## Abstracts of Scientific Papers-WADEM Congress on Disaster and Emergency Medicine 2017

Disaster Psychiatric Assistance Team (DPAT): The Present Situation and Future Measures to Address Disaster

Psychiatry in Japan

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**Study/Objective:** There is no guidance for mental care teams during disasters; this leads to inefficient activity. For example, the lack of consistency in the number of consultations per team. The Ministry of Health, Labor, and Welfare has a budget which is provided to each prefecture, but without a manual for what mental care teams should do.

**Background:** In addition to those providing medical assistance, many organizations and institutions went to the disaster area to provide mental health care following the Great East Japan Earthquake. However, it became clear that the lack of predefined methods and guidelines resulted in unneeded activity and an uneven distribution of care, and so, these became points for future improvement.

**Methods**: We conducted researched about the system of mental care support activities in the Great East Japan Earthquake 2011. **Results**: The aims of Mental Care teams are: 1) The need for assistance in the acute phase; 2) The need for a coordinator; and 3) The need for preparation during normal times.

**Conclusion:** In order to tackle these shortfalls a new specialist organization, Disaster Psychiatric Assistance Team (DPAT) is able to support the psychiatric care and psychiatric social care in disaster areas, and was created on April 1, 2013. I would like to explain the actual activities in each disaster so far, as well as discuss the future prospects of disaster psychiatry in Japan. *Prebasp Disaster Med* 2017;32(Suppl. 1):s15

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#### Preparedness Analysis for Management of Bleeding during Mass Casualty Incidents, Qom, Iran

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**Study/Objective:** In this study we determine the most important factors affecting the ability to care for Bleeding Patients (BP) during a Mass Casualty Incident (MCI) and devise a tool to assess them in our work setting.

**Background:** Bleeding is responsible for a major part of preventable deaths during trauma and MCIs. An MCI may greatly overwhelm a system's ability to manage BPs. In such settings, implication of usual protocols used to manage trauma patients may not be possible or applicable, while the hospital's inability to provide necessary products in time may hamper optimum care.

Methods: An extensive literature review was conducted to determine factors effective in a system's ability to manage bleeding during an MCI. Using the qualitative method these findings were converted to a questionnaire to examine different parts of the response system. This tool was then used to assess different organizations participating in response to an MCI at the city of Qom, Iran.

**Results:** Factors having a significant effect on bleeding and whose restrictions may impair proper management of BPs were divided into three domains: Blood and blood products' supply, prehospital management of bleeding, and in-hospital patient-specific interventions. After assessing different parts of the response system at our work setting, it was found that the system was grossly unprepared to manage bleeding during a mass casualty incident in all three domains. Among the domains, preparedness of the blood supply system was better than others, while prehospital management had the lowest score.

**Conclusion:** Based on the assessment tool we devised, we found the response system at our setting to be unprepared for the management of BPs during an MCI. We believe our questionnaire is a useful and much needed tool, which will expose the limiting factors of providing care for BPs in response systems. *Prebosp Disaster Med* 2017;32(Suppl. 1):s15

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# Disabled People in Disasters - EC Project "EUNAD-Implementation"

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Study/Objective: The specific reactions and needs of mentally and/or physically disabled people in disaster settings, as well as trauma-related psychosocial consequences in the mid- and long-term phase, are a known gap in psychosocial and mental health support. The EUNAD IP project aims toward the implementation and preparation of EU human rights related Assistance Programs for disabled survivors of disasters on the basis of EUNAD (people with visual or hearing disabilities) and EUTOPA (Target Group Intervention Program) projects. Background: EUNAD IP project is supported by the European Commision, DG Humanitarian Aid, and Civil Protection. Acronym EUNAD IP: European Network for Psychosocial Crisis Management - Assisting Disabled in Case of Disaster - Implementation. Duration: 24 months (2016-2017). Coordinator: Federal office of civil protection and disaster assistance, Bonn, Germany.

Project partners: University of Innsbruck, Austria; Charles University in Prague, Czech Republic; Center for Psychotraumatology,

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Alexianer GmbH, Krefeld, Germany; Norwegian Center of Violence and Traumatic Stress Studies, Oslo, Norway, University of Southern Denmark, Denmark. Fields: Civil protection, psychosocial support in disasters, disaster psychology, crisis communication, crisis management, needs of physically and mentally disabled people in disasters.

