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Possibilities for Application of Multimedia Technology for Rescue Training

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The developments in Computer Science and the possibilities for its use in Medicine allows us to provide information support and training systems in the field of Disaster Medicine on the basis of the application of multimedia technology. Multimedia systems "Burns" and "Rescues Training" are presented.

The system "Burns" includes all types of medical care to burned victims and treatment tactics both at the pre-hospital and hospital stages. There are many color illustrations, video images, audio comments, and movies that demonstrate methods for providing aid and treatment. The system "Burns" also includes the most important algorithms for burn victim management in cases of disaster. These algorithms are created with participation of Professor B. Domres of Germany, and cover triage and prehospital polytrauma algorithms. The algorithms, in the form of computer tests, can be used in an interactive mode in which the user must choose one of the options at every step of the process. Thus, the system can be used not only as an electronic guide to select the adequate medical aid in cases of disaster, but also it can be implemented as a good visual means for training physicians, medical students, and paramedical staff.

The Multimedia Interactive Training System (MITS) "Rescues Training" includes different tests and hypertext for learning about life-saving techniques for resuscitation and intensive therapy. The web-site with the demo-version of MITS for rescuer training is: <http://windoms.sitek.net/~cito>

Keywords: algorithms; computers; intensive care; life-saving; multimedia technology; rescue techniques; resuscitation; training; training, interactive

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The Psychological Support Program of the Japanese Red Cross Society: Introduction from the International Federation of the Red Cross and Red Crescent Societies

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Introduction: After the Great Hanshin-Awaji earthquake in 1995, stress reactions were common, and the Post-Traumatic Stress Disorder (PTSD) became a popular term among people. But the system to support the psychologically affected people by disasters had not been established. The Japanese Red Cross Society (JRCS) decided to establish a psychological support program.

Methods: The JRCS sent an investigation team to the American Red Cross, the Danish Red Cross, the inter-

national organization in Geneva, Switzerland of the International Federation of Red Cross and Red Crescent Societies (IFRC), the International Committee of Red Cross (ICRC), the UNHCR, and the WHO; in order to get information about stress reactions and psychological support. Also, the JRCS sent its delegates to Bosnia-Herzegovina and the Serbia Republic to evaluate the degree of stress on refugees in both countries.

Results: The JRCS established a draft for the psychological support program by introducing the essence of the program of IFRC, and modified it to fit the Japanese culture. It published a manual for psychological support and coping with stress. The characteristics of the program are as follows: 1) The program consists of methods for the provision of psychological support for the victim of disasters, and for coping skills for stress on the helpers and members of medical relief team; 2) It is not the specialist in psychology or psychiatry who provide the psychological support; 3) As our program introduced the main frame from IFRC, it also is useful for the delegates for international relief actions. Since 1995, the JRCS added this course for psychological support and coping with stress to the training program for the members of medical relief teams of JRCS.

Conclusion: The JRCS started its psychological support program by introducing and modifying the international system. It is important to train the trainers in order to develop the system and to make it effective.

Keywords: coping skills; disaster; earthquake; Hanshin-Awaji earthquake, 1995; Japan; Japanese Red Cross Society; post-traumatic stress disorder; psychological support; stress; stress disorders; training

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New Methods for Diagnosis and Rehabilitation of Patients with Post-Traumatic Stress Disorder (PTSD)

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Introduction: In recent years, Russia has experienced a tendency for increasingly different disasters and accidents, economic difficulties, chemical and railway accidents, and others. The Afghanistani and Chechen wars and the consequences of the liquidation of Chernobyl have contributed to the growing number of patients with Post-Traumatic Stress Disorder (PTSD) in Russia. More than 300 participants in the Afghanistani and Chechen wars, and victims of the consequences of Chernobyl and of another large catastrophes were studied for early diagnosis PTSD, the development and evaluation of new diagnostic and rehabilitation programs.

Establishment of the diagnosis included screening methods of diagnostics (special computer programs, many-sided personality study, and others) and methods of precise diagnostics (systematic study of peroxidation and lipids, immunological status, and concentrations of melatonin). This program allows the diagnosis of PTSD