

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; Singapore

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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.