

organizations throughout the world have used Norwegian products in a wide variety of situations and under tough climatic conditions. The products are well-known for their quality, and have been utilized and proven functional in the field. Teams of experienced relief workers are available for international responses within 72 hours of receipt of a request for aid. Carefully selected relief goods are available for shipment within 24 hours.

Technical Emergency Relief Service (THW): In situations of a disaster in foreign countries, the German government is able to assist local disaster-relief personnel with its Technical Emergency Relief Service (THW). The THW maintains a Rapid Deployment Search and Rescue (SEEBA) Unit for such cases. The SEEBA consists of THW voluntary specialists who undergo special training and continuing education in order to be prepared for rescue missions in foreign countries.

The Swiss Disaster Relief Unit (SDRU): This unit consists of an unarmed corps that provides humanitarian help to foreign countries hit by natural disasters. Immediately following the disaster, six organizations cooperate to form the Swiss Chain of Rescue.

The Japan Disaster Relief Team (JDR): This is the international disaster relief scheme of the Government of Japan, established in 1987 under a law concerning the dispatch of Japan Disaster Relief Teams. The JDR dispatches rescue teams, medical teams, and expert teams. The Japan Medical Team for Disaster Relief (JMTDR) was organized in 1982 to provide emergency medical relief for disasters in developing countries.

Conclusion: The JDR should facilitate closer relationships between NGO groups, must collect more information, and provide them with more resources.

Key Words: Germany; intentional disaster relief; JDR; NGO; Norway; Swiss

Rapid Adduction Motorcycle:

A Pilot Project in Athens

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Objectives: Evaluation of a pilot project of the rapid adduction of an emergency physician by a motorcycle.

Methods: We evaluated the first three months of the activity of the Rapid Adduction Motorcycle (RAM), manned with a rescuer and an emergency physician. During this three-month period, the RAM received a total of 150 calls, concerning 154 patients: 7% of them were classified as severe incidents; 41 of medium severity; and 22 calls were canceled. The average distance covered was 3.5 km (range: 100 m to 40 km), and the average response time was 4.2 minutes (range: 30 seconds to 20 minutes). Nursing acts provided: venous access, 50; vital signs monitoring, 154; placement of tourniquet, 1; wound cleaning and dressing, 29; use of scoop-stretcher and vacuum mattress, 5; immobilization with air splints, 10; hemorrhage control, 4; CPR, 8; placement of cervical collar, 6;

use of cold pack, 1; placement of orolaryngeal airway, 9.

Conclusions: Up to now, the results of the use of the RAM in Athens are very promising, but further evaluation must be made before we can reach a final conclusion.

Key Words: emergency medical and nursing care; emergency physician; rapid adduction motorcycle; rapid adduction vehicle;

The Medical Aspect of Liberia's Complex Emergency in April 1996

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The author presents his three and one-half months of experience in Monrovia, Liberia, for his third tour, just before the ignition of hostilities. Recruited this time as a demobilization officer with United Nations Observers Mission in Liberia (UNOMIL), he ultimately acted as a Humanitarian Officer for UN-DHA (Department of Humanitarian Affairs), the UN Dispensary Physician, as well as the only expatriate medical doctor in Monrovia for more than two weeks in the middle of one of the worst crises that this war-torn capital ever has faced.

Liberia's history of civil strife with an emphasis on the medical side will be reviewed. The role of International Organizations and non-governmental organizations will be explained and the situation right before the eruption of the hostilities presented.

The immediate changes after the ignition of the new round of civil strife regarding the international community as a whole and UN in particular will be examined. The medical problems for the remaining members of the international community and the Disaster planning that was instituted will be discussed. The pathology that emerged from the various stages of the conflict will be investigated. Information regarding the change from bullet wounds to road traffic accidents as the major cause of deaths will be given. The first signs of an outbreak of cholera and how the response of WHO and others that prevented the worst case scenarios will be probed.

The return of major, non-governmental organizations and other humanitarian players, the unique role that DHA played, and the reluctance of the international community to respond to this emergency will be presented. Conclusions regarding the preparedness of the international community to face this crisis will be drawn.

