

# Disaster mental health: lessons learned from the Hanshin Awaji earthquake

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In the early morning of 17 January 1995, Kobe city (1.5 million inhabitants) and surrounding urban areas were devastated by the Hanshin Awaji earthquake, which killed more than 5,500 people immediately and made more than 350,000 people homeless. Soon after the earthquake, almost 1.5 million volunteers from all over Japan and from abroad came to visit the Kobe area and helped victims to recover from the damage. The memory of the disaster is still vivid among Kobe residents and survivors, including myself. The event was very tragic. However, we have learned many lessons through this experience.

*Organization of manpower on the site.* The Hanshin Awaji earthquake was not at all expected in Japan. Central as well as local government, hospitals, communities and families had made no preparation for a big earthquake in the Kobe area. When the earthquake struck, there were no coordination and directions. The victims behaved based on common sense. They tried to rescue other fami-

ly members by themselves, moved to shelters (mostly to nearby schools), lined up for food and water, shared their experiences with other victims at shelters. Almost no cases of looting and violence were reported. The arrival of professional rescue team was very late, due to the delayed decision and congestion of roads by private cars. This teaches us the importance of disaster preparedness for the whole population (1).

*Contribution by volunteers.* It was reported that more than 1.5 million volunteers, mostly University and college students from all over Japan and housewives from nearby areas, visited Kobe areas and stayed for several days to provide supports to the victims. They helped the victims (many of them were old) to carry their belongings, to get the food, to bring water, to clean their shelters and to fill in official papers. Also, they listened to stories by victims who, sometimes, lost their family members and close friends. Volunteers were very helpful to the victims, as they could feel that they were not abandoned and isolated. However, there was a total lack of coordination. Some shelters close to the main roads had many volunteers and some isolated shelters had no volunteers.

*Mental health services for the victims.* What was most appreciated by the victims was the support for their daily life rather than professional psychiatric services. Some groups of psychiatrists set up disaster mental health care clinics at shelters but almost no clients came. Victims talked of their experiences to volunteers who helped them. Local mental health workers prepared simple guidelines for volunteers on how to listen, encourage and keep confidentiality. Most severely affected victims stayed at shelters for several weeks and exchanged their experiences. This provided an invaluable opportunity for debriefing (2).

*Each phase has different mental health problems.* The first reaction to the disaster was a kind of emotional numbness, the loss of the sense of reality, an abnormal sense of time. Within a few days, this phase was followed by the phase of anxiety and fear of aftershock. Many victims became talkative and restless. Battlefield friendship prevailed. Stress related somatic symptoms, such as hypertension and stress ulcer, were observed. Within a week, anxiety and sleep disturbances became manifest among residents of shelters. Depression and depressive symptoms appeared a few weeks later, when people came to face the loss of family members, housing, money and communities. This phase continued for several months and sometimes for years. After a year, the dominant problems of victims became of social nature. Aged victims lost the hope to live. Many started drink alcohol to forget the difficult reality (3). More than 230 victims died unattended at temporary houses. It was hard to provide support to the victims at temporary houses due to the lack of manpower and financial resources. The establishment of communal space and self-help groups among victims living at temporary houses were very useful to prevent solitary death.

*Post-traumatic stress disorder (PTSD).* The prevalence of PTSD after the Hanshin Awaji earthquake varied greatly. Several factors, such as diag-

nistic criteria, sites of collection of samples, timing of the survey, contributed to the different results. PTSD should be considered as part of the variety of mental health problems among victims of the disaster. Anxiety, sleep problems, depression, chronic self-destruction including alcohol abuse, were common among victims of the Hanshin Awaji earthquake. PTSD did not carry the stigma usually attached to mental problems: the concept was widely used and accepted by Japanese mass media and was used as a synonym for the whole range of psychological problems after the disaster in Kobe. One can even say that the concept of PTSD has contributed to decrease the stigma attached to mental health problems and psychiatrists after the Hanshin Awaji earthquake in Japan.

*From victims to survivors.* The Hanshin Awaji earthquake brought a tremendous damage to Kobe city and its residents. The city lost about 100,000 population after the disaster, as many had to leave the city due to the closure of factories and workplaces. However, the population gradually recovered and has returned to the same level before the earthquake after five years. Kobe city built several memorials. Several United Nations and governmental agencies for disaster prevention were set up in the Kobe area. Kobe University, with the support of the government, opened the Research Center for Urban Safety, and our medical school, heavily affected by the disaster, built new hospital buildings with a renewed department of disaster medicine. An international training course on comprehensive medical care for disaster victims was started, with the support of the Japan International Cooperation Agency, aiming to transfer our experiences and technologies for disaster management to experts from various developing countries. This transfer of experiences constitutes a continuous process in our recovery from the Hanshin Awaji earthquake. One could say that sharing is the source of our recovery from the disaster (2).

## References

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