

take care of the quality system implementation by providing on-scene monitoring, conducting customer interviews, and searching for further improvement aspects.

Key Words: ISO 9001; quality assurance partners; quality management

Military Medical Aid in International Disasters

Colonel I.S. Creamer, MC, MFPHM

Copthorne Barracks, Shrewsbury Shropshire, UK

The military medical services of many countries are designed to treat soldiers, both male and female, in any situation in any part of the world without reliance on local medical resources. They are experts in life-saving treatment, the evacuation of casualties, and the maintenance of health. In addition, they have considerable experience in medical planning and medical management for the most adverse circumstances. Finally, their equipment is designed to operate in a field environment, and they are trained for rapid deployment to any part of the world. The military, thus, has the potential to provide urgent medical aid to populations in disaster and emergency situations anywhere in the world.

The aid can be provided in one of two scenarios: 1) A dedicated military medical mission—Rwanda; or 2) As part of a wider military mission alongside the medical support to own troops on the ground—Bosnia.

A military medical mission must be of limited duration as it always will be outside the primary purpose of the medical services that exist to support the military forces of the nation. This suggests the need, in any disaster situation, to work closely with the non-governmental organizations (NGOs). Similarly, unless agreed separately, medical supplies and supplementary equipment may need to be provided by relevant NGOs.

Finally, deployment of medical forces in a disaster situation must not only be authorized by the donor government, but also accepted by the recipient nation. These international negotiations may require lead time. Military medical aid mainly exists, therefore, for use in the middle time range of a disaster.

In summary, often there is a misunderstood, but tailor-made source of medical support for disasters. Deployment for civilian disasters is outside the primary role of the services, and thus, there are temporal and resource implications. However, despite limitations, it merits inclusion in the options for international response to world disasters.

Key Words: aid; disasters; disaster response; humanitarian; medical; military aid; responses

Psychosocial Sequelae of Disasters in the Acute Phase and During Mid- and Long-Term Recovery Periods

Gloria R. Leon, PhD, Victor S. Koscheyev, MD, PhD

University of Minnesota, Minneapolis, Minnesota USA

Disaster experts have tended to focus more closely on the medical as compared to the psychosocial effects of disasters. The Chernobyl power plant and Armenia

earthquake catastrophes will be used as examples of the psychological, family, and community effects of disasters, and how these factors influence physical health.

Differences in response patterns in the acute as compared to the mid- and long-term recovery periods will be examined. The disruptive effects of evacuation, distrust of government information, the continuous overt and covert reminders of the disaster, and the tremendous uncertainty about future health status in the case of radiation and other toxic accidents will be described.

Recent research on adolescents and adults living in an uncontaminated village in the Chernobyl area illustrate the psychological behavioral effects of health uncertainties. Factors influencing the development of post-traumatic stress disorders in the Armenia earthquake victims will be related to extent of trauma, age of victim, and prior trauma history.

In assessing physical illness consequences of disasters, the profound effects of stress on physical health status also need to be taken into account. These stress effects may have an indirect influence on the later development of diseases thought to be related directly to radiation and other forms of contamination. Psychological and physical health findings on Chernobyl power plant workers will also be presented to describe the current state of this group, and to illustrate the variety of factors that contribute to current work performance and health.

Key Words: acute; long-term recovery; psychosocial sequelae

New Methods in Critical Care Medicine

Margarita Malakhova; Oxana Dmitrienko

Academy of Medical Education, Saint Petersburg, Russia

Background: A rapid biochemical method for staging the endogenous intoxication signs of bacteremia and for monitoring the progress of sepsis has been developed to study endotoxemia and sepsis in acute and chronic diseases, traumas, burns, etc.

Measurements: The method is based on evaluation of the pull of endogenous substances of low and middle molecular mass and oligopeptides in blood plasma, erythrocytes, and the urine. The stage of sepsis is estimated from spectrophotometric data.

Results: This laboratory index correlated with the severity of the patient's condition in reanimatology, trauma, burns, infectious diseases, and cardiology. It also correlated with probability of mortality. Five stages of endogenous intoxication were described. Starting with the first stage, septicaemia is at least the third stage and with bacteremia determined by blood culture.

Conclusion: This rapid and simple method that is applicable in any clinical laboratory, provides the information necessary for the diagnosis of endotoxemia, sepsis, and for selection of the detoxification method to be used, and for prognosis of the diseases.

Key Words: critical care; disease staging; detoxification; endotoxemia; prognosis; sepsis