

protocols for training and further studies of resilient behaviors in disaster management teams.

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#### Revised Hospital-MIMMS Course for Japan

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**Introduction:** HMIMMS (Major Incident Medical Management and Support: The Practical Approach in the Hospital) has been introduced by ALSG (Advanced Life Support Group, Manchester, UK) and developed for many countries for preparing to accept huge numbers of casualties at a hospital during major incidents. The original HMIMMS course has been held in Japan since 2007, produced over 1,200 providers. Japan has a crucial history of natural disasters, earthquakes, tsunamis, and typhoons often resulting in extensive damages to infrastructure and communications.

**Aim:** The MIMMS-JAPAN and the Japanese Association for Disaster Medicine have joined to plan to revise the original HMIMMS course from the point of view of the difference of the type of disaster.

**Method:** By the permission of ALSG, two subjects were added “Hospital Evacuation” and “Business Continuity Plan” as lectures, workshops, and tabletops to the original HMIMMS course. Before attending the course, students were required to watch e-learning for deeper understanding and time-saving. Total program was organized into two days.

**Results:** Main points of modification are to:

1. Replace a system peculiar to the UK with a Japanese system.
2. Add unique contents of a Japanese disaster.
3. Add the important subjects especially in Japan.
4. Modify the presentation slides to understand easily for Japanese students. But the fundamental concept that hospital functions upon ‘CSCATTT’ is strictly preserved.

**Discussion:** Newly revised HMIMMS course will start in 2019 for Japanese learners. Many reflections must be accumulated and further revisions will continue.

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#### Risk Mapping of Road Traffic Incidents in Greater Kampala Metropolitan Area for Planning of Emergency Medical Services

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**Introduction:** Compared to high-income countries, low and middle-income countries (LMICs) bear the heaviest brunt of road traffic incidents (RTIs), which is a serious public health and development burden. Like other LMICs, Uganda has been experiencing a worryingly high burden of RTIs and their associated impacts with the highest number of all the total registered RTIs in Uganda registered in the Greater Kampala Metropolitan Area (GKMA). This places a tremendous demand on the few existing emergency medical services (EMS) to adequately respond to those affected.

**Aim:** To aid in better planning of EMS for the victims of RTIs by using risk mapping of RTIs in the GKMA.

**Methods:** A mixed methodological approach involving a systematic review, Delphi panel technique, retrospective data analysis, and a cross-sectional method.

**Results:** With Uganda progressing forward as envisaged in its “Vision 2040,” the GKMA, which is the country’s political and socioeconomic epicenter, is experiencing significant changes in terms of population growth. This has significantly increased RTIs, which puts pressure on the pre-hospital emergency care for those affected unless necessary actions are taken.

**Discussion:** Therefore, the road safety vis-à-vis injury prevention measures, which are needed to reduce the burden of RTIs, should be multifaceted in nature so that they closely correlate with the ongoing dynamics that cause them, particularly in the GKMA which experiences the highest number of RTIs and Uganda as a whole. The WHO “Safe System Approach” is desirable for this purpose as it represents the most appropriate approach because it is broad enough to comprehensively manage any of the ongoing dynamics (political, socio-cultural or economical) that are known to contribute to RTIs.

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#### The Role of the Nurse Disaster Preparedness Coordinator at a Large Suburban Teaching Hospital

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**Introduction:** Mass casualty incidents, whether man-made or natural, are occurring with increasing frequency and severity. Hospitals and health systems across the United States are striving to be more rigorously prepared more such incidents. Following a mass shooting in 2012 and significant growth and expansion of our hospital and health system in the following years, a need was identified for more staff to support preparedness efforts.

**Aim:** To discuss the roles and responsibilities of Nurse Disaster Preparedness Coordinator (NDPC), a dedicated position in the Emergency Department (ED).

**Methods:** The role of Nurse Disaster Preparedness Coordinator was implemented in 2016, is a part-time position in the Emergency Department and reports to the ED Manager while working closely with the ED Director of Emergency Preparedness and the hospital Emergency Manager. The role addresses all areas of the emergency

management continuum, from planning and mitigation to response and recovery.

