Sudan. The health conditions of civilian population in Juba became catastrophic due to lack of means and budget. They were facing problems such as:

- 1. Poor environment and inadequate water hygiene;
- 2. Poor nutritional status; and
- 3. Collapsed health service system
 Against this situation, the ICRC continues to provide various activities in Juba:
- 1. Health care services;
- 2. Distribution of food and non-food items;
- 3. Tracing and reuniting of unaccompanied people;
- 4. Dissemination of International Humanitarian Law; and
- 5. Co-operation programme with the Sudanese Red Crescent Society.

As for medical services, the ICRC medical team aimed to assist local staff in surgical projects at the Juba Teaching Hospital (JTH). The JTH had 500 beds and 1,000 employees. Local doctors worked irregularly and were undependable. The medical assistants performed the actual medical practices. An ICRC surgeon performed 200 operations per month, mainly for infected wounds debridement and abscess drainage. The hospital received 34 war-wounded cases in six months.

Keywords: abscess; armed conflict; disaster relief; healthcare; ICRC; Juba Teaching Hospital; nutrition; Sudan; surgery; water; wounds *Prehosp Disast Med* 2002;17:s21-22.

Ex-Post Evaluation of Japan Disaster Relief Assistance

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Objective: To observe and evaluate the activity of the Japan Disaster Relief Medical Team that was dispatched to Mozambique to assist during the great flood disaster in March, 2000 using "reduction of personnel damage (humanitarian relief)" perspective as the focus point.

Methods: The activity of the Japan Disaster Medical Team was evaluated using a survey according to the seven "rights": 1) right information; 2) right time; 3) right place; 4) right person; 5) right materials; 6) right coordination and cooperation; and 7) right technology.

Results: Effective data indicating the move of flood-attributed Internally Displaced Persons (IDPs) and disease trend were obtained and examined.

Conclusion: For the first time, the Japan International Cooperation Agency dispatched a post-disaster evaluation team. It concluded that such a retrospective evaluation is

extremely useful for providing more effective and more efficient disaster relief activities by Japan.

Keywords: evaluation; flood; international disaster relief; JICA; seven rights

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Evaluation of Health Disaster Management During the Mozambique Flood in 2000

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Background: In 2000, a major flood occurred in the southern part of Mozambique. Hokwe in the Chokwe Province, Gaza State, was one of the most severely affected areas. A Japan Disaster Relief Medical Team was dispatched into this area to evaluate the health disaster management during this flood using the Guidelines for Evaluation and Research in the Utstein Style.

Methods: The Initial Health Disaster Severity Score developed by the Gothenburg working group was used to assess the health status in affected area. For the evaluation research of the response, the idea of Template B and C on the guideline was used.

Results: Average severity score of the disaster was 41.6. The high scores were seen in the category of Medical, Impact on health care system, and Preparedness. The needs in this disaster were confirmed by the use of evaluation research. Infectious diseases were prevalent, and local health system could not cope with it. Therefore, international cooperation activities toward were found to be fit these needs.

Conclusion: The Guidelines for Evaluation and Research in the Utstein Style could be used in the case of a slow onset national disaster.

Keywords: DHSS; evaluation, flood; infectious diseases; Utstein template

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Evaluation of the Activities of the Japan Disaster Relief (JDR) Medical Team for Flood Relief in Mozambique

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Objective: To evaluate the activity of the Japan Disaster Relief (JDR) Medical Team dispatched by the Japanese Government/Japan International Cooperation Agency (JICA) at the request of the Mozambique Government from 18 March to 26 March in 2000 to provide relief activities for the victims of a flood in Mozambique.

Methods: An evaluation team was sent to Mozambique about one year after the dispatch. According to standard evaluation criteria, the efficiency, effectiveness, impact, coverage, connectedness, and coherence of the response were evaluated. Data were collected from many organizations and institutes, including counter parts and other donors such as Ministry of Health, National Institute for Disaster management, local health bureau, UNDP, WHO, UNICEF, WFP, MSF etc.

Results: The activities of the JDR Medical Team in Hokwe, Province of Chokwe in Gaza State and the Report to Ministry of Health were highly valued except for the short duration of the activities.

Conclusion: The duration of the activities of the JDR Medical Team was difficult to evaluate since a cost-effective evaluation could not be completed due to many factors that were outlined during the presentation.

Keywords:, disaster, evaluation; flood; Japanese Disaster Relief Team; Mozambique; relief

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Emergency Medical Management for a Mass Gathering Event at a Fireworks Festival

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Objectives: To report on the emergency medical management of mass gathering event that occurred on a pedestrian bridge between Asagiri station and the festival site just after the end of Akashi firework festival on 21 July 2001. Methods: A retrospective investigation was conducted.

Results: In this accident eleven people were killed, 247 people were injured, and 84 injured patients were transported to the hospitals by ambulances: 10 with cardiopulmonary arrest (CPA), one in critical condition, seven were seriously injured, 19 were moderately injured, and 47 slightly injured. As a result of insufficient preparedness, it took a while to grasp seriousness of the accident, which delayed the response to the event, It took two hours to transport all of the patients. The number of injured people was beyond the capacity of emergency medical system in Akashi City. Apparent problems included: 1) delay in obtaining the necessary information about the event, which delayed the response; 2) delay in requesting needed support from neighboring cities, and 3) delay in transportation of the victims to appropriate medical institutions.

Conclusion: The mass gathering event provided an opportunity to reconsider the significance of the prior consultations, security, and emergency medical plans for each potential event in our county. It prompted us to

reconsider how to manage a mass gathering event, to establish cooperation with fire stations, police, and medical institutions, and to establish a system to dispatch emergency doctors to the scene.

Keywords: bridge collapse; disaster; emergency medical management; event; firework festival; mass gathering; planning

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Complex Emergencies and Humanitarian Assistance Etsuko Kita

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Since 1980, >150 armed conflicts have occurred worldwide. Those modern conflicts, Complex Emergencies (CEs), are increasingly internally rather than between states, and are multidimensional and complex. The cycle of violent conflicts, deaths and casualties, massive migration, hunger, and human rights abuse have affected millions of civilians of developing countries like Rwanda, Sierra Leone, Sudan, Angola, Somalia, Afghanistan, and East Timor in South and South East Asia. However, rapid and intense globalization also can induce such complex human crises in some middle-income countries like Indonesia and South Balkan. CEs have been, therefore, the most serious global public health issue in the world since the end of the Cold War.

The Complex Emergencies (CE) are defined as relatively acute situations affecting large populations, that are caused by a combination of factors, generally including civil strife or war, exacerbated often by food shortage and population displacement, and resulting excessive mortality (Michel Tool and CDC). In addition, in most or recent CEs, often, the security of aid workers is at risk.

The International Committee of the Red Cross (ICRC), an impartial, neutral, independent, and exclusively humanitarian organization, has had a mission to protect the lives and dignity of victims of war and internal violence, and to provide them with protection and assistance. The Japanese Red Cross Society (JRC), a member of the International Red Cross and Red Crescent Movement, has participated in international relief activities for victims of armed conflicts.

In this session, experts form the Japanese Red Cross Society presented their experiences of relief in conflict zones. What they should do and what they should not do was discussed with some of prospective view in order to render future JRC contributions more appropriate, effective and efficient.

Keywords: complex emergencies; conflict; humanitarian; International Committee of the Red Cross; Japanese Red Cross; relief; war *Prehosp Disast Med* 2002;17:s23.

Difficulties in Relief Activities for Refugees: Comparison of the Experiences in Rwandan, Kosovar and Afghan Refugee Relief

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