Current Status and Issues of Reconstruction in Miyagi Prefecture

Community Support Department Director

Doctor - **Naru Fukuchi**

1. Introduction

Four years have passed since the Great East Japan Earthquake, and three years have passed since the Miyagi Disaster Mental Health Care Center (hereinafter referred to as the center) began full-scale operations. We can see changes in local life and support activities in the stricken areas with each passing moment. In this paper, by reviewing past activities and analyzing the contents of the activities over time, we will examine how mental health activities should take place after a large-scale disaster through the center, and we will consider future support for reconstruction after a disaster. For details of various statistics, please refer to the activity status in Chapter 1.3.

This report is based on the report of the FY2012-2014 Ministry of Health, Labor and Welfare Science Research Grant, “Research Contributing to the Understanding of Information on Mental Health Disorders, Verification of Intervention Effects, and Improvement of Intervention Techniques” (Principal Investigator: Yoshiharu Kim)[1].

2. Special features of disaster mental health

First, disaster mental health is often different from community mental health during peaceful times, and I would like to first mention its distinctiveness [2] (Figure 1). A disaster severely damages the existing mental health system and gets divided into several pieces. “Remaining functions” refer to resources that have been reduced in scale due to the disaster but can be reproduced sufficiently with ingenuity in the future. “Fosterable resources” are resources that were not the main part of existing mental health but could be fostered and expanded for the recovery of the region in the future. “Unrecoverable functions” are facilities and human resources that have been lost due to a disaster and can no longer be considered in designing future mental health. On the other hand, there are many “flowing resources” into the area triggered by the disaster, and the activities of external medical and welfare corporations, NPOs and NGOs, and other volunteer groups are becoming active. The difficulty of disaster mental health lies in gathering these pieces together and reshaping the vision of future mental health in light of local conditions.

Let's apply each fragment to the Great East Japan Earthquake. "Fosterable resources" are thought to be the gathering functions of resident volunteers, such as members of the welfare commissioners and eating habit improvement committees, the Young Entrepreneurs Group, and the Women's Association. Clinics and hospitals that were severely damaged by the tsunami and were forced to close are considered “irreparable resources.” Motivated human resources may be employed by specialized organizations in the affected areas and live in the community, and be considered as "inflow resources." In post-disaster mental health, changes in the local situation over time are rapid and large, so it is necessary to always have a big picture and timely intervention.

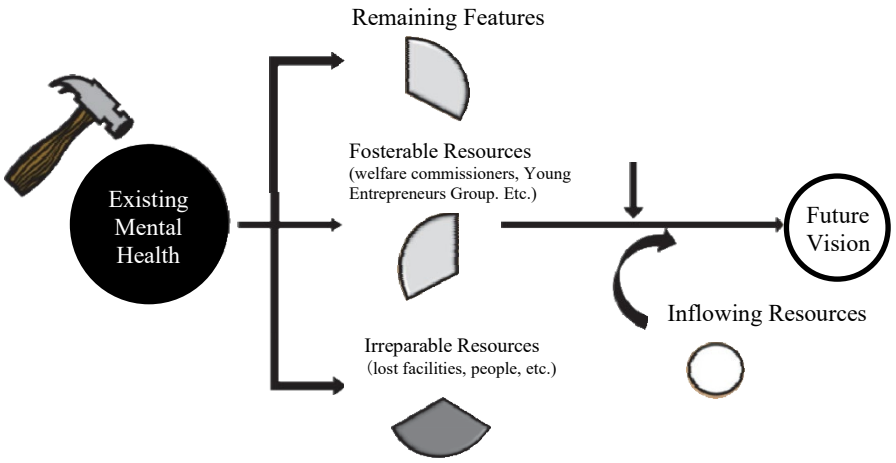

Figure 1 Special Features of Disaster Mental Health

3. Difficulties of emergency support team post-disaster

In Japan, after the occurrence of the major earthquake, one “mental health care center” was established in each prefecture. After the Great Hanshin-Awaji Earthquake in 1995 and the Niigata Chuetsu Earthquake in 2004, the “Hyogo Prefecture Mental Health Care Center,” and the “Niigata Prefecture Mental Health Care Center” were established respectively. After the Great East Japan Earthquake of 2011, "Mental Health Care Centers" were established in each of the three affected prefectures in the Tohoku region. Various reports have been made on the difficulties of creating an emergency support team based on past experiences [3) 4)].

Our center established a preparation room in December 2011, and the Ishinomaki and Kesennuma Regional Centers were established in April 2012 and started full-scale operations approximately one year after the earthquake. Only a few of the volunteers who gathered for the opening of the center had previously met each other. The time from the preparation stage to the start of activities was short, and it was difficult to figure out the competence of each and organize and allocate roles. While a clear direction was not established as an organization, local centers far from the stem center were often lost in their activities, and it was necessary to devise a careful communication system. It is sometimes discussed whether these centers are expansions of existing or new organizations, but if the latter is adopted, I think that the key to building an organization is to start compact with a minimum number of branches.

