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Adaptation of START Triage Training Program for Hospital Personnel in West Africa

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Study/Objective: As part of a multi-year hospital resilience-building program at the John F. Kennedy Medical Center (JFKMC) in Monrovia, Liberia, the purpose of this program was to introduce the Simple Triage and Rapid Treatment (START) mass-casualty protocol to clinical employees and health professions students, in order to increase individual provider readiness to respond to disaster events.

Background: Individual provider resilience and clinical readiness is a key component of overall hospital resilience during a disaster or crisis event. The primary objective of this component of the hospital resilience program was to provide clinicians and health professions students the opportunity to learn the START triage system, and practice making high-consequence triage decisions under stressful conditions.

Methods: Training was coordinated with relevant medical and nursing departments and student learners in the facility to ensure maximum participation. Powerpoint slides featured Standard Liberian English phrases when appropriate, and the authors produced a skills video using Liberian clinicians and actors speaking Liberian English. The 30 minute didactic training was followed by serial skill practice stations, in which participants had the opportunity to serve as rescuers/triagers. Instructors assigned to each station monitored the practice sessions and provide just-in-time feedback following every skill repetition.

Results: Over 150 learners participated in the course. Based on feedback from participants and hospital administration, the training was successfully adapted. The START video was widely praised during and after the training. A major limitation was that students had widely variable basic life support clinical skills. Future implementations of this program should include a basic life support course. Future instances of training also will provide an opportunity to test recall knowledge of previously trained personnel.

Conclusion: The START training program can be successfully adapted for West African audiences, and can serve as an important component of overall hospital resilience-building efforts.

Central Ohio's Regional Response to the Largest Botulism Outbreak in 30 Years

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Study/Objective: Describe the strengths and challenges of regional health care preparedness coordination, as it pertains to the largest Botulism outbreak in 30 years.

Background: This session will discuss the central Ohio region's response and perspective to the foodborne Botulism outbreak in central Ohio. The Central Ohio Trauma System (COTS), and the Healthcare Incident Liaison (HIL) received notification at approximately 12:45 pm on April 21, 2015, from Fairfield Medical Center, regarding suspicion that several people who had attended a local church potluck, may have been affected with Botulism. The COTS HIL was able to utilize their pre-established communication systems to assist FMC in notifying 31 hospitals within minutes, collecting and sharing information, identifying open critical care beds and the activation of portable ventilator caches. Communication was established with the Ohio Department of Health, CDC, hospitals, and local public health facilities. The COTS HIL worked with other regions in the state of Ohio to provide situational awareness, and request bed availability from their hospitals. The session will also discuss the identification of Botulism and response at Fairfield Medical Center, along with the local and regional public health infectious disease investigation.

Methods: This session will begin with background information on the central Ohio Healthcare Coalition and Response. Fairfield staff will present case studies on the patients that presented to their facility. Regional public health will add to the presentation by discussing how local public health worked alongside regional and state public health, to conduct the infectious disease investigation.

Results: A total of 56 people presented for evaluation; 24 confirmed cases of Botulism; 11 patients were intubated; two deaths; and 25 doses of antitoxin were given.

Conclusion: Many lessons learned will be presented, including how our extensive planning for Ebola assisted us in this Botulism response. We determined that our hospital transfer centers were an untapped resource.

Challenges of Establishing National Public Health Rapid Response Teams during an Emergency

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Study/Objective: To highlight the common challenges of establishing national public health Rapid Response Teams (RRTs) during an emergency, and to identify potential solutions to avoid delays in future responses.

Background: The International Health Regulations dictate the need for countries to establish disease outbreak response capacity. RRTs, multi-disciplinary teams trained in public health emergencies, can help fulfill this need as a component of a larger emergency response infrastructure. However, the need for RRTs is often only realized during the onset of an emergency, leading to substantial delays in effective response measures.

Methods: National public health RRT challenges were identified through direct observation of RRTs during emergencies, as well as discussions with RRT managers involved in outbreak responses in seven African and Asian countries in 2016.

Results: Three common challenges were identified. One challenge is the lack of a trained, ready, and deployable workforce. In addition to public health core competencies, RRT members require training on the country's emergency response infrastructure and deployment processes, as well as exercises to translate their subject matter expertise into timely, actionable, and data-driven objectives. Another challenge is insufficient human resource capacity for response during large and/or growing emergencies. A surge-capacity mechanism is needed, such as rostering personnel with key skills required for common emergencies, including the enrollment of people who are not directly involved in emergencies day-to-day. Finally, the lack of delineated emergency response mechanisms, such as roster activation processes, financial allocation and disbursement, pre-deployment briefings, and in-the-field logistics, can delay RRT response activities.

Conclusion: These challenges highlight the need for pre-emergency planning for RRT implementation, specifically delineating the mechanisms and processes for an effective RRT before an emergency occurs. Countries without an existing RRT, and those in the process of establishing an RRT, should preemptively address these challenges to ensure a rapid and effective response.

An Effective Health Resource Availability Mapping System for Decision Making in Crises Contexts

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Study/Objective: An assessment aiming at analyzing the ability of the health system to provide priority emergency services, and at developing a recovery plan was conducted using the WHO HeRAMS: Health Resources Availability and Mapping System

Background: During a major crises like what the Central African Republic (CAR) is experiencing, it appears very challenging to have reliable information to plan emergency responses and for the restoration of essential health services. HeRAMS provides the state of health infrastructures, their functionality and reasons of their non-availability or non-functionality.

Methods: Briefing and mobilization of health stakeholders, followed by adaptation of a standardized questionnaire that was administered to key informants from each level of care (primary, secondary and tertiary) and health coordination offices, by telephone and/or site visit, or filling of a hard copy. The questionnaires were collected and verified by central, regional and district health officials and information triangulated by health partners who worked in the field.

Results: Two assessments were done in 2014 and 2015 on respectively 814 and 1008 health facilities. A detailed overview on human resources, clinical equipment, availability of health services and infrastructures was done: where 68% and 52 % were respectively functional in 2015 and 2014. An overview on key services such as: essential trauma care, neonatal and maternal care, STIs and HIV/AIDS, and noncommunicable diseases including mental health; as well as reasons of non-functionality: human resources, equipment and medical supplies. The result is help in identifying geographical areas with major service gaps, and developing restoration strategy and plans, including the health sector transition plan for 2015-2017.

Conclusion: The assessment with HeRAMS coupled with epidemiological data helped to set humanitarian priorities and develop lifesaving services, along with the restoration plan of public services. It provided a baseline for further medium and longer term planning. It should be envisaged in major humanitarian crises.

Approaches to the Use of Research Knowledge in Policy and Practice during the Syrian Refugee Crisis

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Study/Objective: With an increasing demand on health systems to respond to the Syrian refugee migration crisis, there couldn't be a better time to conduct rigorous research to examine approaches to evidence informed decision-making in healthcare delivery for the Syrian refugees. The purpose of this