

tizing relations within the family. For the entire period of stay in hospital (8–32 days), half of the wives never visited them. **Conclusions:** The data highlight the problems of therapy and healing of former war participants, which includes social and humanistic aspects of their lives.

**Keywords:** Armenia; employment; marriage; military; post-traumatic stress disorder; war  
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### Peri-Traumatic Experiences, Acute Stress Disorder, and Post-Traumatic Stress Disorder after Motor Vehicle Crashes

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**Introduction:** Motor vehicle crashes (MVCs) are a major cause of death in occidental countries. In Portugal, the number of victims is one of the highest in Europe. These victims frequently report symptoms of peri-traumatic dissociative experiences, acute stress disorder (ASD), and post-traumatic stress disorder (PTSD). In a previous longitudinal study of 42 participants, peri-traumatic dissociation at the time of MVC predicts PTSD four and 24 months later, a result that matches literature on trauma reactions.

**Objective and Methods:** The aim of this study was to evaluate the relationships between peri-traumatic experiences, ASD, and PTSD, and determine PTSD predictors four months after the accident in 65 MVA victims (51 males, 14 females; mean age = 33 years). Participants were evaluated five days after the accident (T1) and four months later (T2). Participants completed the Peri-Traumatic Dissociative Experiences Questionnaire (PDEQ) Stanford Acute Stress Reaction Questionnaire (SASQ), and a 17-item PTSD scale.

**Results:** Of the patients, 27.8% had ASD. Four months after the accident, 33% reported PTSD. Peri-traumatic dissociation was correlated with ASD and PTSD symptoms. Peri-traumatic dissociation predicts ASD. Together, dissociation and ASD accounted for 42.6% of PTSD symptoms variance. **Conclusions:** Some authors have discussed the contribution of ASD and peri-traumatic experiences to PTSD development. More data would be useful to understand the impact of these relationships and symptoms on physical and psychological health, but also on secondary victims as families and healthcare professionals.

**Keywords:** acute stress disorder; motor vehicle accidents; peri-traumatic experiences; post-traumatic stress disorder; public health  
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### Canadian Prehospital Readiness for a Tactical Violence Event

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**Introduction:** Paramedics are the only medical personnel who routinely are at the scene of violent episodes and are more likely to be assaulted than other prehospital personnel.

In addition to individual acts of violence, emergency medical services (EMS) providers now need to cope with tactical violence, defined as the deployment of extreme violence in a non-random fashion to achieve tactical or strategic goals.

**Methods:** This survey was designed to review the readiness of EMS crews in Ontario and British Columbia to assess the risk of violence in their environment, deal with violence, gauge the impact of violence and on the EMS crew member, and evaluate the access and effectiveness of emotional support available to caregivers exposed to violent episodes. **Results:** The results of the survey indicate a significant lack of preparedness for situations involving tactical violence: 89% of respondents either never had such training or had been trained more than a year ago; 36% of respondents never had engaged in a field exercise with other responding agencies; and 4.5% of respondents were not aware of who would be in charge in such an event. In addition, this study has shown that EMS crews are exposed to events that are significant in their emotional impact.

**Conclusions:** The involvement of children, multiple casualties, and the presence of malice all increased the impact of the event on the caregiver. In addition, the study revealed inadequate access to appropriate training and support required to deal with this emotional impact.

**Keywords:** emergency medical services; Canada; prehospital; readiness; tactical violence  
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### Psychosocial Issues in India among Victims of Natural Disasters and in Conflicts

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**Introduction:** Mental health is a low priority in resource-poor settings and among vulnerable populations fighting for survival after disasters. The psychosocial situation in the conflict setting is more complicated than for victims of natural disasters because their baseline mental health status is unknown.

**Methods:** Psychosocial evaluations from Indian disasters during the past 10 years were collated and analyzed for important mental health predictors. Social issues of food security, equity of safe water provision, and about distribution of disaster relief and aid also were evaluated.

**Results:** Children were the most vulnerable group in India. Post-traumatic stress disorder (PTSD) usually was a transient response to disasters, and lasted for an average of 90 days. Residual sadness was the only persisting PTSD symptom (84%). Underlying depression was the most important predictor for residual PTSD. Interventions facilitated through natural groups (language and ethnic groups) were easier to facilitate and yielded better results. While spiritual healing workshops had a definite role, relief being provided along religious lines was more controversial. Of 98% whose homes had been destroyed, 89% had their homes relocated/rebuilt within 24 months, and 51% had resumed their previous occupation. However, only 30% recovered economically after natural disasters. The health-care providers, funders, and relief agencies were hesitant in their response in the setting of complex emergencies, as

they are unsafe work environments, at the personal and political level. Mental health interventions were more complex and outcomes less predictable in the conflict setting as compared to natural disasters.

