

level, and each treatment area noting the treatment status of each patient. The Disaster Response Headquarters replied with the results of adjustments such as hospitalization ward and time to start surgery. The descriptions were reflected in the remotely shared DWBs in about one second. Text conversations through the DWBs were also seen. In the post-event survey, some said that the smooth sharing of information led to quick decisions. Compared to conventional radios, DWBs have the advantage of allowing communication through text, which allows more detailed and accurate patient information to be communicated quickly. The results suggest the survival rate can be improved by assisting early medical intervention or rapid entry of patients into operating rooms. The next goal is to use DWBs for medical coordination among disaster base hospitals.

Conclusion: DWBs are effective for the rapid and accurate sharing of patient information during disasters.

Prehosp. Disaster Med. 2023;38(Suppl. S1):s133–s134

doi:10.1017/S1049023X23003527

Adolescents Exposed to Cumulative Natural Disasters: A Comparison Between their Realities in Rural and Urban Areas

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Introduction: Over the past years, the Outaouais region (Quebec, Canada) and their residents have had to endure no less than five natural disasters (floods, tornadoes). These disasters are likely to have a variety of consequences on the physical and mental health of adolescents, as well as on their personal, family, school and social lives. The experiences of teenagers are also likely to vary depending on whether they live in rural or urban areas.

Method: Data were collected via a self-administered questionnaire in February 2022. A total of 1307 teenagers from two high schools participated in the study by completing an online survey. The questionnaire measured various aspects of the youth's mental health using validated tests, such as manifestations of post-traumatic stress, anxiety and depression, as well as the presence of suicidal thoughts and self-harm. Other aspects of the youth's experience were measured, including their level of social support, school engagement, alcohol and drug use, and coping strategies.

Results: One third of young students (n=1307) were experiencing depressive symptoms and suicidal thoughts, as well as significant daily stress. More than 25% of the students had moderate or severe anxiety and thoughts of self-harm. These problems were significantly more prevalent among youths with prior exposure to a natural disaster. The study data also revealed that youths living in rural areas had a more worrying profile than those living in urban areas.

Conclusion: Similar to other studies (Ran et al., 2015; Stratta et al., 2014), our research data revealed that youths living in rural areas presented a more concerning profile than those residing in urban areas. It therefore seems important, in future

studies and services, to focus more specifically on these teenagers to better understand their needs and to develop adapted services more likely to meet them.

Prehosp. Disaster Med. 2023;38(Suppl. S1):s134

doi:10.1017/S1049023X23003539

Significance of the “Coordination Headquarters for Healthcare and Medical Support” in Japan; comparison with Emergency Medical Team Coordination Cell (EMTCC)

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Introduction: The Japan Disaster Medical Assistance Team (DMAT) was established in 2005. Although it had become possible to gather medical teams at an early stage in the fields of health and welfare, there had still been a lack of personnel. In 2017, the Japanese government decided to establish the Health and Medical Coordination Headquarters when we had major disasters. Not only the medical team, but also the public health nurse and the welfare team gathered at this headquarters, and activities that integrated health, medical care, and welfare started from an early stage. On the other hand, WHO indicates to establish EMTCC within the Ministry of Health, in order to manage and coordinate EMT activities and aggregate data.

Method: The Japanese Headquarters and the EMTCC were compared in terms of their functions and issues.

Results: In Japanese headquarters, the director of the local public health center will be the director, and the secretariat for the headquarters will be run by supporters. Participants in the headquarters meeting include leaders of public institutions involved in health risk management. Furthermore, leaders of unions such as medical, dentist, pharmacists and nurses on the side of supporters, leaders of medical, healthcare, and welfare will participate. To establish EMTCC, WHO dispatches a coordinator, information manager, and data analyst.

EMTCC collects medical information by using Minimum Data Set (MDS), which is similar to Japanese Surveillance in post extreme emergencies and disasters (J-SPEED). The most significant difference is that EMTCC does not deal with health and welfare issues.

Conclusion: Regarding medical care, information is summarized in a similar way at headquarters. These facts indicate the Japanese headquarters management experience is applicable to EMTCC.

