083.
Some Features of Organizing Medical Services to Victims of Burns in Underground Settings

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Explosions of coal dust and methane in underground workings very often are accompanied by terminal injuries of miners skin. As a rule, there are many victims having extensive and deep burns and very often respiratory tract involvement.

The Kemerovo Burn Center and Regional Center of Emergency Medicine has been involved with the treatment of victims of two explosions in mines. There were 22 persons involved. As the fire was of short duration, the burns appeared on opened parts of body: face, upper extremities, and trunk. None of the victims suffered lung barotrauma, but all had inhalation of the products of combustion. Most of them could move without assistance and were able to get out of the mine.

It's very important to start the infusion therapy for burn shock early. In all of our cases, infusion therapy was carried-out through peripheral veins by fighters of Military Rescuing Mining Department. The skin was covered with considerable coal dust that made the diagnosis of the area and depth of burn very difficult. In addition, there were some cases of burn shock.

The victims were transported immediately to the nearest medical institution where the anti-shock therapy was continued by members of the combustiological brigade of the Regional Medical Emergency Center. Such tactics are required by the impossibility of immediate smooth transportation of the victims to the Regional Burn Center because of the remoteness of the accident site. The long time required for transportation renders the burn disease more complicated and resulted in the early onset of renal failure. Within 3 to 4 days of the incident, the victims were transferred by helicopter to the Regional Burn Center where they were given special help (necrectomy, active detoxification, hyperbaric oxygenation, intravenous laser therapy, and skin restitution). Three (14%) of 22 died, their index of heaviness was from 180 to 220, and they had infection of respiratory tract. The principle cause of death was burn toxemia with multiorgan failure.

Thus, this experience speaks to the inexpediency of long distance transportation of burn patients following an accidents in the mines, and affirms the necessity the organizing specialized teams in a Regional Emergency Medical Center.

022.
Multifactor and Combined Traumas in Fire Victims

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The characteristics of fire victims were evaluated taking into consideration the city demographic indices. A model contingent of victims similar to that with clinically analogous traumas acquired in extreme situations was selected. They were high risk patients. It is this pathology that is the most difficult factor to be considered in organizing medical assistance to fire victims and in their treatment.

The indices of trauma severity, the course, and the outcome of 1,049 victims were studied (293 patients with deep burns involving over 10% BSA; 491 with similar condition plus inhalation trauma; 107 with thermo-mechanical trauma; 61 pregnant women; and 97 who died in fires). Every trauma taken separately is well-known to specialists. Even though combined tramas are rare for burn victims, they practically are constant for fire victims. Hence, multiple severe organic changes in organism also are typical. The result is the multifactor character of clinical manifestations: a mixed clinical picture with integration of thermal, mechanical, and inhalation traumas. The fire victim's pathology noticeably is influenced by the patients "background" (i.e., the state before trauma).

The results of our study indicate that such factors as past diseases in adults and children, advanced age, pregnancy, and psychogenic illness after-effects are not significant factors.

The results confirm the historically formed concept that the "fire victim" in particular has the most severe form of burn trauma, and the concept of "fire victim's pathology" is necessary for medical specialists and for those involved in assistance to fire victims.

096.
Psycho-Social Rehabilitation in Sarajevo: Impacting the Infrastructure

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This paper describes data collected during the first six months of a project designed to develop and support staff of four social service centers serving specific catchment areas in Sarajevo, Bosnia and paraprofessionals working in refugee centers in that city. The project was developed, implemented, and sustained while the city was under siege. The social service centers and refugee centers are on the lowest rung in the mental and social health system of the city. As a consequence, they receive the least support to from governmental and non-governmental aid agencies. Staff members working in the social service and refugee centers have been subject to the same severe and continuous trauma as the clients they serve. Working conditions, particularly during the frigid winter and during periods of intense shelling, are extremely poor. For this reason, these settings seemed ideal for rigorous testing of the hypothesis that collaboration of expatriates and locals can have substantial positive consequences.