Methods: Focus groups, in-depth interviews, expert interviews, questionnaires, literature research, guidelines research, case studies, and qualitative studies.

**Results**: Recommendations, guidelines, training programs, practical toolkits, and an international expert network.

**Conclusion:** EUNAD IP project integrates mentally and/or physically disabled people in the crisis management programs, and develops training tools for first responders, psychosocial helpers, social workers, and mental health professionals.

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## Crisis Standards of Care: Concepts of Operations and Tools Vicki L. Sakata

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**Study/Objective:** 1. Review Crisis Standards of Care (CSC) concepts. 2. Introduce scarce resource conservation and allocation tools developed by Northwest Healthcare Response Network (NWHRN). 3. Understand complexities of operationalizing CSC using NWHRN Regional Scarce Resource Management Concept of Operations as an example.

**Background:** In a catastrophic disaster, standards of care may change, either due to overwhelming number of patients or lack or resources. In 2009, the Institute of Medicine published a landmark report on CSC.<sup>1</sup> Since then, many others have worked to operationalize concepts of CSC. Delivering health care when resources are limited (eg, ventilators in a pandemic) would force clinical practice to change dramatically. The NWHRN is a health care coalition representing the two largest counties in Washington State. We convened a Disaster Clinical Advisory Committee (DCAC) and developed clinical guide-lines for use during times of scarce resources.

Methods: The NWHRN DCAC committee developed nine Scarce Resource Cards based on work by Minnesota Public Health. We have modified Minnesota's work to meet our regional needs and have added 3 Critical Care Algorithms. The Critical Care algorithms are used together with Triage Team Guidelines. All resources were developed by subject matter experts and clinical leaders, with input by adult and pediatric ethicists.

**Results:** These CSC tools are important, but only a small part of response. Local and regional coordination between clinicians, health care executives, and public health is required to best serve a community. Recognizing this, NWHRN developed an overall Concept of Operations for Scarce Resource Management bringing all stakeholders together for regional planning.

**Conclusion:** Clinical decisions when resources are scarce require coordinated efforts between many health care stake-holders. Developing a Concept of Operations around scarce

resource management is key in planning for Crisis Standards of Care. <sup>1</sup>IOM 2009. *Guidance for Establishing Crisis Standards of Care for Use in Disaster Situations: A Letter Report.* Washington, DC: National Academies Press. *Prebosp Disaster Med* 2017;32(Suppl. 1):s16

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### The Golden 100 Hours of Mass Casualty: A Civilian Team Applying the Military 'Mobile Forward Surgical Team' Model to Deliver Mass Casualty Surgical Care in the

Aftermath of Super Typhoon Haiyan

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**Study/Objective:** The first 100 hours following a masscasualty or natural-disaster event offers a "Golden 100 Hour" period of time where the opportunity exists to provide maximal medical and social benefit to disaster victims. Our rapidly deployable, self-sustained, Civilian Mobile Forward Surgical Team (CMFST) analogous to the Mobile Forward Surgical Team utilized by the United States Military showed this model is safe and effective.

**Background**: The first 72-100 hours post-event is often devoid of formalized medical responses from outside the disaster zone, and local response is often hampered by the disaster itself. Among survivors, there is a need for urgent medical care within the first 100 hours.

Methods: Our CMFST began surgical operations in Leyte Province, Philippines approximately 60 hours after Super Typhoon Haiyan hit landfall. This represented the only operational medical facility, providing Damage Control surgical and obstetrical care within the hardest hit region from 60 to 110 hours post typhoon landfall. Our CMFST training, organization, and discipline was based on the Military Forward Surgical Team model. Ten out of the 13 individuals had prior formal CMFST/Mass Casualty training, none had prior military experience.

**Results**: Over a four-day period, we cared for 157 patients requiring urgent surgical, obstetric, or orthopedic operations or procedures, who otherwise would not likely have had access to medical or surgical care. Our field hospital was the de facto medical and surgical facility for a population of 50,000, until the local hospital resumed operations, and even then, remained functioning for a time period of four months after our team departed the disaster zone.

**Conclusion:** Based on our operational experience in the immediate aftermath of Super Typhoon Haiyan, we believe that Civilian Mobile Forward Surgical Teams should become standard in international disaster relief to provide care as early as is possible within the "Golden 100 hours" post-event.

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