**Results:** The NDPC's responsibilities fall into the categories of all-hazards preparedness, chemical, biological, radioactive, nuclear and explosive (CBRNE) response, and general nursing practice. All-hazards preparedness includes ED staff training, policy and procedure development, and liaising with hospital emergency manager to coordinate hospital-wide efforts. CBRNE response includes the training and maintenance of a patient decontamination team, a high-risk infectious disease team, and their equipment. General nursing practice addresses research, nursing indicators as they apply to disasters, promoting evidence-based practice, and community outreach.

**Discussion:** A dedicated Nurse Disaster Preparedness Coordinator has allowed transition from intermittent larger exercises to a regular and frequent exercise schedule and better application of full-scale exercises. Overall, the creation of the role has strengthened hospital readiness for mass casualty incidents while alleviating the vast scope of emergency management responsibilities for a large suburban hospital.

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### The Role of Emergency Medical Team: Experience Acute Response in Earthquakes and Tsunami at Palu, Central Sulawesi, Indonesia, 2018

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**Introduction:** The natural disasters of the earthquake and tsunami occurred in Palu, on September 28, 2018, at around 17.02 WIB. The earthquake measured 7.7 magnitude with the epicenter at a depth of 10 km in the direction of 27 km northeast of the city of Donggala, followed by a tsunami along the coast of Talise town of Palu. Some of the victims of the disaster have died, and in addition to many deaths, there were reported trauma cases such as fractures, torn wounds, and other injuries where many did not receive medical help.

**Aim:** To revitalize hospitals in Palu with the medical assistance team.

**Methods:** Sardjito hospital formed a medical team sent to the disaster area which consisted of 22 members from various disciplines (anesthetists, orthopedic surgeons, general surgeons, neurosurgeons, internal medicine doctors, pediatricians, general practitioners, anesthesia nurses, emergency nurses, surgical room nurses, sanitarians, sterilization officer, technical officers, and nutrition officers). The ICS informed the targets of this emergency response that the following must be accomplished within 2 weeks: revitalize the health care facilities and deliver health care. The sanitarian officer coordinated dealing with the problem of the former corpse in Bhayangkara Hospital by doing disinfectants in the area of the former mortuary. Sardjito Hospital's medical team revitalized health services in Bhayangkara Hospital by providing 24-hour emergency services and surgery.

**Results:** The medical team of Sardjito general Hospital gave medical service in Bhayangkara Hospital and Torabello Regional Hospital. The total number of treated patients was 158, and most cases of surgery were orthopedics.

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### A Sense of Trust, the Norwegian Way of Improving Medical On-Scene Managing Major Tunnel Incidents: An Interview Study

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**Introduction:** Norway is a country with many road tunnels and therefore also has experience with rescue operations in tunnel environments. Major incidents always challenge involved emergency services' management skills. Oslo, Norway has a specially trained medical on-scene commander, a function already existing in police and rescue service. Intra-agency communication and management of personnel are essential factors for a successful rescue effort.

**Aim:** To investigate the medical management provided by the specially trained Norwegian medical on-scene commander in relation to tunnel incidents.

**Methods:** Interviews were conducted with six of the seven medical on-scene commanders in Oslo. The collected data were analyzed using qualitative content analysis.

**Results:** An overarching theme emerged: A need for mutual understanding of the tunnel incident. The medical on-scene commanders established guidelines for response in collaboration with the other emergency services. By creating a sense of trust, the collaboration between the emergency services became more fluent. Socializing outside of work resulted in improved reliance on their counterparts in the other services. The management also included that the medical on-scene commander supervised his personnel on site by providing support using knowledge of the risk object and surrounding area.

**Discussion:** A forum for the emergency services on-scene commanders where they share ideas and knowledge, improve the on-scene intra-agency communication, and trust is desirable. A culture of trust between the organizations is needed for a mutual understanding. Further research on this subject is needed in other contexts and countries.

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### Sleep in Emergency Services Workers: What Do We Know and Why Does It Matter?

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