**Conclusions:** Systematic mental health surveillance post-disaster must be included in the general post-disaster assessment. There is a need for supportive education, training of mental health workers, and development of region specific social and psychological questionnaire for validated use in India.

**Keywords:** conflict; India; natural disasters; post-traumatic stress disorder; psychosocial

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### When Helping Hurts: The Effects of Compassion Fatigue on Disaster and Emergency Workers

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**Introduction:** The emotional aspects of traumatic events often are ignored for professionals involved in disaster interventions immediately with victims of emotional trauma. There is a growing body of theoretical and empirical literature that recognizes that engaging in therapeutic work with trauma survivors can and does impact the professionals involved. Compassion fatigue is the latest in an evolving concept that is known in the field of traumatology as *secondary traumatic stress*. Most often, this phenomenon is associated with caring for others in emotional or physical pain.

**Results:** In a literature review, Beaton and Murphy (1995) assert that emergency/first responders and crisis workers absorb the traumatic stress of those they help. By doing so, they are at-risk for compassion fatigue. Among the negative consequences that often are not linked to their work, include substance abuse and relationship conflicts. Although the body of literature exploring the prevalence of compassion fatigue continues to grow, the lack of research to support the underlying theory of the concept in relation to measurement is cause for alarm.

**Conclusions:** This presentation will explore a theoretical model that accounts for and predicts the emergence of compassion stress and compassion fatigue among professionals working with traumatized people as well as explicate the principals associated with accurate diagnosis, assessment, research, treatment, and prevention of compassion fatigue.

**Keywords:** compassion fatigue; disaster; psychosocial; secondary traumatic stress; trauma

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### A Psycho-Educational Intervention Program for Police Officers

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**Introduction:** Recent studies have documented the adverse impacts of disaster exposure for emergency response personnel. Increasingly, researchers and practitioners are focusing on the role of resiliency in reducing the risk of

adverse mental health impacts on first responders. To that end, a novel resiliency-building intervention program was developed and implemented by an external peer-assistance program for a large urban police department. The program includes education and debriefing components and initially was piloted in precincts and now is being implemented at the firing range. A session consists of a team of two peer support officers and a mental health clinician presenting a short psycho-educational program designed to familiarize officers to signs and symptoms of distress and promote effective coping. This is followed by an hour-long small group discussion that gives officers an opportunity to discuss events that have affected them, giving them a better opportunity to mitigate the stressors associated with those events. To assess the feasibility of this approach, a process evaluation of the program was conducted.

**Methods:** Audio-taped, in-depth, semi-structured individual interviews were conducted with 25 program facilitators (14 peers and 11 clinicians). A thematic analysis of the transcripts followed.

**Results:** Participants reported that the program was well received by officers of all ranks. An important aspect of this program was the relative privacy afforded by offering it in a more neutral setting of the firing range as opposed to a precinct. The presence and involvement of their fellow officers was seen as significant in fostering openness and normalizing officers' experiences. Participants also reported that this support mechanism likely would help prepare officers for disasters and other critical incidents.

**Conclusions:** This program is a feasible and relatively inexpensive approach to providing psycho-education to police officers. This model may be effective for other departments.

**Keywords:** peer support; police; process evaluation; psycho-educational intervention; psychosocial; stress

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### Integrating Language, Culture, and Community into Planning for and Providing Effective Emergency Health Care during Disasters: Challenges and Opportunities from the California Experience

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**Introduction:** The experiences of racially/ethnically diverse residents and communities in the US in the wake of the wildfires in California, Hurricane Katrina, and other disasters have shown the serious if not fatal lack of their effective engagement in response to these events, confusion around access to and provision of emergency care, and failure to adhere to recommended services guidance and requirements. As one of the most diverse states in the country, California's experience with earthquakes and wildfires has heightened related concerns around the capacity of health-care providers to effectively meet the needs of diverse communities. The objectives of this study were to: (1) identify barriers and challenges to meeting emergency health needs of these communities during disasters; (2) identify programs and policy gaps in the current environment; and (3) develop recommendations as well as guidance for improvement.