had holidays for the last 12 months" were the most significant items. The administration of a minimal test did not allow for the elaboration of a relevant tool (sensitivity: 60%, specificity: 92.2%)

Conclusions: Deprivation prevalence is high, the more so among the older population. The EPICES score test appears to be the minimal "identifying test" for deprived patients, simplification was not conclusive.

Keywords: deprivation; Evaluation of Precarity and Inequalities in Health Examination Centers; older population; psychosocial; socio-economic

(I103) Issues of Mental Health during the Acute Phase of a Disaster in Japan—Lessons Learned

Rimi Fuse;[1] Akira Fuse;[1] Hiroyuki Yokota;[1] Toru Ishihara[2]

1. Department of Emergency and Critical Care Medicine, Nippon Medical School, Tokyo, Japan
2. Tokyo Medical Association, Tokyo, Japan

Purpose: To demonstrate features of the mental health care during the acute phase of a disaster due to natural hazards in Japan. This report will discuss issues in devastated area of Chuetsu in Niigata Prefecture after an offshore earthquake.

Methods: The earthquake of 16 July 2007 had a magnitude 6.8. It injured 2,153 people, including 192 with severe injuries, and caused 14 deaths. The Tokyo Medical Association (TMA) deployed disaster medical relief teams on the day of the event, and performed mental care in internally displaced person (IDP) camps. Other mental care teams took over the mission three days after the event.

Results: There were 27 medical teams was 27. They visited 88 IDP camps. Medical teams treated 2,288 cases during first four days. Forty-seven cases included psychiatric problems. Three of 13 refugees who had psychiatric symptoms needed new medicine. Four were under psychiatric treatment and could continue their treatment with their attending physicians.

Earthquake victims displayed the following characteristics during the acute phase: (1) poor adaptation in the elderly; (2) fluctuation of compliance for medications; (3) occult anxiety and complaints; and (4) unconsciousness of sleep disturbance.

Conclusions: The development and education of liaison methods about mental health care during the acute phase of a disaster is needed for emergency physicians and general surgeons of Disaster Medical Assistance Team and Medical Association relief teams that perform treatment during the acute phase of disaster. They must understand and have skills for triage of different mental health cases.

Keywords: acute phase; earthquakes; Japan; mental health; psychosocial issues

Oral Presentations—Triage

Continuous Vital Signs Acquisition Improves Prehospital Trauma Triage

Ayan Sen;[1,2] Peter Hu;[2] Colin Mackenzie;[2] Sean Jordan;[2] Yan Xiao;[2] Richard Dutton;[2] Thomas Scalea[2]

1. Department of Emergency Medicine, Henry Ford Hospital, Detroit, Michigan USA
2. Program in Trauma, R. Adams Cowley Shock Trauma Center, University of Maryland School of Medicine, Baltimore, Maryland USA

Introduction: Vital signs (VS) data collected in prehospital care and recorded in trauma registries are often missing or unreliable as it is difficult to record dynamic changes while performing resuscitation and stabilization. The purpose of this study was to test the hypothesis that analysis of continuous vital signs improves data quality, and predicts life-saving interventions (LSI) better than use of retrospectively compiled Trauma Registry (TR) data.

Methods: After Institutional Review Board approval, six emergency medical services helicopters were equipped with a Vital Signs Data Recorder (VSDR) to capture continuous VS from the patient onto a handheld personal digital assistant (PDA). Prehospital LSIs (fluid bolus, cardiopulmonary resuscitation, drugs, intubation, etc.) and those performed within two hours after arrival in the trauma resuscitation unit were considered outcome variables. The VSDR and TR data were compared using Bland-Altman method. A multivariate analysis was performed to determine which VS variable best predicted LSIs using the values in the TR and the VSDR.

Results: Prehospital VSDR data were collected from 177 patients. There was a significant difference between the highest and lowest heart rate, systolic blood pressure (SBP), and oxygen saturation between the VSDR and the TR data ($p < 0.001$). The VSDR highest heart rate and lowest oxygen saturation recorded predicted LSIs while none of the TR vital signs did so in a multivariate model. The SBP was not an independent predictor of LSI.

Conclusions: The VSDR data increased the odds of predicting LSIs compared to the TR data. Using continuous vital signs in prehospital care may lead to the development of better trauma prognostic models.

Keywords: disaster; emergency medical services; life-saving interventions; prehospital; Trauma Registry; vital signs

Effect of Shift Duties and Patient Volume on Triage during Peace and Mass-Casualty Incidents

Rakesh Kumar

JPN Apex Trauma Centre, AIIMS, New Delhi, India

Background: Triage is an effective method to streamline patient flow and shorten the delay for definitive care. We studied the effects of shift duties and patient volume on triage.

Methods: Patients presenting to the emergency department were tagged with a red, yellow, or green wristband as