given equal levels of mustard exposure, initially the children’s symptoms were considerably more severe than were those of adults, whereas the chronic effects tended to be significantly more pronounced in adults.

**Conclusions:** This investigation provides insight into the special repair mechanisms in children. This may account for the lower overall susceptibility to chronic health problems by mustard-exposed children.

**Keywords:** adults; chemical warfare; children; effects, chronic; lesions; mustard gas; symptoms

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**Afghanistan Humanitarian Relief Mission: The Singapore Perspective**
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Humanitarian crisis includes the extreme suffering of people driven from their homes, and who lack shelter; security; food, clean water, and healthcare. These consequences may have a sudden onset with a quick conclusion, or they may last for years.

The Afghanistan refugee problem is a chronic one, with the last 20 years of ongoing war and strife. After 11 September 2001, the migration of greater numbers of Afghans has generated a more pressing and acute need, especially at the border between Afghanistan and Pakistan. There are more than one million internally displaced persons. The healthcare, hygiene, and nutritional status of these refugees remain dismal despite multiple attempts at the provision of international and regional relief aid. The predominant problems include: (1) acute respiratory and gastrointestinal diseases; (2) infant malnutrition; (3) anemia; (4) deficiency of care for chronic illnesses (which leads to complications); and (5) lack of obstetrical care. Because of the war, acute traumatic injuries are also common.

Singapore, under the umbrella of the Singapore International Foundation, mounted several missions to render aid. This paper will highlight the efforts and challenges faced by the teams.

**Keywords:** Afghanistan; aid; consequences; internally displaced persons; International Foundation; Pakistan; refugees; relief

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**Organization of Medical Provision During Chemical Accidents or Acts of Terrorism in Russia**
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Analysis of chemical safety in Russia shows the tendency towards an increase of chemical accidents and technological events. This is the reason a well-built system for the management of chemical accidents on the federal, territorial, and municipal levels was formed in Russia. At the same time, integration of manpower and resources of the medical service is achieved at the expense of interaction on the level of interdepartmental commission, which includes different ministries in accord with the plan of action for chemical accidents at the federal or territorial level. Medical manpower and resources of Ministry of Health of Russia are presented by ARCDM “Zaschita” (field multipurpose hospital, teams of emergency response), institutions of state sanitary control, and special medical institutions providing toxicological care. During the management of chemical accidents, health relief is realized in three areas: (1) everyday activity; (2) increased preparedness; and (3) emergency.

In the emergency regime, the following is done: (1) information is received through control rooms of Ministries or the All-Russian Service for disaster medicine; (2) special teams or field medical institutions are ready for action or go to the emergency site; (3) the accident scale and level of contamination of the territory are estimated; and (4) qualified and special medical assistance is rendered to the injured.

The most important aspect of the management of chemical accidents is the standardization of chemical hazards, sanitary-hygienic, and medical-evacuation measures. The ARCDM “Zaschita” introduced standards of chemical-accident health relief for 32 highly toxic chemical agents which may be encountered in Russia; these standards are realized in regions and territories in chemical accidents. In acts of terrorism and health relief, a special medical team is formed, ready to hold qualified medical triage and give emergency medical care to the injured.

To increase the efficiency of chemical-accident health relief in Russia, it is necessary to: (1) integrate manpower and reserves of medical service at all levels; (2) form reserves of medical property and antidotes; (3) improve the system of postgraduate training of doctors—specialists of ARSDM.

**Keywords:** assessments; chemical events; integration; medical services; organization; relief; reserves; response; Russia; safety; teams; terrorism; training

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**Disaster Medicine: Psychological Issues**

**From Armenia to Algeria — 15 Years Together with Children during Disasters**
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It seems that the earthquake in Armenia happened only yesterday. And only yesterday, there was an earthquake in Algeria. Fifteen years have elapsed as if only a minute. Fifteen years ago, I got myself involved into the disaster medicine as a volunteer. Ten of the 15 years, I have given to the World Association for Disaster and Emergency Medicine (WADEM). In the course of this period, there has been established a unique (the only one in the world) pediatric relief team qualified and prepared to render medical aid to children during emergencies: This team has worked in many countries of the world during wars and other disasters.
The main conclusions I have come to are:

1. The assistance to children in case of disasters should be provided by pediatric experts, since this diminishes the morbidity and mortality rate twofold;
2. Many countries of the world do not have a sufficient number of experts who can provide the specialized, qualified, medical aid to children in catastrophes;
3. The standards used for treating children in disasters differ greatly from those used for treating adults, but so far, have not been worked out thoroughly;
4. Specialized medical aid to children must be rendered maximally as close to the site of the disaster as is possible;
5. The system for the provision of specialized assistance to children in case of wars and emergencies, including legal, social, psychological, and medical, currently does not exist anywhere in the world.

To my mind, the WHO must head and regulate the medical activities during catastrophes and wars, including those activities aimed at helping children. The WHO recommendations must become the law for all non-governmental organizations and foundations. All non-governmental organizations and foundations, as well as for individual experts, involved in such activities, must get the WHO certificate giving them the right to work in the areas of disasters. This is especially important since the role of the International Committee of the Red Cross recently has faded substantially as indicated by some of the events in Iraq.

**Keywords:** certification; children; disasters; International Committee of the Red Cross (ICRC); medical care; non-governmental organizations (NGOs); pediatrics; relief; specialists; World Health Organization (WHO) *Prehosp Disast Med* 2003;18(1)s24.

### Delivering Bad News in Catastrophic Medicine

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Nearly every healthcare professional in catastrophic medicine is challenged by communication with victims or survivors in a very specific and sensitive manner, especially while delivering bad news. The regular course of education does not provide sufficient opportunity to gain skills and knowledge about communication in critical circumstances.

A part of a research project on teaching these specific skills will be presented. Fifty general practitioners were randomly chosen from all of the applicants who replied to our invitations to participate in the study. A pre-test/post-test design was used to evaluate the efficacy of a two-day intensive training program in delivering bad news. The participants were videotaped during interviews with trained simulated patients. The videotapes were rated by two independent raters, using an established instrument for evaluation of utterance by utterance of the communication skills and behavior before and after participation in the training program.

Results suggest that communication skills can be taught, but attitudes and emotional concerns are more difficult to change.

In this paper, data about the participants' emotional concerns and barriers will be presented. These data were gathered from questionnaires, from role playing, from comments after participants viewed their own videotaped interviews, and from narrative declarations of concerns in the participants' case reports. There is an outstanding finding that, in addition to lack of knowledge and skills, the majority of the participants felt emotionally unsupported (for themselves, and for the patients and their relatives) when dealing with critical situations. The most critical emotional states to handle are anger, profound grief, and depression.

**Keywords:** anger; bad news; communications; depression; emotional concerns; general practitioners; knowledge; role-playing; simulations; skills *Prehosp Disast Med* 2003;18(s1)s24.

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