

hospitalized after the earthquake in Armenia, and only 56 of them (2.1 %) had amputations. During the Sakhalin earthquake, the number of amputations was 12 out of 112 admitted patients (9%). Each of these children needed correction and changes in their prosthetics 1-3 times during the year following the provision of the first prosthetics. Later, the prosthesis exchange was done within 6-12 months during the child's growth period.

Disabled children had medical and social rehabilitation in hospitals and camps for recovery treatment, as well as education and proper professional orientation. Rehabilitation became more difficult when a child had lost his parents, or s/he had to change residence and his/her usual environment was disturbed. The optimal rehabilitation of the patients who suffered during disasters requires advanced planning for the long-term and expensive state programs that aim at the social rehabilitation of invalids.

**Keywords:** amputations; children; disability; fractures; injuries, compression; prosthetics; rehabilitation; trauma

#### PL-1-8

##### Rehabilitation of Children with Crush Syndrome

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We observed 17 children, age 2 to 13 years injured at the time of the earthquake. All children had crush syndrome of extremities of various degree of weight. Five children had fractures of extremities, and nine children had acute renal failure with the duration of anuria from 3 to 22 days. All of the wounded had traumatic or hypovolemic shock. During the period of intensive therapy of the children, 77 operations including seven amputations of lower extremities in six of the children, 33 procedures of hemodialysis, 20 episodes of plasmapheresis, three hemofiltrations, and 60 hyperbaric oxygen treatments were executed. A total of 143 litres of fluids and preparations of blood were administered.

The stages of the children's rehabilitation can be divided into three parts: 1) functional (including mobility); 2) psychological; and 3) social adaptation. The elements of the medical physical culture began from the first days of their stay in the intensive care department. It was included respiratory exercises, massage of intact parts of the body with the subsequent expansion of the intensity and duration of the procedures. The complex of physiotherapeutic procedures included variants of microwave therapy, ionophoresis of medicine preparations, lazer therapy, and others. To a smaller degree water procedures were used. In connection with the development of neuropathy of the lower extremities of 11 of the children, special recover therapy was conducted by common orthopedic and neuropathological specialists. Of the four children with amputated extremities, the functional recovery depended on qualitative forma-

tion of individual prostheses. This work was executed for three months in Japan under the invitation of its government. At end of the treatment, each of the four invalids could move independently.

Very important for the successful treatment of these children was the provision of psychological support without exceptions for all of the children. The younger children developed psychological damage easier; it was manifested in the first weeks by psychoasthenia, and was activated in parallel with recovery of the children, expansion their mobility and other functional capabilities. The older children had suffered the sudden loss their homes, relatives, and customary image of life. Some developed advanced reactive conditions with a prevalence of depressive syndromes. The help of psychiatrists appeared the most valuable in acute period of treatment. The most important positive psychological factor was the appearance of relatives (live parents were found only for four of the 17 children) whose presence had a stabilizing effect on the children's psyche.

The most complex problems were the social problems. Only with help the directed policy of the State, the chapter of Khabarovsk region's administration managed overcome the difficulties. All of the children found homes and developed a sense of life and reliance for the future.

**Keywords:** amputations; children; crush syndrome; depression; loss; psychosocial reactions; rehabilitation; social condition

*General Session-V*  
**Complex Disasters**  
Monday, 10 May, 16:00-17:30 hours  
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#### G-20

##### Advance Deployment and Organization of Activity of a Field Multiprofile Hospital (FMH) in Local Armed Conflicts

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In health responses to military operations, Field Multiprofile Hospitals (FMH) have a particularly specific role. This paper presents studies of the types of casualties, the characteristic properties of the affected people cohort, and the capacity for evacuation.

Medical care delivery to the affected in armed conflicts is not a general practice for civilian medical units, including the Field Multiprofile Hospital (FMH) of ARCDM "Zaschita". The FMH had a unique experience with such military activity during the conflict in the Chechen Republic from 1994-1995. In those years, the FMH teams worked in localities such as Mozdok, Tolstoi-Yurt, Znamensky, and Grozny. The teams participated in health response activities following acts of terrorism in Budenovsk, on the Chechen-Daghestan border (Pervomajsky), and during the military operations within the area of the Sunzhi station (1996).