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## 1. Introduction

Our country is a land of disasters, and there are many earthquakes and tsunamis in our memory. The Tohoku region has experienced the Meiji Sanriku Earthquake (1896) and the Showa Sanriku Earthquake (1933), and there are various “legends” and monuments associated with these occurrences. Despite these warnings, such events leave behind huge scars, and everyone feels, “Was there anything more I could have done?” There is a possibility that a disaster of the same scale will occur in areas other than Tohoku in the future, and I feel that it is the responsibility of professionals in the disaster area to report the actual situation so that it may be a clue that enables prompt support in an emergency.

In the disaster area, the acute phase has passed; the medium- to long-term phase has been reached, and local life and support activities are changing from moment to moment. Debris has been removed from residential spaces, and is, instead, piled up in waste storage areas. Local residents are moving from evacuation shelters to temporary housing to confront their social problems.

The root of all problems is anxiety about the uncertain future, but individual problems differ depending on the time and region. Responses that focus solely on “mental care” are no longer sufficient and require policies that are in line with employment and economic conditions. There is a need for methods based on the knowledge of local public health and ideas that are tailored to individual circumstances.

## 2. Issues Associated with Population Shifts

Owing to the flood damage caused by the tsunami and the pollution from the nuclear accident, the vitality of the Tohoku region has changed significantly. In the prime of their work lives, many have left disaster areas in search of employment, and the remaining areas are aging even further. Although the number of applications for long-term care certification is increasing, the facilities available are limited because of delays in restoration, and the reality is that there is a shortage of long-term care workers.

It is thought that one of the reasons for the increase in the number of people requiring long-term care is that physical activity was restricted after the earthquake and motor function was further reduced. In addition, although families have supported each other up to now, there are many cases in which young people are forced to take care of the elderly because others have left the area. However, there are quite a few cases in which elderly people evacuating to convenient temporary housing have strengthened their ties to their community and have more opportunities to go out.

Many families living in the southern part of Tohoku evacuated to other prefectures because of concerns about radiation from the nuclear accident. However, since stable work is not guaranteed at evacuation shelters, it would inevitably be only the mother and child who would end up evacuating. The father would remain in their place of residence and continue to work, and the family would reunite on the weekends. In such situations, the mother and child are in an unfamiliar land, and there is the heavy financial burden of a double life, especially as the father continues to be exposed to radiation. This burden is particularly heavy for mothers with infants and for pregnant women.

In addition, if evacuated to an area with a large influx of people, as newcomers, they could experience conflicts with original residents, thereby being forced to live in shame. The stress caused by the nuclear accident simply has no parallel among the events investigated in past trauma studies, and the future stress response is unpredictable. These families, uncertain of how long this situation will last, experience unimaginable anxiety. It is difficult for children to accurately understand all these circumstances; they simply feel the anxiety of their parents and continue to live on (Fukuchi 2012).

### 3. Results of Community Resident Surveys

In the disaster area, various groups conducted health surveys for affected residents. From January to March 2012, the Medical Maintenance Division of the Health and Welfare Department of Miyagi Prefecture took the lead in conducting a health survey of residents of private rental housing who were receiving rent support. There were responses from 9,414 households to 12,826 target households (recovery rate 73.4%).

The questionnaire included the K6 (Kessler, RC et al., 2002) to identify residents with depression, anxiety, and mood disorders. In this health survey in Miyagi prefecture, 8.1% were judged to be experiencing severe mental disorders, with a K6 (overall mental health) score of  $\geq 13$ . In Kawakami et al.'s 2006 national survey using the K6 (Heisei 18), 3% of the general population scored  $\geq 13$  points (Kawakami, 2006). Although it is not possible to compare the results of the two, it is considered that the health condition of the residents in the disaster area is not good. Based on the results of these surveys, community supporters make door-to-door visits and are patiently trying to get involved in providing the necessary support.

There are also active activities to improve the health status of the entire population, targeting high-risk groups. In each temporary housing setup, various gatherings are held to prevent social isolation and strengthen regional ties. Activities vary depending on the circumstances of the area. There is also a plaza for the childrearing generation, a teahouse for the elderly, and a cooking class for single men. Professionals may naturally blend into such gatherings and conduct lectures and training. There are also initiatives such as the Gatekeeper Program (Cabinet Office), which provides training to non-professionals like local welfare officers, children's committee members, and youth chambers of commerce, all in an effort to spread the essence of mental health in everyday life.

However, it is necessary to point out the outbreak of various investigations in the disaster area and their harmful effects. Surveys and studies should not be conducted only to dispel the anxieties of the supporters, and it is necessary to plan and formulate a mechanism and flow in advance so that local residents receive the necessary services. In some instances, there were external support teams whose main purpose was research; at times, they only conducted the survey, failed to provide feedback, and merely announced their results after returning to their areas. Their actions were ultimately only worth so much, and in the end, local supporters ended up conducting follow-up support for the high-risk individuals these entities had identified. Finally, in the medium- to long-term phase, there is simply no end to the number of researchers who come asking, "Is there a field where this research plan can be implemented?" I would also like to point out that there are some areas that are reluctant to accept outside supporters because of these negative experiences.

