offers doctors advanced training in disaster medicine, also disaster medicine education is provided at the bachelor and residency levels all over the Russian Federation. In Ukraine, at the moment, there is no training of specialists in disaster medicine, while in Belarus there are curricula at all levels of education.

Conclusion: Despite the fact that our life is impossible without catastrophes, most of the post-soviet countries are not having educational programs in disaster medicine. Using international experience could be beneficial so that every country will be prepared to face any disaster both locally and globally.

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Emergency Preparedness: Training Outcome in Hospital Staff

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Introduction: A widely acknowledged aspect of emergency preparedness is hospital-wide staff education. Maintaining interest in hospital emergency preparedness among hospital staff is challenging. A hospital-wide education process involving a robust lecture and hands on donning and doffing sessions followed by periodic disaster drills has been recently undertaken as a quality improvement process.

Method: A prospective pre- and post-test study of 256 hospital staff were given a six-hour training course in comprehensive Hospital Incident Command Systems (HICS), Hazmat (Hazardous Materials), and CBRNE (Chemical, Biological, Radiation, Nuclear, and Explosive) events. The same pre and post-test were given to all participants that contained questions to assess emergency preparedness knowledge.

Results: 256 registrars within seven months (two classes per month) completed training with pre and post-tests. The average class size was 18.3 (range= 14 to 26 registrars). 3 of 256 (1.1 % 95% confidence interval) registrars achieved the pass mark of 70% in the pre-test survey and 230 (89.8 %) registrars achieved the pass mark in the post-test (χ2-test $P < 0.001$) with an absolute increase in the pass rate of 84%.

Conclusion: This finding justifies Emergency Preparedness Training at our institution, showing a marked improvement in staff knowledge of HICS and CBRNE management. This study should encourage continuous widespread use of Emergency Preparedness training in hospital Emergency Preparedness.

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Impact of Virtual Disaster Collaboration Exercises on Disaster Leadership at Hospitals in Saudi Arabia

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Introduction: This study measured the impact of virtual three-level collaboration (3LC) exercises on participants' perceived levels of collaboration, learning, and utility (CLU) at hospitals in the southern region of Saudi Arabia. Our 3LC exercise is a tabletop training tool used to facilitate disaster education and document CLU. This model enables the practitioner to acquire new knowledge and promotes active learning.

Method: An English version of the CLU scale, the validated Swedish survey tool, was applied to 100 health-care managers or leaders in various positions at both the operational and tactical levels after conducting the 3LC exercises.

Results: The results show that most participants strongly agreed that the exercises focused on collaboration (r2 = 0.767) and that they had acquired new knowledge during the exercises. There was a statistically significant association between participation in the collaboration exercises and perceived learning (r2 = 0.793), as well as between perceived learning and utility (r2 = 0.811).

Conclusion: This study confirms the feasibility of three level collaboration exercises conducted virtually. Our work also demonstrates that learning depends on collaboration practices and that collaboration exercises before crises can help to build qualities that people can apply in daily life. Collaboration elements exercised in this study contributed to perceived learning. There was a strong covariation between participation in the participants' collaboration exercises and perceived learning and utility. The virtual three-level collaboration exercises were well received by the participants and achieved an acceptable collaboration, learning, and utility score. Although exercises were conducted virtually, they were well received by the participants and achieved a value M = 4.4 CLU score, which opens up new dimensions in collaboration simulation exercises, at least from an organizational perspective, in a world with an increasing number of disasters and public health emergencies.

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Reinventing Medical Hazardous Materials Response for Radiological Emergencies: Building Resiliency in Emergency Medical Response Systems Through a Novel Approach to Education and Training

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Introduction: The past three years have included multiple Public Health Emergencies of International Concern (PHEIC) and dramatically impacted all facets of Emergency Medical Response. During this time, simultaneous crises have demonstrated the value of the non-traditional responder in mitigating complex incidents. Current geopolitical climate has proliferated nuclear power and increases the necessity for readiness and awareness for radiological incidents. These are complex incidents a responder may face and requires even the lowest skilled practitioner to be fully engaged before special operations intervention.