This paper presents and discusses the observed consequences of this project in relation to three phases: development, implementation, and outcome. Social obstacles and dysfunctional preconceptions that impede programmatic goals are identified and discussed as are synchronistic cultural variables that unexpectedly facilitate progress toward stated objectives. Finally, a brief working paradigm for the development of psychosocial

rehabilitation projects to serve severely traumatized and culturally diverse populations is presented and discussed.

012.
"Helping the Helpers": Training Seminars in Israel to Stress-Relief Workers from Former Yugoslavia

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During the last few years, a brutal war has been taking place in Former Yugoslavia (FY). Mental-health professionals from Croatia, Bosnia-Herzegovina, Serbia, and the other republics have had to struggle with this mass-disaster effect—the abundant numbers of traumatized civilians, especially children—without prior experience or adequate training, without appropriate tools to administer to the distressed population, and, above all, while being themselves seriously burned-out and frequently traumatized by the situation.

A special program, combining professional training and peer-support, has been designed and implemented by the staff of the Carmel Institute in Zi'khron Ya'akov in collaboration with the Community Stress Prevention Centre in Kiryat Shmona. The program, entitled "Helping the Helpers" Seminar comprises two weeks of intensive training in the following areas:

1) Theoretical and conceptual inputs;
2) Expressive methods;
3) Relaxation and treatment methods;
4) Coping and appraisal;
5) "Helping the Helpers" aspects; and
6) Self-guided sessions.

The two seminars conducted in Israel (in the spring and the autumn of 1994) were followed immediately by in-country facet workshops entitled "Expanding Circles" conducted by the "graduates"' of the Israeli Seminars in their respective countries to a broader circle of local professionals. These workshops attempted to implement and further disseminate the knowledge acquired in Israel. To date, the "Expanding Circles" facet has been a great success and the Israeli model is becoming a standard method of training mental-health professionals in FY.

The proposed presentation will describe the entire project, as well as its immediate effectiveness as illustrated in the distressed areas of FY. The project is proposed as a model for emergency and disaster prevention and intervention.

101.
Disaster Response: Effective Strategies for Psychological Recovery

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Aim: The main aim of this presentation is to examine the psychological consequence of disaster and models of intervention. Methods: Specific strategies for psychological recovery will be discussed within a framework of disaster management. Areas to be covered include;

1) An outline of short- and long-term psychological reactions (post traumatic stress syndrome, bereavement, loss);
2) Aspects of disaster management from a psychological perspective (training, planning, community awareness, etc.);
3) Specific roles of health professionals and relationships with community agencies; and
4) Clinical aspects of psychological management (critical incident debriefing, peer support, counseling, therapy).

Discussion: Disaster is defined as a situation in which personal, community, and organizational arrangements cannot cope with a hazard impact. As experienced during recent bushfires, the threat of injury frequently is associated with disaster. The high prevalence of trauma reactions is related to factors, such as being trapped by fire, personal loss, or fear of injury.

Burns unit staff becomes skilled in addressing these trauma reactions, and their experience is of considerable value to disaster management within both the hospital setting and the broader community. The discussion will draw on the author's experience during the recovery phases following the cyclone devastation of Darwin and the Sydney bushfires.

139.
Israeli Field Hospital for Rwandan Refugees–1994

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Following the civil war in Rwanda early in the Spring of 1994, about one million refugees crossed the boarder to Zaire, passed through the town of Goma, and spread along the roads leaving this town to the north and the west. No food, good drinking water, or shelter were available for these refugees, and contagious disease disasters followed very rapidly. Thousands died of cholera within a few days, and the media, attracted to the area by the civil war, witnessed and broadcasted worldwide some of the worst scenarios of our times.

The government of Israel decided on a medical relief delegation, and the Israel Defense Forces Medical Corps organized, equipped, and provided the manpower for a custom-made field hospital within 24 hours. This independent and self-contained field hospital arrived at Goma on 25 June 1994 at 06:00 hours, and received its first patients by noon on the 26th. Location, mode of operation, and relations with all other relief organizations were coordinated by the UN High Commissioner for Refugees.

The hospital operated for about 6 weeks and treated about 3,600 in-patients. Its activities are described and discussed.

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