### 4. Occupational Mental Health

Immediately after the earthquake, there was a series of requests for assistance from rescue workers (fire departments, police, etc.). It was their mission to be prepared to sacrifice their own lives and strive to save lives, while at the same time facing many dead bodies. In the medium- to long-term phase, the mental burden on interpersonal assistance staff and civil servants is increasing. Many of these occupations have been active in the area since before the earthquake, and they often have some kind of loss experience themselves. In interpersonal assistance, there is prolonged exposure to local residents' stories of loss, placing those who work in this field at the risk of secondary traumatic stress (Pearlman, L.A. et al., 1995). In addition, local residents are likely to direct their dissatisfaction stemming from the stalling of reconstruction work toward those who perform public duties. Therefore, it can be hard for these professionals to find their jobs rewarding.

Lectures and training may be requested in these occupations. Naturally, the training will be based on the themes of disaster stress and secondary traumatic stress, but the basics consist simply of "gratitude." Since it is difficult to concentrate for a long time in a work area with high stress levels, it is necessary to adjust the topic based on the time and local circumstances. I have often explained this using the concept of "herd immunity" in vaccination. Vaccinated persons are less susceptible to certain infections. As the inoculated population increases, certain infectious diseases are less likely to spread, benefiting not only individuals but also their families and communities. In order for the group to be healthy, it is all about increasing the number of healthy people. In other words, if you want to contribute to the health of the community, you must yourself stay healthy. Efforts based on devoted self-sacrifice ultimately do not contribute to collective health. Furthermore, accepting more

and more healthy people from the outside is also very useful for promoting group health. This line of reasoning can actually be quite convincing.

#### 5. Culturally Appropriate Support

In considering efforts toward recovery, we cannot ignore the spirituality based on our country's unique culture. Sumo is the national sport of Japan and an embodiment of the spirit of "bushido," again unique to Japan. It is said that the sumo tradition, in which wrestlers literally collide with each other while naked and fight each other openly and with prescribed techniques, is pure. A few years ago, two strong wrestlers with a fierce rivalry played a historic and heated championship match. After a long battle, the winner involuntarily made a "fist pump" gesture toward the audience. The next day, the media criticized him harshly. They said that this fist pump in the ring was disrespectful to the opponent. It is a virtue to always maintain humility, not to reveal the feelings hidden in the heart, and to carefully grasp the feelings of the other party. Such is the culture of Japan.

Overseas media praised the Japanese response to the earthquake. Usually, when major disasters have occurred overseas, disgruntled citizens have been known to riot, causing widespread security concerns. This did not happen in Japan, thought to be a result of respect for etiquette and the emphasis on caring for and helping each other.

Immediately after the earthquake, I continued to make rounds at evacuation shelters as a member of a mental health care team. I cannot count how many times I heard things like "There are people who are in worse condition than me, so tend to them. I'm okay." After a year, various ceremonies were held, but few people cried aloud or visibly expressed their sadness. Clench your teeth, no matter how much you're hurting, and realize the impact your emotions will have on your surroundings: this is what we are told. I feel that it is necessary to carefully capture these strong feelings, affirm them, and devise ways to connect them to individual dignity and resilience. It is necessary to focus on the ideal way of offering support based on the culture of the country or region.

#### 6. Reconsidering Community Mental Health

Psychiatric care in Japan is a hospital-centered system, one in which professionals wait for people to come in for consultations of their own volition. Therefore, psychiatry as a public health tool that supports community mental health has not been fully developed as an academic discipline.

However, after the earthquake, professionals went to the affected areas to raise awareness and pick up high-risk local residents. In other words, there was rapid progress in encouraging people to boost the power of existing regions. If you think about it carefully, all these activities are natural. It is not a special initiative that we are taking because of the earthquake but one that should be continued even in peacetime. It is necessary to reconsider the ideal way of approaching community and school mental health in the wake of the earthquake.

No one would have expected a disaster of this magnitude. While it is important to be prepared, not all events can be dealt with. It is important to take concrete measures, but the focus should be on ensuring that people and communities can respond to any eventuality.

In the event of a disaster of this scale, the organization that manages the community itself will be destroyed, and it will be necessary to play a role of "connecting" before regaining normal functions. I feel that what a community should work together to nurture is not a charismatic leader but an individual who can act as a "hub" that connects various related organizations. People in these "hub" roles would have a greater degree of freedom; they would go out to various areas and build relationships with various institutions. Even if given a flexible role in your first job after graduating from university, it can be difficult to move with such freedom. I feel that it is necessary to spread these ideas in the prescribed school education and allow them to take root to form a culture that allows "free people." I believe that developing such human resources from an early stage and allocating multiple personnel to the region will lead to increased resilience. Ideally, these multiple networks would be organically connected with each other like a living being.

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