

Five years since the Great East Japan Earthquake, Expectations from the Miyagi Disaster Mental Health Care Center

Tohoku University / International Research Institute of Disaster Science / Department of Disaster Psychiatry

Professor / **Hiroaki Tomita**

It has been five years since the Great East Japan Earthquake. There were 15,894 deaths, 2,561 missing individuals, and 6,152 injured (as of March 10th, 2016, Table 2, National Police Agency), and the scale of this human damage also signifies the number of people who have experienced traumatic experiences or who have lost their loved ones as a result of the earthquake. The International Research Institute of Disaster Science, newly established at Tohoku University after the Great East Japan Earthquake, has conducted various research alongside the Tohoku Medical Megabank Organization on the disaster areas affected by the Earthquake, as well as the long-term effects of the Earthquake on housing environments in residential communities, work environment, economic status, and human-to-human connections.

Health surveys conducted annually on around 2000 individuals who experienced large-scale housing damage beyond that of partial destruction in the coastal municipalities of Miyagi Prefecture showed that the percentage of subjects with high post-traumatic stress reactions in response to the earthquake as measured by the Impact of Event Scale-Revised (IES-R) has decreased annually, but one in every four individuals still have high levels of stress. These results re-affirm the long-term mental health support needed following large-scale disasters (Figure). Collective relocations are currently in progress in the disaster area from container type temporary housing to public housing and elevated sites, but research has shown that a majority of relocated subjects feel anxiety over responding to a new environment or separating from the human connections established in the temporary housing facilities after the earthquake. This indicates the future need for long-term observation and care in providing support for these environmental changes.

The Tohoku Medical Megabank Organization has conducted questionnaire health surveys with over 100,000 people, of which the mental health of over 2,700 was evaluated in interviews, and support was provided for those who needed it. Many individuals are suffering from clinical depression or anxiety disorders and who are mentally overwhelmed who nevertheless do not consult with medical institutions or other people and carry their burdens alone. This indicates that although individuals are familiar with the terms “depression” and “PTSD” through public awareness programs, they are not familiar with the actual conditions of these illnesses, both in terms of how they present themselves in the individual or people around them, or how to seek support for them. This indicates the urgent need for the initiatives provided by the Miyagi Disaster Mental Health Care Center, including direct support for residents, support for care workers who maintain the support environment, human resource development, support for various activities, and public awareness. We anticipate future public interest activities from the center in the future.

Another important aspect of the Miyagi Disaster Mental Health Care Center in ensuring that they effectively implement future initiatives in the disaster area affected by the Great East Japan Earthquake is the other activity branch of the center: that of research. After the Great East Japan Earthquake, there has been various flooding, snow damage, volcanic eruption, and earthquake disasters throughout the country, and Japan must further prepare for other large-scale disasters in the future. We hope that the lessons of the Great East Japan Earthquake are applied both in support for mental health in disaster situations as well as future preparation support for the next disaster.

The Tohoku University International Research Institute of Disaster Science and the Tohoku Medical Megabank Organization is advancing research relating to disaster mental health and its support based on large-scale epidemiology data, as well as based on interdisciplinary collaborations such as in the humanities, sociology, sciences, and engineering.

In the future, we hope to increase information human exchange between the Miyagi Disaster Mental Health Care Center, International Research Institute of Disaster Science, and the Tohoku Medical Megabank Organization, as well as provide more effective evidence-based post-disaster support activities and prepare for the next disaster, all in collaboration with other organizations in the same Miyagi Prefecture that are actively working in the recovery process.