Key Words: cholera; civil strife; disaster; disaster epidemiology; disaster medicine; disaster response; injury types

Session 1B: Preparedness

Chairpersons:

B.B. Atiyeh (Lebanon/USA)

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Hellenic MEDEVAC Operations in 1995 and 1996

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Objectives: Retrospective evaluation and analysis of all emergency air transports, during the two consecutive years 1995 and 1996, carried out by the Hellenic National Emergency Medical Service (HNEMS).

Methods: We analyzed all calls received by HNEMS concerning an emergency air transport (medevac) and all medevac operations made by the HNEMS in 1995 and 1996.

	1995	1996
Calls, total	1,888	2,095
Patients transported, total	1,492	1,772
from islands	1,386	1,691
from mainland	43	62
from abroad	0	19
Void calls	166	195
Transports without the participation of HNEMS	304	137
Organ transplantation	6	11
Deceased patients before arrival	29	3
Deceased patients during medevac	1	0

Conclusions: The direct results of the steady improvement and expansion of the HNEMS, is the continuing rise of the number of the medevac operations, as well as the continuing improvement of the primary medical and nursing care.

Key Words: emergency air transportation; Medevac

Helicopter Supported Rescue**Operations in Mountain Areas:****Challenge for the Emergency Physician**

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The outcome of patients injured in mountain areas is linked closely to the availability of rapid rescue. In the past, the main idea for rescue in mountain areas was to protect the victims from environmental danger, and to enable organized and safe evacuation. In the past three decades, considerable progress has been made in providing prehospital treatment to severely injured patients. However, the main progress in alpine rescue techniques was the establishment of a well-organized helicopter emergency medical system. With these rescue helicopters, the idea of short search and rescue periods as well as extensive prehospital advanced life support could be realized during high alpine rescue operations.

Whereas the methods of advanced cardiac and advanced trauma life support are basics for emergency physicians, the realization of these goals often are difficult in this setting. Because of difficulty finding safe landing

places, the use of the rescue winch frequently is necessary to deliver physician and equipment to the victims.

Most of the emergency medical equipment needs to be taken by backpacks. Therefore, it must be reduced to the absolute minimum size and weight to deliver emergency life support. Because of the location of the victim with further danger of falls, rock falls, or avalanches, the medical treatment at the scene also must be reduced to a minimum. Often, rapid evacuation of victims by rescue winch from an exposed area is emphasized as in the best interest of patients and rescuers. Further, life support and treatment for transportation to a hospital may be delivered to the patient at a safer landing place.

The described problems during helicopter supported rescue operations in alpine areas require special skills, education, and training for the emergency physician as well as for the whole rescue crew.

Key Words: alpine rescue; emergency physician; helicopter rescue

An Airplane Crash into Type-K Ndolo Market: What Lesson for the Future?

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On 08 January 1996, an airplane (Antonov 32) that failed takeoff, went straight ahead into a Type-K market. A total of 348 people were killed and many were injured.

The place of disaster was crowded with people, but there were no army forces to allow the organization of the first-aid efforts. Mama Yemo Hospital that received the first injured, was overwhelmed, and two other hospitals took the additional victims.

From this experience, we can realize the importance of Emergency and Disaster Medicine Teams with: 1) delimitation areas of responsibilities; 2) hospital responsibility, and planning for emergency and disaster situations; 3) development of prehospital medical services; 4) involvement of anesthetists in the development of the human resources in emergency and disaster medicine in the Congo; and 5) involvement of the national administration in this health-care field.

Key Words: airplane; crash; disaster; Kinshasa (Congo); perspectives

Role and Function of EMS Supervisors

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Prehospital emergency care not only is the practical delivery of primarily medical, but also incorporates psychological, social, geographical, and various other sciences. Compared to other parts of medicine, prehospital emergency service takes place in very uncontrolled settings. Providers are exposed to various dangers including: tough weather conditions, traffic, hostile encounters, radiation chemical, and infectious substances.

To ensure continuous quality improvement under such adverse conditions and in routine daily operations,