

On Disaster Rehabilitation

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First of all, please allow me to express my deepest condolences for the loss of precious lives due to the 2024 Noto Peninsula Earthquake. Furthermore, my thoughts and prayers are with all of those who lost many of what they had cherished in the instant following the disaster and are still forced to live under quite severe and inconvenient conditions, struggling with a great sense of uncertainty and insecurity.

Introduction

Let's do a quick exercise: Imagine yourself living at a shelter, with no running water, for more than a month following a disaster that forced you out of your own home. What if you, or your family, or parents, or grandparents suddenly become entrenched in this sort of situation? What would you be dealing with?

It is predicted that, in the near future, we will have a megathrust earthquake in the Greater Tokyo Area or along the Nankai Trough. Due to the series of major natural disasters that recent years have seen so far, including this year's Noto Peninsula Earthquake, the importance and necessity of disaster rehabilitation are being clearly recognized more and more. In the case of the 2011 Great East Japan Earthquake, the total disaster-related death toll (loss of lives due to indirect causes such as health deterioration, fatigue while living at shelters, not directly-caused deaths resulting from collapsed buildings, fires, tsunami, and other aspects of the earthquake event) was 3794, while the figure for the 2016 Kumamoto Earthquake was 218, according to official reports. Typical health issues that tend to occur due to disasters generally include hypertension, cerebral apoplexy, myocardial infarction, deep vein thrombosis, lung embolism, pneumonia, asthma, infectious gastroenteritis, bone fracture, muscle pain, and joint pain. As these diseases are attributable to stress, lack of rest, malnutrition, adverse environmental conditions, lack of exercise, falls, deteriorated muscular strength, etc., they are closely related to rehabilitation medicine.

What is disaster rehabilitation?

In today's Japan whose population has become inordinately aged, the term *disaster rehabilitation* refers to any activities conducted by competent health specialists to systematically support persons impacted by serial disaster events, persons requiring special care due to such events, etc. with the goal of preventing disuse syndrome and disaster-related death among them, from the perspective of rehabilitation science and medical care, so that those disaster-impacted persons, special-care-requiring persons, etc. can recover or restore their independent living at an early stage (April 2019).

About JRAT

JRAT is the acronym for Japan Disaster Rehabilitation Assistance Team, which is a general incorporated association. The predecessor organization was founded on April 13, 2011, and then it was renamed and incorporated on April 1, 2020 to succeed the collective experience of 10 different organizations that conducted rehabilitation support activities in the aftermath of the Great East Japan Earthquake.

As JRAT is committed to steadily propagating its suggested approach to disaster rehabilitation not only among professionals working in the healthcare and nursing care industries but also among the residents of each concerned community, it responds to disasters by ensuring that proper environments are set up at evacuation shelters, handling rehabilitation triage there, and conducting direct support activities, etc. in conjunction with various other disaster support organizations. In addition, under its motto "major disasters keep occurring before our memory of the previous ones vanishes" rather than "major disasters keep occurring after our memory of the previous ones vanishes," JRAT has been focusing on the following activities: (1) establish local JRATs in all 47 prefectures, share information and organize JRAT activities in each regional block; (2) develop structures that allow for cooperation between the prefectural governments, DMATs (Disaster Medical Assistance Teams), JMATs (Japan Medical Association Teams), and other disaster medical assistance organizations; and (3) provide education, raise public awareness, facilitate human resource development, etc. regularly when there are no disasters.

My experience of providing support in response to the Noto Peninsula Earthquake

On January 1, the earthquake measuring up to 7 in the Japan Meteorological Agency's seismic intensity (magnitude 7.6) hit the Noto Peninsula in Ishikawa Prefecture. On two separate occasions, from January 6 to 11 and from February 11 to 16, I obtained permission from my employer to travel to the region on duty and provide disaster relief assistance as a member of the Aichi JRAT. As you might have seen on TV, newspapers, and the Internet, this would become a disaster relief project of unprecedented scale, as much of the infrastructure across the Noto Peninsula was destroyed by the earthquake and the tsunami and fires that ensued, tearing down residential houses, disrupting the region's road network, and cutting off supplies of water, electricity, etc.

While on site, I gathered information on evacuees, evacuation shelters, and infrastructure, and provided indirect sustainment support, etc. while cooperating with the staff of the JRATs from Ishikawa and other prefectures as well as other disaster medical assistance organizations. However, I saw that it was not only the evacuees at the shelters that had been impacted by the disaster, as the staff of the Ishikawa JRAT that were providing assistance on site were suffering the consequences of it in one form or another and had to perform their duties for their employers. From my firsthand experience of being part of this disaster relief project, I recognized the need to be highly attentive to the health of assisting staff that are local residents of the very prefecture that has been impacted by the disaster, while also acknowledging how crucial it would be to preplan and set up such organizational structure that would allow the recipients of various types of support and assistance to efficiently receive them in a major catastrophic event like this.

Preparing for a megathrust earthquake along the Nankai Trough and in the Greater Tokyo Area

While it is predicted that we have a 70 to 80% chance of a Nankai Trough earthquake occurring in the next 30 years, the location of our Hospital is apparently within the reach of the tsunami that the earthquake would generate, and has a high likelihood of liquefaction also, according to hazard maps. Given these estimations, as the Hospital must effectively function as a disaster base hospital, we must review its business continuity plan (BCP) and disaster prevention and mitigation manual once again and make any necessary amendments.

Summary

As major disasters have been occurring almost annually in recent years, and it's likely that a megathrust earthquake will transpire in the near future, I would greatly appreciate it if more and more people became interested in this organization called JRAT and in the concept of disaster rehabilitation, from the perspective of rehabilitation medicine. If we can collectively recognize such major disasters keep occurring before our memory of the previous ones vanishes, with each of us making necessary preparations with an expectation that the next ones could occur to us, and maintaining such mindset of mutual support when disasters do arise, would facilitate the process of restoring our ordinary lives as soon as possible.