With a variety of occupations, we decided not to divide the roles clearly according to the occupation, but to improve our skills so that everyone could provide equal and wide support. In other words, at the time of the establishment, even occupations specializing in individual treatment, such as doctors and clinical psychologists, were equally devoted to one-on-one visits and established a policy to connect to the necessary local support organizations. At first, it was difficult to establish a clearer action policy than the above, because the current situation in the area could not be understood accurately. For this reason, building relationships with municipalities, which are the contact points for assistance, was the top priority. Several disaster surveillance surveys were conducted, including a health survey for residents of temporary housing conducted in Miyagi Prefecture, from which many high-risk individuals were identified. Under these circumstances, we believe that the center has been building trusting relationships with municipalities by actively conducting one-on-one visits. In this way, instead of "thinking and running," we had to become "thinking while running." There are many things we’ve realized as we ran, and it is important to check with each other and determine the direction as an organization over time. On the other hand, activities that were initially allowed a high degree of freedom were later added with rules and restrictions, which seemed to make the activities feel more and more cramped. Of course, as a characteristic of the human resources who join these emergency support organizations, many people have performed activities with a high degree of freedom in each region, which has made them feel as though they have lost that freedom.

4. What can be seen from residents' support

Next, I would like to analyze the Center's three-year support activities for residents and add some considerations. From the beginning, since the program mainly focused on one-on-one visits, the system for receiving consultations (reservation system, interview room, etc.) was not sufficient, and there were no telephones or hotlines. As a result, the number of visitors and telephone calls was low, and the number of one-on-one visits accounted for about 60% of all activities. Regarding the gender of the recipients, women tended to be dominant at the beginning, and the number of men gradually increased over time. Since our activities were concentrated during the weekday, it was thought that one-on-one visits would inevitably lead to interactions with unemployed women. It is also noteworthy that support for middle-aged unemployed men has been increasing in the third year of activity. Regarding the age distribution of the subjects, it is considered necessary to know issues specific to the elderly, such as prevention of nursing care and prevention of isolation, because there are many the elderly in need of support for both men and women.

F2 (schizophrenia / schizophrenia-type disorder and delusional disorder) occupied the majority of the support recipients' disease classifications since the start of activities. Over time, F1 (mental and behavioral disorders due to the use of psychoactive substances) and F3 (mood / emotional disorders) increased, and in 2014, the order was F2> F3> F1. It is thought that many of these diseases started occurring before the disaster and that the existing protective factors were weakened by the earthquake and their condition worsened in many cases. In the acute phase, among vulnerable residents suffering from illnesses such as schizophrenia, the symptoms may have worsened due to difficulties in sending medical resources caused by disruptions in lifestyles. There is a need to find such residents as early as possible and connect them to appropriate medical institutions, representing a triage function. In the medium to long term, the number of diseases caused by stress associated with life changes, such as alcohol-related diseases and depression, will increase. Therefore, it is thought that there is a need to identify residents at risk by screening and taking other actions to prevent them. This is what is referred to as a high-risk approach. In disaster mental health, support strategies and target audiences may change over time with changing local conditions.

5. Change in Community

Here, I would like to comment on changes in the local situation. Groups have a defense reaction, and instinctively try to protect themselves against strong stimuli by altering themselves. Communities are being stimulated by disasters and are constantly changing to adapt to those changes. Changes throughout the region include (1) increased unity, (2) open and closed communities, and (3) excessive vigilance.

(1) Increased Unity

To overcome the crisis, various gatherings were planned in the affected areas, and a stronger unity was observed. More cafés for disaster victims, meetings to strengthen organizations and networks, and workshops to respond to future changes have increased. At cafés and other gatherings, the habits of residents have changed over time, and the content required for the gatherings have adapted to those changes. Initially, gatherings spontaneously occurred primarily in container type temporary housing, mainly to maintain the community. However, after that, we realized that those who were in danger of collapsing communities were apartment type temporary housing residents rather than container type temporary housing residents. Furthermore, after that, all the evacuated residents began to realize that they could not return to their original areas and gathered to create a new community with the evacuated residents, whether or not they were affected, mainly by neighborhood associations. Regardless of the type of activity involved in community formation, the participants were relatively healthy elderly women, and how to increase the participation of men in the community was mentioned as an issue.

(2) Open and Closed Communities

Overtime after the disaster, the local acceptance towards support has changed (Figure 2). Immediately after the disaster, the communities' doors were wide open and tended to accept supporters endlessly. The affected areas were in a state of "wanting to borrow a cat's hand (I'll take all the help I can get)," while the supporters were uplifting. The assistance demanded by the stricken areas was heavy work such as mud removal, and there were no issues with supporters changing every few days. However, after a few months, we began to see the costs of accepting supporters endlessly and began to close our doors. The support that was sought during this period was changed to a role that required communication skills such as an individual that residents can talk to at café activities. Over time, vigilance gradually melted down and the doors opened again, accepting supporters in line with long-term plans. In this way, the doors of the community were opened and closed over time, and the support needed was also changed, and it was considered necessary for the supporters to provide the support that required determining to time.

