

## Field Hospital Strategies following the Abruzzo Earthquake, 2009

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**Introduction:** On 06 April 2009, an earthquake measuring 6.3 on the Richter Scale struck a large area of the Abruzzo region in central Italy. An initial assessment suggested many people were injured and many buildings were destroyed, including the main hospital of the area, the San Salvatore Hospital.

**Methods:** The National Civil Protection immediately sent the field hospital (FH) of the Marche Regional Government, the neighboring region, to the Abruzzo region. The non-governmental organization Regional Association Sanitary Emergencies (ARES) also sent personnel. The ARES professional volunteers included doctors and nurses who had knowledge of disasters and specific medical specializations.

International literature suggests that a FH is a complex structure that often requires a long period of time to become completely functional—time that the affected population often does not have.

**Results:** The proximity of the affected area to the Marche region, the logistic organization of the FH and the medical staff of ARES helped ensure that the FH was fully operational 22 hours after the earthquake. The FH had a 60-bed capacity, a field surgery theatre, ultrasonography, radiological devices, and different code areas.

From 06 April to 06 June, the FH provided medical treatment to almost 6,000 patients, and the ARES personnel (167) were backed by the sanitary personnel of the San Salvatore Hospital.

**Conclusions:** A well-planned medical response is important when providing health assistance during a disaster, yet it is hard to substitute a damaged hospital in the heart of the disaster area. A modular sanitary structure, light at the beginning, with specific and restricted medical supplies, with a small number of specialists in disaster medicine and disaster logistics could help improve the positive results obtained in the L'Aquila Abruzzo mission.

**Keywords:** Abruzzo Earthquake; disasters; earthquakes; field hospitals; Italy

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## Mental Health

### 5,600 Emergency Department Admissions and Early Intervention for Post-Traumatic Stress Disorder: What Works, When, and Why

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**Introduction:** Post-traumatic stress disorder (PTSD) can be a chronic and disabling disorder for a significant percentage of trauma survivors, particularly following mass-

casualty incidents. Few studies have examined the use of outreach and uptake of early interventions in the recently traumatized, and their ability to prevent the development of chronic PTSD.

**Methods:** This study examined the development of PTSD symptoms in a large (>5,500) cohort of very recently traumatized patients coming to an emergency department. Patients were assessed via telephone at two weeks, seven and 14 months, and by clinical interviews at three weeks and two months. Symptomatic patients (n = 296) entered a randomized, equipoise stratified, controlled trial that compared different early interventions: Exposure Based Treatment (EBT), Cognitive Therapy (CT), an SSRI, Placebo (PBO), and Waitlist control. All treatments began within a month of the traumatic event. If necessary, the waitlist control group was offered EBT at three months post-trauma. The SSRI/PBO condition was double blind. Clinical and telephone assessors were blind to treatment allocation, acceptance or completion. All subjects were followed up to 14 months post-trauma.

**Results:** Exposure Basic Training and CT had a greater effect on reducing PTSD incidence compared with WL, SSRI and PBO (at three months: 21.4% and 18.2% vs. 57.3%, 61.9% and 58.8%,  $p = 0.002$ ). Preliminary analyses indicate that CT and EBT differed in certain specific areas: patients were more likely to drop out of EBT; CT had a greater effect on the depression scores.

**Conclusions:** Both CT and EBT are effective early interventions for CBT, but have slightly different effects. Outreach for patients arriving at an emergency department following a traumatic event is feasible. Clinical assessment and treatment uptake was relatively low, and further work is necessary to reduce barriers to treatment.

**Keywords:** admission; emergency department; intervention; post-traumatic stress disorder; psychosocial

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### Comparison of Psychiatric Symptoms among Hospital Personnel between the Second Lebanon War and the Israel-Gaza Armed Conflict

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**Objectives:** The study goal was to assess psychiatric symptoms among hospital personnel during the Israel-Gaza armed conflict in comparison to hospital personnel during the 2<sup>nd</sup> Lebanon War. To the best of the authors' knowledge, this is the first study comparing hospital personnel who were under the same threat (rockets) and exposed to wounded soldiers and civilians.

**Methods:** One hundred fifty-three hospital personnel participated in the study and completed a demographic questionnaire, along with a battery of self-reported measures for psychiatric symptoms such as the Impact of Event Scale-Revised (IES-R) and Center for Epidemiologic Studies Depression (CES-D).