

mobilization and a variety of professional techniques, the military sectors made the main contributions to the affected areas at the primary stage. These contributions were in the areas of: (1) search-and-rescue; (2) medical treatment; (3) emergency sheltering; (4) emergency relief; (5) an information reporting system; and (6) basic restoration. The collaboration and cooperation with civil sectors like non-governmental organizations and non-profit organizations also sped up the procedure of recovery. This paper describes the process, plan, and deployment of military sectors in order to discuss the observations from the Chi-Chi Earthquake. The existing policy and plan of the Ministry of Defense for the emergency response to disasters also will be presented in order to depict the proactive participation in the preparedness for the next disaster.

Keywords: Chi-Chi Earthquake; emergency relief; military response; recovery effort; Taiwan

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Civilian/Military Joint Cooperation in Humanitarian Assistance and Disaster Relief: The Experience of the Czech Republic

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Since the end of the Cold War, military intervention for the purposes of humanitarian assistance and disaster-relief often have been requested by political authorities. From the late 1990s, the Czech Military Medical Service has been involved in providing humanitarian assistance to developing countries. Due to excellent cooperation between the Home Office, the Ministries of Defence, Foreign Affairs, and Health, a complex project known as MEDEVAC was developed. This project was designed primarily for pediatric patients who have little possibility of receiving treatment from local medical facilities. A total of 97 patients have received comprehensive treatment (mostly surgical) in Prague Hospitals. These include 38 children from Iraq, predominantly with congenital heart diseases, and 10 from Pakistan, following the earthquake of December 2005. The Czech government established a special budget for this project. Military medical personnel performed selection and diagnostic procedures according to their field hospital capabilities. In addition, transportation was organized by the military. While the Ministry of Health guaranteed the provision of highly specialized health care providers, the Home Office solved the most complicated problem of identifying the immigration status for the children and their accompanying adults by granting them temporary asylum-seeker status. This presentation provides a detailed description of the point handling sequence and the coordination procedures.

Keywords: children; civilian/military; coordination; humanitarian; Prague; relief

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Poster Presentations—Topic 1: Civilian-Military Collaboration

(1) Civilian-Military Collaboration in Training for Disasters

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Introduction: The Swedish Armed Forces are continuously engaged in various international missions that involve medical personnel that should be properly trained prior to the mission.

In 2006, the National Board of Health and Welfare requested that the Swedish Armed Forces Medical Center create a course that would provide training in medical care for provisional circumstances abroad, including damage control surgery.

Methods: Participants were handpicked from a pool of well-qualified doctors and nurses. Half of the participants were civilians and were selected by the National Board of Health and Welfare; the other half had military affiliations and were selected by the Swedish Armed Forces Medical Center. The course was conducted on a small island off the West Coast of Sweden, which only can be accessed by boat or helicopter.

Results: The limitations resulting from the isolated location and the provisional circumstances soon became obvious. All resources were limited, including water, electricity, drugs, blood products, disposable items, and radiology and laboratory resources. The course emphasized the importance of environmental factors, such as climate and personal safety. Medical evacuation capacity was relied upon.

Conclusions: The need for civilian-military collaboration and a course of this kind became apparent in Sweden after the 2004 Tsunami disaster in Thailand. The participants of the course all were satisfied, and this training concept will be expanded. The goal is to create a pool of well-qualified, highly trained and motivated professionals, who may become extremely valuable in future national or international disasters.

Keywords: civilian; collaboration; military; training; Tsunami

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(2) Use of Medical-Grade, Activated Carbons in Protection of Civil Population against Terrorist Actions

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The long-term use of medical-grade, activated carbons in the treatment of various diseases and conditions will be shared. Activated carbon is a universal antidote; it (1) is non-toxic—neither adsorbed nor metabolized by the body; (2) is the first choice when the nature of poisoning is unknown, as

it adsorbs most drugs and chemicals; (3) has few serious adverse effects or complications; and (4) can be made in a variety of forms, shapes, and textures. In the aftermath of the Chernobyl accident, >150,000 liquidators were exposed to radioactivity within the 30 km zone and >3 million residents have stayed in contaminated areas. This resulted in accumulation of radionuclides in the bodies of both groups of people. Patients suffering from radiation exposure and accumulation of radioactivity were treated successfully using oral adsorbents or, in severe cases, hemoperfusion.

