

management, community based health work force and self care will be reviewed. Finally, pre-emergency preparedness focusing on community based benchmarks, community based disaster management planning and strengthening health systems based on PHC will be discussed.

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### (P1-29) Catastrophe Management Plan, Simulations and Results – An Experience of a Private Hospital in Brazil

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**Introduction:** The terms catastrophe and disaster have been frequently heard worldwide due to situations like earthquakes, floods and events provoked by man as the September 11th and Anthrax attack. Catastrophe means all situations where material and human resources available in a healthcare facility are not enough to assist a large number of victims admitted at the same time. Accreditation requires having a plan to manage effectively those situations, assessing safely as much victims as possible.

**Objective:** To describe the catastrophe plan and its management in a private hospital.

**Methodology:** Hospital Albert Einstein is located close to a huge soccer game stadium and near to the State Government Hall. This was the reason to have a plan focusing on casualties with a large number of victims. The literature was revised to choose the triage methodology. Triage to identify the priority of patients' assessment based on their condition, possibility of treatment and determining discharge for those without visible risk. Simulation was implemented, followed by debriefing to register lessons learned.

**Results:** An algorithm was developed with a crisis center and defining care and support areas in the organizations to manage the victims at Emergency Room and triage field. The plan was effectively deflagrated twice: 47 victims from a bus accident and 25 from a policeman strike. Debriefing was done in all opportunities and communication is the main issue; 15 simulations have been done for training purpose, with specific goals.

**Conclusion:** Hospital is a high risk environment itself for an internal or external incident depending on its localization. A disaster plan is necessary to improve everyone safety, to organize resources, to respond effectively to such situations and take the organization back to regular operation as soon as possible. Simulations are essential to guarantee staff competency and organization support and response to adverse situations.

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### (P1-30) Natural Disasters Challenge for Emergency and Rescue Services - Lessons Learned

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Natural disasters challenge for Emergency and Rescue Services-lessons learned Przemyslaw Gula MD PhD, Edyta Szafran Institute for Emergency Medicine. Krakow, Poland.

In the period 2008–2010 Poland experienced series of natural disasters including 3 large scales flooding, 2 periods of extremely high snowfalls followed by low temperature periods and finally local flush flooding in different locations. The time of each disaster elapsed from several days up to 6 weeks. All of them had severe impact on local infrastructure by destroying road systems, communication as well as healthcare and fire brigade facilities. The rescue efforts required evacuation, Search and Rescue operations, providing medical care and shelter. The most problems occurred in following areas: - large scale evacuation - collapse of communication systems (including 112 dispatch) - inadequate number of specialized rescue equipment (helicopters, vehicles, boats, snowmobiles, etc.) - providing EMS in affected areas - necessity of evacuating hospitals. The lessons learned showed the need for following changes: - strong trans regional coordination in means of facilitation of utilizing civil protection and military recourses - unification of operative procedures for all actors of the response operation - improvement of communication systems and reducing their vulnerability on environmental factors - establishing regional crisis management and control centers, covering the emergency response activities in affected areas - need of large-scale use of HEMS as well as Police and military helicopters in natural disasters - need for better supply in specialized rescue equipment including rescue motorboats, 4 wheels drive rescue vehicles and ambulances, snowmobiles, quads in local response units. The main rule of commanding the entire operation is subsidiary. Local coordinating structures should be supported by regional and central governments by supplying necessary recourses. However the operational command should be unified and include all participating units and organizations.

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### (P1-31) The Determinants of Competency for Emergency Medical Technician-II in Taiwan

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**Background:** The formal training for Emergency Medical Technician (EMT) in Taiwan was legislated by Emergency Medical Care Services Act in 1995. Very little research discusses the competency of EMTs. The purpose of this study was to assess the determinants of competency for the EMT-II in Taiwan.

**Method:** In June 2005, a cross-sectional survey was targeted on firefighters with EMT-II certificate and having a minimum work experience of three months in central Taiwan. Kirkpatrick's (1994) four-level model guided the development of conceptual framework and questionnaire. Structural Equation Modeling (SEM) was adopted for the analysis.

**Results:** One thousand and seventy-three EMT-IIs were included in the study. Majority of them were male (99.4%) with an average age of 34.46 years old. Among them, 96.5% were careered EMTs with 130.33 months of field experiences. The competency of EMT-II was measured by 4 indicators of error reduction, quality improvement, achievement orientation, and efficiency improvement. The construct of 'Capability