s158 Poster Presentations

disasters, is a common phenomenon in several countries. In Brazil, the Armed Forces have a history in providing humanitarian assistance to victims of emergencies through their field hospitals, such as medical and dental care, laboratory and imaging diagnosis, and pharmaceutical services.

Aim: To verify pharmaceutical services preparedness of military units in an institution of Brazilian Armed Forces to disaster response and humanitarian aid.

Methods: A transversal study was carried out. The methodological approach was based on a logical model and indicators related to the preparedness of pharmaceutical services. Field research was carried out and good storage practices were investigated in loco. Key stakeholders were interviewed based on an open-ended questionnaire on the preparedness of pharmaceutical services. Interviews were transcribed and analyzed for overall content, according to analytical categories stemming from the literature and indicators prior defined.

Results: Key stakeholders of three military units were interviewed, and official documents and guidelines were also analyzed. Some pronounced shortcomings were identified, such as the lack of a specific budget for medicines management, no surplus of health supplies, lack of appropriate transports, and need of capacity building of health professionals and support team. The existence of a disaster plan, selection of essential medicines for primary reaction, forecasting of medicines, field hospitals as mobile and adaptable health structures, and a system for military mobilization are some of the strengths identified. Two military units are better structured in the management of pharmaceutical service. The third unit still needs to mature its processes to fit the health purposes of its mission.

Discussion: These findings can subsidize the improvement of pharmaceutical services' efficiency and quality in means of providing better response in emergency situations supported by the Brazilian Armed Forces.

Prehosp Disaster Med 2019;34(Suppl. 1):s157–s158 doi:10.1017/S1049023X1900356X

A Pilot Investigation of the Effect of Transport-Related Factors on Care Quality in a Moving Ambulance

Erik Prytz PhD^{1,3}, Zandra Åkerstedt¹, Björn Lidestam PhD², Maria Lampi PhD³, Carl-Oscar Jonson PhD³

- Department of Computer and Information Science, Linköping University, Linköping, Sweden
- Swedish National Road and Transport Research Institute (Driver and Vehicle), Linköping, Sweden
- Center for disaster medicine and traumatology, and Department of Clinical and Experimental Medicine, Linköping University, Linköping, Sweden

Introduction: Providing patient care in a moving ambulance can be difficult due to various transport-related factors, (e.g., accelerations, lateral forces, and noise). Previous research has primarily focused on cardiopulmonary resuscitation (CPR) performance effects but has neglected to investigate other care interventions.

Aim: To test a range of different care interventions during different driving scenarios.

Methods: A workshop with ambulance practitioners was held to create a list of care interventions to be tested. Two ambulance

practitioners were recruited to drive an ambulance on a closed test-track while performing care interventions on simulation models. Three driving scenarios of differing difficulty were used. Main outcome measures were estimates of workload using the NASA Task Load Index (TLX) and task difficulty. G-forces and video-data were also collected.

Results: Estimated workload increased overall as the difficulty of the driving scenario increased, as did task difficulty estimates. However, some care scenarios and interventions were affected less. For example, placing intravenous access increased greatly in difficulty, whereas saturation and blood pressure measurements had more modest increases. TLX scores showed that the primarily estimated physical workload and effort that increased, but also mental and temporal demands for some care scenarios. The more difficult driving scenarios primarily increased the variability of measured G-forces but not necessarily the overall driving speed, indicating that force variability is an important factor to study further.

Discussion: The study was intended as an initial pilot test of a wide range of care interventions. It will serve as input to future, larger studies of specific interventions and transport-related factors. Overall, this small pilot indicates that more interventions than only CPR should be studied in moving ambulances to investigate potential performance effects. This is important for traffic, patient, and work safety for ambulance workers and patients.

Prehosp Disaster Med 2019;34(Suppl. 1):s158 doi:10.1017/S1049023X19003571

A Pilot Study of Surge Capacity in the Metropolitan Area of South Korea

Prof. Young-hoon Yoon¹, Prof. Jung-Youn Kim¹, Gwang-ryol Heo MD¹, Bo-Sun Sim MD¹, Prof. Sung-Woo Moon²

- 1. Korea University Guro Hospital, Seoul, South Korea
- 2. Korea University Ansan Hospital, Seoul, South Korea

Introduction: Seoul is the third most densely populated area in the world except for the city-state. However, a national disaster plan has not yet been established.

Aim: From September 2017, representatives of seven regional emergency medical centers in Seoul met monthly and decided to investigate basic data for the future establishment of surge capacity planning.

Methods: Staff, supply, space, and systems for surge capacity were surveyed in seven hospitals. The additional surveyed data were as follows: hospital incident command system and actual operational experience; performance of disaster drill; safety and security plan; estimation of surge capacity in normal operating conditions and extreme operating conditions; alternative therapeutic spaces; back-up plan to call non-duty medical staff; decontamination equipment; contingency plan for stuff shortage; etc.

Results: All the hospitals reported they have hospital incident command systems and held disaster drills every year, however, the two hospitals (28.5%) had no real experience of hospital incident command system activation. Five hospitals (71.4%) did not have a safety and security plan. They replied they can treat average 7.7 emergency patients (Korean Triage and Acute scale