

Health Care for Japan Disaster Relief Team Personnel following the 1999 Columbia Earthquake

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Introduction: A physician and a nurse accompanied the Japan Disaster Relief (JDR) team to the Columbia earthquake of 25 January 1999, to provide care of the physical and mental health of the 35 non-medical team members. This was the first experience of JDR mission in 15 years. The team consisted of 15 members from fire departments, 15 from police departments, four from the Japan International Cooperation Agency (JICA), and one from the Ministry of Foreign Affairs. The team started their relief mission in the most affected city of Armenia within 48 hours after the quake. We will discuss the results and problems of the health care of the team members in this mission.

Methods: 1) *Medical care* — Team members were free to consult the team doctor or the nurse. Their medical records are reviewed; 2) *Physical complaints* — At JICA headquarters' request, the team doctor created the questionnaires about subjective physical signs for the short term that were completed by the members on the third, the fifth, and the eighth day of their mission; 3) *Mental assessment* — Self-rating Depression Scale (SDS: 20 points, "best"; to 80 points, "worst") was adopted and its questionnaires were completed simultaneously with the above questionnaires.

Results:

- 1) *Medical care* — Eight members consulted the team doctor with three minor injuries and five minor diseases. Medicines prepared according to WHO recommendations did not fully meet the relief personnels' requirements.
- 2) *Questionnaires* — On the third day, nine members complained of constipation. The number decreased gradually to five on the fifth day and to one on the eighth day. There were no complaints of diarrhea on the third, one on the fifth day and four complaints on the eighth day.
- 3) *Mental Assessment* — Nine of thirty members who completed the SDS showed minor mental deterioration without significant depression. But, the adequacy of SDS for short-term assessment of disaster relief personnel was not clear.

Discussion and Conclusions: JDR members had different health problems from the disaster victims. Adequate methods to assess physical and mental state should be prepared beforehand for the future missions. Special consideration should be paid to relief personnel.

Keywords: Columbia; earthquake; health care; Japan Disaster Relief; personnel; relief; team

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Psychological Aspects of Pre-Earthquake Training and Emergency Management

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To decrease the risk associated with living in an area with high seismic hazard and to minimize negative consequences of destructive events, it is especially significant for all professionals engaged in earthquakes (local authorities, civil defense, medical and military personnel, mass media, etc.) to be psychologically competent. Previous experience in overcoming the consequences of earthquakes provides the necessity of psychological selection and special psychological training of managers and other specialists, so that they pursue their professional activities under conditions of prediction, awaiting, and elimination of a seismic disaster.

Knowing psychological regularities and human behaviour phenomena that are manifested in emergencies, enables one to construct a system of psychological training, to develop methods and the means of regulation of the well-being of people living in a seismic-prone zone. Such a system decreases anxiety, panic, and depressive mood of the community when waiting for catastrophic events.

The social well-being, the level of psychological sensitivity, the degree of phobia of earthquakes and prediction of catastrophic events predetermine the impact of earthquake on the feelings of each person and on the public as a whole.

Psychological knowledge, psychological training, and professional psychologists at different stages of training, during the seismic events, and at the stage of emergency response play a significant role in improving the well-being of both professional personnel and population. This is why briefing of the population and special personnel was conducted in Kamchatka. About 1,000 questionnaires for population and about 600 for the response personnel were processed. High anxiety of the population was revealed: 55% of the population who took part in the briefing are afraid of earthquakes, including 12% who estimate this fear as panic, and 33% at the level of anxiety. 51% of the people rely on themselves in an emergency, 17% believe that they will be rescued by the military men, and 20% believe in the professional rescue teams. It is remarkable that only 2% consider that local authorities are capable of disaster management. The analysis confirmed the significance and high importance of socio-psychological preparedness in disaster mitigation policy.

Keywords: life safety; psychological competence; socio-psychological sensitivity