Limited research exists to determine whether current emergency medical services (EMS) training supplies the competency necessary to ensure safety of the prehospital provider during a radiological incident. Forthcoming research will investigate the effectiveness of this current training within the United States.

Method: Survey data will be collected from multiple providers across the United States to evaluate their confidence level on two primary objectives during a radiological incident: competency of personal protective equipment donning and doffing, and management of contaminated patients.

Data analyses of survey responses help drive future proposed educational activities that will be compliant with best practices set forth by organizations such as the United States Department of Health and Human Services Radiation Emergency Medical Management (REMM), the National Fire Protection Agency (NFPA), and Radiation Emergency Assistance Center/Training Site (REAC/TS).

Results: Data will be collected by survey responses to evaluate a diverse range of EMS services. Details such as skill level, type of EMS service, catchment of communities served, and their impressions upon the training will be analyzed.

Conclusion: This is an ongoing project that will embrace the perspectives of the diverse group of delegates of WADEM throughout and become enriched through the organization's wealth of knowledge. Gaps highlighted during roll-out of this research can also be used to address logistics, doctrine, and policy shortfalls.

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EMS and Bioterrorism Response

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Introduction: Previous studies have found that public health systems within the United States are inadequately prepared for an act of biological terrorism. As the COVID-19 pandemic continues, few studies have evaluated bioterrorism preparedness of Emergency Medical Services (EMS), even in the accelerating environment of biothreats.

Method: This study utilized an Internet-based survey to assess the level of preparedness and willingness to respond to a bioterrorism attack and identify factors that predict preparedness and willingness among Nebraska EMS providers. The survey was available for 1 month in 2021 during which 190 EMS providers responded to the survey.

Results: Only 56.8% of providers were able to recognize an illness or injury as potentially resulting from exposure to a biological agent. Provider Clinical Competency levels ranged from a low of 13.6% (ability to initiate patient care within his/her professional scope of practice and arrange for prompt referral appropriate to the identified condition(s)) to a high of 74% (the ability to respond to an emergency within the emergency management system of his/her practice, institution, and community). Only 10% of the respondents were both willing and able to effectively function in a bioterror environment.

Conclusion: To effectively prepare for and respond to a bioterrorist attack, all levels of the healthcare system need to have the clinical skills, knowledge, and abilities necessary to treat patients exposed to biological agents. Policy changes and increased focus on training and drills are needed to ensure a prepared EMS system, which is crucial to a resilient state. EMS entities need to be aware of the extent of their available workforce so that the country can be prepared for the increasing threat of bioterrorism or other novel emerging infectious disease outbreaks. A resilient nation relies on a prepared set of EMS providers who are willing to respond to biological terrorism events.

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The National Israeli Field Hospital in Ukraine - Innovative Adaptation to a Unique Scenario

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Introduction: Following the outbreak of hostilities in Ukraine and the resultant humanitarian crisis, the State of Israel deployed a field hospital inside Ukraine. Challenges included a large refugee population, disruption of routine medical services to the local population, first-time deployment of a civilian field hospital, and deployment to a country at war.

Method: The activity of the field hospital during a deployment in Ukraine is described along with lessons learned for future deployments.

Results: A Rapid Assessment Team (RAT) performed needs assessment and coordination with local authorities. The main necessity encountered was delivery of primary care to both the refugee and local population. During the 6 weeks of deployment, 6,161 patients were treated in the hospital. 65 patients were hospitalized and 59 underwent surgery. The hospital was completely digitalized. 103 remote consultations were performed using telemedicine techniques. Capacity building of local teams was given high priority and 796 Ukrainian health professionals underwent training.

Conclusion: Deployment of a national civilian field hospital in a country of war is possible through coordination with local authorities while undertaking the necessary security measures.

The change in caseload from expected war trauma to predominantly primary care necessitated agility in planning and operation with subsequent adaptation of hospital and staff structure.