Prehosp. Disaster Med. 2023;38(Suppl. S1):s134

doi:10.1017/S1049023X23003540

Mass Casualty Triage: What Works and Who Does it Best?

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Introduction: There is a consensus that there lacks a standard for primary triage during mass casualty incidents. This is further compounded by a dearth of high quality research on the topic. Some studies suggest the superiority of SALT triage versus other triage systems, however, findings have not widely transitioned to clinical practice. We believe that despite specialized training including that in emergency medicine or emergency medical services (EMS), there will be significant variability amongst triage determination and use of triage methods. This study intends to analyze various provider skill levels and their accuracy of triage determination.

Method: In a disaster exercise, a group of providers trained to use START triage were expected to triage, treat and determine transport order of the patients from a scenario of a simulated intentional radiological dispersal device (RDD) detonation with multiple casualties. Another group of providers trained to use SALT triage were expected to triage, treat, and determine transport order of patients from a scenario of a building collapse after a hurricane to assess SALT triage with the participating officers. Additional cohorts of EMS clinicians will be given the same case scenarios and asked to triage, treat when necessary, and determine transport order of the patients.

Results: The initial data from the RDD exercise includes 102 patient case scenarios with 27 minimal (green), 40 delayed (yellow), and 35 immediate (red) patients. The providers involved in the exercise are trained at minimum to NREMT EMT level. Results showed an under-triage rate of 7.8%, an over-triage rate of 20.6% and overall accuracy of 71.6% when using START triage.

Conclusion: The undertriage rate with START is 7.8% is higher than the generally acceptable rate of less than 5%. Our research is ongoing and we anticipate completion in 2023. We hope that our research provides future direction to improve triage in disaster scenarios.

Prehosp. Disaster Med. 2023;38(Suppl. S1):s134–s135

doi:10.1017/S1049023X23003552

The Advancement of the Scientific Study of Prehospital MCI Response from TIIDE to NIGHTINGALE: A Scoping Review

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Introduction: The European Union Horizon 2020 research and innovation funding program awarded the NIGHTINGALE grant to develop a toolkit to support first responders engaged in prehospital (PH) mass casualty incident (MCI) response. To reach the projects' objectives, the

NIGHTINGALE consortium adapted the Translational Science (TS) process. The aim of this study is to perform the first TS (T1) phase PRISMA scoping review to extract data that will be used to guide the creation of the initial evidence-based second TS phase (T2) modified Delphi statements for a subsequent study.

Method: The consortium was divided into three work groups (WGs) MCI triage, Prehospital Life Support and Damage Control (PHLSDC) and Prehospital Processes (PHP). Each WG conducted simultaneous literature searches following the PRISMA extension for scoping review with a common research strategy sharing MCI related search terms and then terms specific for each WG. Final included articles went through data extraction based on identified themes and sub-themes from PH MCI response literature to be used to create the future statements.

Results: The initial search yielded 925 total references to be considered for a title and abstract review (PH Triage 311, PHLSDC 329, PHP 285), then 483 articles for a full reference review (MCI Triage 111, PHLSDC 216, PHP 156) and 155 articles for the database extraction process (MCI Triage 27, PHLSDC 38, PHP 90).

Conclusion: The progression of the study of prehospital MCI response enabled NIGHTINGALE partners to methodically obtain information that will contribute to each WG's creation of initial T2 modified Delphi statements.

Prehosp. Disaster Med. 2023;38(Suppl. S1):s135

doi:10.1017/S1049023X23003564

A Qualitative Study on the Use of the Hospital Safety Index and the Formulation of Recommendations for Future Adaptations.

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Introduction: Hospitals around the world need to be safe and prepared to face disasters, being these man-made or caused by natural hazards. The Hospital Safety Index (HSI) is a tool developed by the World Health Organization (WHO) that allows access to the level of preparedness of hospitals; it is the most widely used instrument of its kind. Although the HSI is frequently used by hospitals and healthcare facilities around the world, scientific literature on its application in real life is scarce and qualitative studies are absent. By adopting a qualitative methodology, this study aims to investigate the use of the HSI to assess disaster preparedness in hospitals and healthcare facilities, identify challenges and facilitators of