articles discuss disaster-related surgical care in developing countries, with few discussing improving local country surgical assets. Most papers instead discuss the impact of foreign surgical teams, which are also clearly needed. Reasons for these overall findings are discussed. Opportunities to investigate the significant gap in surgical preparedness to disasters should be addressed. Research on improving local surgical assets in LMIC, in particular to address the acute phase of disasters, may be beneficial.

Assessment of Advanced Life Support Training in Emergency Medical Personnel : a National Report of Thailand

Chanisa Eksombatchai, Khrongwong Musikatavorn, Suthaporn Lumlertgul
Emergency Medicine, King Chulalongkorn Memorial hospital, and faculty of medicine, Chulalongkorn university, Bangkok/Thailand

Study/Objective: To survey the number of Emergency Medical Service (EMS) personnel certified in Advanced Life Support (ALS) in Thailand.
Background: In Thailand, Emergency Medicine specialty has been established for only 17 years. In-depth knowledge of emergency medicine training in ALS and knowledge gap between each kind of personnel had never been studied.
Methods: Research was done in the form of survey research using a questionnaire. The surveys were allocated by postal mail to emergency rooms in 13 health districts throughout Thailand. The target group was emergency medical personnel who practiced in EMS of Thailand: Emergency Physicians (EP), General Physicians (GP), Paramedics, Emergency Nurse Practitioners (ENP), and Registered Nurses (RN). A self-administered questionnaire consisting of personal and professional profiles, certificated status in ALS, and 50-questions of procedural competency assessment was used.
Results: According to 1,155 respondents (80% response rate), the percentages of personnel who passed each of the ALS courses is as follows: Advanced Cardiac Life Support (ACLS) 81.56%; Advanced Trauma Life Support (ATLS) 62.77%; Pediatric ALS (PALS) 45.45%; Prehospital Trauma Life Support (PHTLS) 15.84%; Advanced Disaster Life Support (ADLS) 8.23%; WINFOCUS Ultrasound ALS (WINFO-CUS) 6.15%; Advanced Hazmat Life Support (AHLS) 4.85%; and others 1.9%, respectively. There were 11.60% that had never been trained in ALS (Figure 1). The average competency score was 34.02/50 (SD = 8.81). EP had a significantly higher mean competency score than GP (P < .01). ENP had a significantly higher mean score compared with RN (P < .01); there was no significant difference between ENP and Paramedics (P = .06). Other factors that significantly associated with competency score were gender, hospital type, and work experience. Most of the participants (92%) desired additional training in ALS.
Conclusion: Emergency medical personnel in Thailand should be supported to train in ALS in order to comprehend standard emergency medical practice throughout the country.
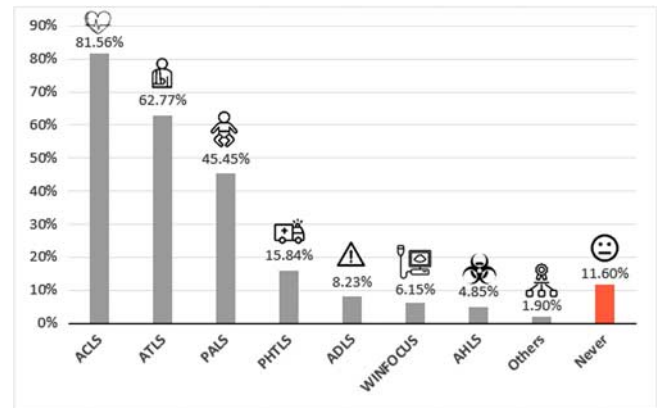

Figure 1. Percentages of emergency medical personnel who passed each of advanced life support courses.
ACLS, ATLS, PALS, PHTLS, ADLS, WINFOCUS, AHLS, HAZMAT life support, Never passed any advanced life support courses

Senior Nursing Students Working as an American Red Cross Volunteer: Virtual Case Workers

Montray Smith[1], Nancy Kern[2]
1. School Of Nursing, University of Louisville, Louisville/KY/United States of America
2. Disaster Health Services, American Red Cross, Louisville/KY/ United States of America

Study/Objective: The American Red Cross (ARC) Kentucky Region, and the University of Louisville (UL) School of Nursing, have facilitated a student clinical experience in disaster preparedness. Fall 2016, a pilot project developed from the Red Cross calls for virtual volunteers to assist with disaster relief services to natural disasters. In response, UL- 4th semester Community Practicum Leadership Practicum students were trained as volunteer virtual caseworkers for the ARC Disaster Services Disaster Action Team.
Background: The American Red Cross is mandated to provide assistance to victims of single- and multi-family fires, in addition to other disasters. Nurses assist caseworkers to provide support to clients, to assist with immediate response, and recovery needs by addressing health needs. Involvement of pre-licensure nursing students as caseworkers allows them to utilize their community leadership education to facilitate clients' recovery.
Methods: The 4th semester Community Health baccalaureate nursing students were trained and responded as American Red Cross virtual caseworkers; as part of a disaster response action team, they served individuals and families affected by home fires in the Kentucky and Southern Indiana region. The group received required training through online modules and in-person orientation to prepare for the role.
Results: The results showed that the nursing students and American Red Cross staff required additional education. The current on-boarding processes needed improvement, and case

workloads needed adjusting to accommodate student schedules. Overall, the students received valuable lessons on disaster relief concepts.

