

subjects were analyzed with paired tests. The statistical level of significance was set at 0.05.

**Results:** Pre- and post-intervention differences for the five sections of the TPQ, which consists of team structure, communication, leadership, situation monitoring, and mutual support were 3.1 to 4.2, 3.0 to 4.2, 3.3 to 4.3, 3.1 to 4.1, and 3.2 to 4.1, respectively. Pre- and post-intervention differences for the same five sections of the TPOT were 1.8 to 4.2, 1.4 to 3.9, 1.6 to 4.3, 1.3 to 3.6, and 1.4 to 3.8, respectively. All results were statistically significant.

**Conclusion:** This table-top team training program positively affected perception toward teamwork and their ability to recognize the presence and quality of team skills in disaster events.

*Prehosp Disaster Med* 2017;32(Suppl. 1):s221–s222  
doi:10.1017/S1049023X17005738

### Burn Disaster Planning and Simulation Event in Quebec, Canada

*Nathalie Morissette<sup>1</sup>, Daniel Payette<sup>2</sup>, Nathalie Soucy<sup>2</sup>*

1. Centre Hospitalier Universitaire de Montréal, Montréal/QC/Canada
2. Académie CHUM/Centre Hospitalier Universitaire de Montréal, Montréal/QC/Canada

**Study/Objective:** The goal of this presentation is to discuss the making of a Burn Disaster Plan at the *Centre Hospitalier Universitaire de Montréal* (CHUM), a university environment that is not part of a trauma center, as well as describe the participation of the Montreal Burn Unit in a major live simulation event.

**Background:** Several burn disasters have occurred in the province of Quebec (Canada) in the last couple of years. These events have triggered a reflection on disaster preparedness among medical and other allied healthcare personnel at the Montreal Burn Unit.

**Methods:** The Montreal Burn Unit disaster plan required two-years of committee meetings and was designed around checklists for all involved personnel. On October 9, 2014, the Montreal health agency coordinated a major “Code Orange” drill to test the responsiveness of the health network to a simulated plane crash. In doing so, it evaluated the efficacy of the Montreal Burn Unit to receive disaster victims. This event was analyzed on site by personnel from Académie CHUM with expertise in simulation exercises.

**Results:** Participants were evaluated using direct observation, online survey, as well as debriefing sessions. The evaluation report from Académie CHUM revealed that the simulation exercise was greatly appreciated by all personnel involved. It helped validate the Montreal Burn Unit Disaster Plan including 1) pre-triage of burn victims in the emergency department, and 2) the designation of a triage physician-leader. Several areas for improvement were identified including 1) patient tracing, and 2) operating room availability.

**Conclusion:** Disaster planning and participation in a large scale, live disaster simulation exercise are demanding. For the CHUM, this investment brought priceless benefits: although not measured, the teams seemed strengthened and the coordination between departments and the culture of continuous improvement and learning appeared reinforced. Simulation of

disaster events will continue within the framework of the transformation process towards our new mega hospital NCHUM in 2017–18.

*Prehosp Disaster Med* 2017;32(Suppl. 1):s222  
doi:10.1017/S1049023X1700574X

### Implementing Best Practice to Critical Patients from Disaster Events Through Simulation-Based Learning Program

*Jiyoung Nob<sup>1</sup>, Hyun Soo Chung<sup>2</sup>*

1. Center For Disaster Relief, Training, And Research, Yonsei University Severance Hospital, Seoul/Republic of Korea
2. Emergency Medicine, Yonsei University College of Medicine, Seoul/Republic of Korea

**Study/Objective:** To develop a standardized High-Fidelity Medical Simulation (HFMS) training curriculum focusing on specific assessment and treatment of disaster-related severe injuries presenting to the emergency department.

**Background:** Evidence suggests that most prehospital and hospital providers are inadequately prepared to manage a multiple-casualty incident. For hospital health care providers, it is critical for them to develop competency in managing patients injured from disaster events. Unfortunately, some of these patients could be really critical, and understanding the pathophysiology of the injury progress is important for good quality care for the patients. Although existing disaster training systems emphasize non-technical skills, there has not yet been an in-depth analysis in identifying the competency of clinical skills for disaster personnel. HFMS is being used in rare but critical clinical events to enhance the competencies of health care providers.

**Methods:** The educational intervention consisted of a half-day workshop (lecture-HFMS-debriefing) for selected 24 emergency residents (six teams). The objective of the scenario was to develop performance competency in managing critically injured patients in a disaster events, specifically, blast, radiation, and crush injuries. A checklist was developed to assess the performances of the participants. All pre-to-post differences within subjects were analyzed with paired t tests. The statistical level of significance was set at 0.05.

**Results:** The content validity index of performance checklist was 0.9. Pre- and post-intervention differences (percentage) for the six team performances were 67.7 to 84.6, 58.1 to 80.8, 51.6 to 84.6, 61.3 to 80.8, 51.6 to 65.4, 61.3 to 76.9, respectively. All results were statistically significant.

**Conclusion:** HFMS training program focusing on critically injured disaster victims positively affected performances of the participants.

*Prehosp Disaster Med* 2017;32(Suppl. 1):s222  
doi:10.1017/S1049023X17005751

### Evaluating, Learning and Simulation Exercise for Efficacy, A Course on Advanced Prehospital Trauma Care

*Erik Prytz<sup>1</sup>, Jonas Rybing<sup>1</sup>, Henrik Carlsson<sup>2</sup>, Carl-Oscar Jonson<sup>3</sup>*

1. Department Of Computer And Information Science, Linköping University, Linköping/Sweden