table 2 and Figure 2.

At this time, AMAMECRISIS and the Latin American & Caribbean Foundation for Psychological Trauma Research are designing RCT research projects for this population and their families.

Cancer Patients	Mean (SD) at Pre-treatment	Mean (SD) at Post-Treatment	Mean (SD) at 30 days Follow-up	Mean (SD) at 90 days Follow-up	Comparison of Pre and Post	Comparison of Pre and First Follow-up	Comparison of Pre and Second Follow-up
All participants N=24	16.75 (5.05)	6.33 (4.18)	5.12 (4.25)	4.16 (4.18)	t(23)=11.103, p<0.0001	t(23)=12.657, p<0.0001	t(23)=12.299, p<0.0001

**Table 2. SPRINT Means, Standard Deviations and statistical comparisons**



**Figure 2. SPRINT scores pre-post and two follow-ups.**

## **Individual EMDR Therapy Treatment for First Responders**

Since 2012, there is an ongoing pilot field study led by Ignacio Jarero based on Dr. Francine Shapiro's initiative of a special EMDR training program to teach appropriate, selected, trained and supervised paraprofessionals on how to provide EMDR Early Intervention in group (EMDR-IGTP) and individual (EMDR-PROPARG) formats, in acute trauma situations and in low-income countries with poor or not psychological trauma professional care (Jarero, Amaya, Givaudán, & Miranda, 2013).

The program leader conducted field trials on this special EMDR program in four continents (America, Europe, Africa, and Asia), with participants from 63 different countries, sponsored by the Mexican Army, Mexican Air Force, Mexican Marines and World Vision International. The trainees used the two protocols only for staff care peer support and not with the civilian population. Preliminary data obtained from the sponsor's personal communication showed that: a) both protocols have ecological validity (acceptability in the real world and with different cultures), b) the protocol's administration by paraprofessionals and for staff care peer support did not cause harm to the participants "clients" or the "facilitators" (paraprofessionals), c) bilateral stimulation (BLS) using the Butterfly Hug is accepted cross culturally, even in cultures in which eye movements (EM) are rejected due to their resemblance to hypnosis or shamanic movements, and d) the protocols reduced post-traumatic stress symptoms. Even though these field trials results are encouraging, a project of this magnitude and worldwide impact needs more research before its dissemination. The following study is part of this special program.

Thirty nine (n= 39) traumatized first responders on active duty were randomly assigned to receive two 90-min sessions of either EMDR-PROPARG or supportive counseling. Participants in the EMDR-PROPARG group showed benefits immediately after treatment, with their scores on the Short PTSD Rating Interview (SPRINT) showing further decreases at a 3-month follow-up. In comparison, supportive counseling participants experienced a non-significant decrease after treatment and an increase in the SPRINT scores at the second follow-up. The significant difference between the two treatments provides preliminary support for EMDR-PROPARG's effectiveness in reducing severity of posttraumatic symptoms and subjective global improvement (Jarero, Amaya, Givaudán, & Miranda, 2013).

## **Discussion**

This paper presents an overview of the Eye Movement Desensitization and Reprocessing (EMDR) therapy Humanitarian Trauma Recovery Programs in Latin America & the Caribbean that have been used since 1998 for natural disasters (e.g., flooding, landslides, and earthquake), man-made disasters, human massacre, ongoing geopolitical crisis, children and adolescents victims of severe interpersonal violence, first responders and cancer patients.

The author's intention is to highlight and enlighten the reader about the existence of these Humanitarian Programs and modified EMDR therapy protocols in both, group and individual formats that present an auspicious answer for the treatment of acute trauma or acute trauma situations without a post-trauma safety period.

Dr. Francine Shapiro mentioned: "So, whether it is having HAP projects or the individual response of clinicians who are working in environments of ethnopolitical violence or others going in and working after manmade disasters or natural disasters, you are liberating the individual adults and children who have been traumatized, and you are ensuring that the proper bonding and connections are able to take place with others in the subsequent years." (Luber and Shapiro, 2009, p.226).

During or after natural (e.g., earthquakes, flooding, tsunamis, tornados) or man-made disasters (e.g., war, terrorism, ethnopolitical violence, geopolitical crisis, human massacres, or urban disasters as the settling of scores between drug cartels) psychological trauma is one of the many consequences of the multifaceted situations which individuals and communities have to deal with (Jarero, 2011). "The basic confidence that is ordinary present between human beings is fractured, leaving the members of their communities immersed in despair and hopelessness about potential attacks against them" (Jarero & Uribe, 2014a, p. 76).

An often overlooked cost of disasters is the psychological wounds that are not always visible, attended, or acute. For more than 10 years, experts have concluded that the psychological casualties of a disaster will outweigh the physical by an estimated 4:1 ratio (Everly, Barnett, Sperry, & Links, 2010). The mental health and well-being of first responders is important to the individual, their family, the organization, and the wider community (Shakespeare-Finch, 2011).

Given the pervasive negative mental health effects of natural or man-made disasters, ethnopolitical violence or geopolitical crisis interventions are needed that can be efficiently applied. The possibility of utilizing EMDR as one component of a comprehensive system of interventions that promote healing and enhance resilience post disaster has important global implications (F. Shapiro, 2009).

The number of traumatized individuals in the world is staggering; it is essential that treatment be provided to help large groups of people return to baseline functioning as rapidly as possible. Randomized, controlled research is needed to investigate and to evaluate the treatment of critical incidents, so that effective therapies can be developed and provided to alleviate the suffering of the world's many victims of disasters (Luber, 2009).

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