Conclusion: Relief organizations, like the American Red Cross, offer nursing students opportunities to help communities in need throughout the country. Busy class schedules and clinicals present scheduling difficulties for students and agencies. Alternative learning experiences, such as virtual environments (call center representatives and casework), can help to meet the objective of the American Red Cross, while providing a unique clinical experience to senior nursing students.

Evaluation of Certain Behaviors in Regard to Disaster Preparedness of Students in Hüseyin Cahit Korkmaz Medical Vocational High School

Hüseyin Koçak[1], Ismail Demirezen[2], Özcan Erdoğan[3]
1. Disaster Medicine Doctorate Student, Bezmialem Vakif University. Faculty of Medicine, İstanbul/Turkey
2. Department Of Emt, Hüseyin Cahit Korkmaz Vocational and Technical Anatolian Health High School, Aksaray/Turkey
3. Department Of Nursing, Bezmialem Vakif University, İstanbul/Turkey

Study/Objective: The purpose of this study is to evaluate the behaviors of disaster preparedness of students at the educational year of 2014-2015 in Hüseyin Cahit Korkmaz Medical Vocational High School in Aksaray.

Background: The first 72 hours after disasters are critical. Personal preparedness is necessary during silent periods of emergencies and disasters in order to survive during these critical hours. Personal preparedness of health personnel is especially important, since they may have important roles after the disaster.

Methods: This is a descriptive epidemiological study. A survey including 24 questions was developed for the study. A Frequency and Chi square analysis was conducted for the data in SPSS 18 software.

Results: The age of the participants varied between 13-18. The average age of the participants is 15.9 (SD = 1.1) years. Of that, 71.7% of the participants (n = 225) were female and 41.4% of them (n = 130) were a student in the Department of Nursing; 33.4% of them were at second grade. 31.5% of the participants (n = 99) stated that they experienced an emergency, and 23.9% (n = 75) of them reported that they experienced a disaster. 32.2% of the participants (n = 101) stated that they had received education on emergencies and disasters, 20.1% of those who had received education (n = 63) reported that they most received education on first aid; 8.3% of them (n = 26) stated that they had received education on fire safety. Finally, 74.5% of the participants (n = 234) reflected that they would like to receive education on disasters.

Conclusion: It is clear that the students at medical vocational high school, who will have important roles in the provision of health care services in future disasters, should receive further relevant education. The majority of the students who participated in the study were aware of this situation.

IFRC Humanitarian Health Competency Matrix

Nancy Claxton
Health, IFRC, Geneva /Switzerland

Study/Objective: To develop, refine, apply, and evaluate a comprehensive competency framework of knowledge, skills, and behaviors required of humanitarian health responders.

Background: A more effective approach was needed to prepare potential delegates in public health and promotion principles, and more active and responsive community engagement through evidence-based training methods. Red Cross and Red Crescent teams agreed that all necessary health-team tasks and activities that may be needed to respond to any disaster be identified and categorized according to specialty and levels of expertise on a competency matrix. These competencies attempt to identify and quantify the knowledge, skills, and behaviors required in a response by Red Cross and Red Crescent health delegates, and improve humanitarian health response.

Methods: In 2013, emergency health representatives from IFRC and eight partner National Societies identified and mapped core and supporting competencies at three tiers of competency into critical strands of content. The competency matrix continues to be refined during and after each emergency health deployment by contributing and host National Societies; the most recent testing and refinement was in September 2016 in Norway.

Results: The system of mapping Humanitarian Health competencies effectively quantifies critical content to better prepare training programs, and to evaluate the performance of the trainees in a response. The emergency health competency matrix allows for better identification and classification of what Red Cross and Red Crescent teams do, across roles in each phase of a response. When there is an ineffective response by Red Cross and Red Crescent - deployed teams, IFRC, and NSs can use the matrix to identify gaps in implementation, capacities, and resources.

Conclusion: Red Cross and Red Crescent's Humanitarian Health competency matrix provides a system for Red Cross and Red Crescent teams to identify and apply critical knowledge, skills, and behaviors required in an emergency health response, and to more effectively train and evaluate humanitarian health responders.

Evaluation of Applicability and Feasibility of the Standardized Direct Observation Tool (SDOT) in Qatar Emergency Medicine Residency Program

Sohaib I.A. Chaudhry, Saleem Farook, Baha Kahlout, Furqan Irfan, Sameer Pathan
Emergency Medicine, Hamad General Hospital, Doha, Qatar/Qatar

Study/Objective: The purpose of this study was to evaluate the applicability and feasibility of the SDOT in the setting of an Emergency Medicine Residency Program.