Keywords: antidote; activated carbon; Chernobyl; radiation exposure; radioactivity

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Oral Presentations—Topic 2: Education

Session 1: Competencies 1

Chairs: Geert Seynaeve; P. Hustinx

Comprehensive Field-Based Training Program for Humanitarian Responders

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The Humanitarian Studies Initiative (HSI) is a multidisciplinary program designed for graduate students from Harvard, the Massachusetts Institute of Technology, and Tufts University who have experience in humanitarian response. The program comprises weekly seminars that cover important topics pertaining to humanitarian operations, academic course work, a three-day simulation exercise, and a three-month field placement. The simulation exercise is an essential component of the HSI program. It consolidates students' knowledge and provides invaluable practical training that helps them to prepare for future work in a complex humanitarian emergency.

Humanitarian responders are faced with an overwhelming number of issues in the field. Although organizations involved in response conduct simulations to train and update their staff, most are restricted to the classroom and have narrow focus. This study presents a new, field-based training program in which participants encounter many of the issues they face as responders in a complex humanitarian emergency. Participants are grouped into non-governmental organization (NGO) teams and work together. They track the crisis on simulation websites prior to the three-day field mission. In the field, participants gather data and perform several tasks in a demanding environment, proceeding to the creation of their NGO final service delivery plan. The program provides participants with the opportunity to develop skills in planning, coordination, needs assessments, population counting, data analysis, report writing, media, public relations, conflict negotiation, international humanitarian law, human rights, disease control, nutrition, shelter, water, sanitation, and protection. By using this model for disaster simulations, organizations can

provide cost-effective, broad-based field training to further develop and enhance disaster response skills of their field staff.

Keywords: education; field-based training; humanitarian; responders; training

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The “Harvard Humanitarian Studies Initiative for Residents” Effectively Trains Doctors in Humanitarian Topics Prior to Field Deployment

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Objective: To determine whether a two-week intensive course is effective in training doctors in humanitarian skills prior to field deployment.

Methods: Thirteen of 19 doctors enrolled in the course completed a multiple-choice test before (pre-test) and after (post-test) the course. The 23-question pre-test covered topics including tropical medicine, humanitarian and human rights law, Sphere standards, epidemiology, malnutrition, and international aid agencies. The post-test contained 70 questions, 23 of which were identical to the pre-test questions, although the order of multiple-choice answers was changed. Scores were stratified by specialty type, MPH degree held or not, and total months of international health fieldwork.

Results: Of the 23 questions, the average score was 15.3 correct answers (67% correct) for the pre-test and 19.3 (84% correct) for the post-test. Pre- and post-test scores did not vary significantly by specialty type or Masters of Public Health (MPH) degree. The average pre-test scores correlated with months of prior field experience were: (1) no experience; test score = 12.0; (2) 2 weeks to 6 months experience; test score = 15.7; and (3) 7-12 months; test score = 16.25. Average post-test scores of those with 7-12 months experience were slightly higher (20.25) than those with no (19) or 2 weeks to 6 months (18.9) experience. The scores of all groups increased from the pre- to the post-test.

Conclusions: A comprehensive two-week course is effective in training doctors of all specialties in humanitarian principles and significantly increases pre-deployment capacity even in those with substantial field experience.

Keywords: education; field deployment; humanitarian; post-test; pre-deployment; pre-test

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Humanitarian Studies Initiative for Residents: An Innovative Program for Doctors in Training

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A new, multi-disciplinary program, called the Human Studies Initiative for Residents (HSIR), is being coordinated through Harvard Humanitarian Initiative (HHI) at Harvard School of Public Health. The program is based on participation from the multi-institutional residency training