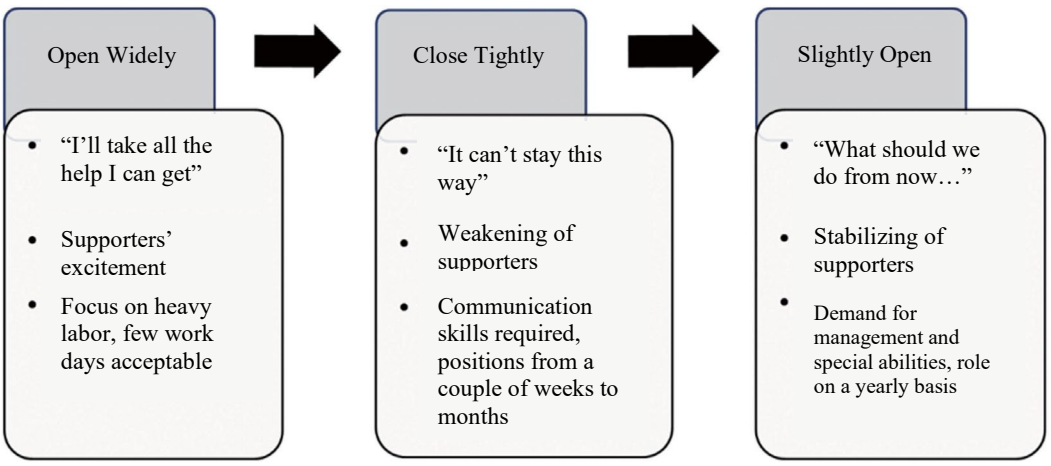

Table 2 Opening and Closing Communities

(3) Excessive Vigilance

In the event of a crisis that threatens the community, people often take excessive temporary precautions to defend themselves from another similar event. When solitary deaths or suicides occurred in a container type of temporary housing, there was a growing movement to notice each other's changes earlier on so that the same situation would not occur. It has also been observed that all the units are equipped with alarm systems to check each other's electric meters and post boxes and to notify outsiders of emergencies. Families of persons with disabilities experienced the difficulties of seeking understanding at evacuation centers, and during the peaceful times, they actively shared information to help residents understand the disability5). As will be described later, even on one-on-one visits based on health surveys, it is undeniable that excessive vigilance is required to prevent the worst-case scenario from happening, as well as continuous visits to residents until formally meeting them. On the other hand, in some areas, such as super embankments, local people began to feel uncomfortable with excessive vigilance and felt that there was no need for high embankments in their areas, and opposition movements occurred. It is conceivable that the residents will feel uncomfortable with time, and that excessive vigilance will gradually return to normal.

6. Big directions for mental health

Four years after the Great East Japan Earthquake, we are just past the acute phase. For the past four years, none of the support teams have been able to set a clear policy and have been working hard to rebuild the region using so-called human wave tactics. Supporters have been endlessly visiting and listening to individuals and have all come together to overcome these difficulties. Isn't it necessary to rebuild the system now? We need to look back at our activities, tabulate and analyze, and prepare for possible changes in the future. In other words, it is time to shift from human wave tactics to traffic control.

In all regions, high-risk approaches based on health surveys are mainstream, and one-on-one visits are repeated based on individual responses. Certainly, this method is the most standard and should not be neglected. On the other hand, excessive vigilance is also at work here, and only numbers are emphasized, but it seems as though the number of visits has become a quota for the one-on-one visit unit. The inhabitants extracted from the health surveys are, so to speak, “visible high risk” individuals, but we are missing the “invisible high risk” group, who consist of temporary housing residents who did not respond or individuals who do not live in temporary housing. In the future, the number of residents in temporary housing is expected to decrease year by year, and the response rate to health surveys is also expected to decrease. There is a need to make a significant shift to a population approach that focuses on specific groups and regions, rather than focusing only on “visible high risk” health.

For this, what is necessary to devise a population approach strategy that matches the local situation? It requires an idea of noticing the characteristics of the area and taking advantage of it. If you are a member of the area, it is very difficult to notice such characteristics, and you need to be proactive. For example, you may be able to notice by connecting with other supporters from another area that have suffered the same damages and compare your efforts. Besides, a new perspective may be gained by actively inviting outside experts. Many supporters have already networked in their area and have good connections. What is needed in the future is a device that connects us to the outside more than now. The roles required are considered to be the role of connecting regions to one another (Connector) and the role of projecting and guiding the big picture (Projector).

7. What is needed from now on

Here, we will review reports from around the world, such as the 2004 Sumatra Earthquake and the 2008 Sichuan Earthquake, and consider the process of rebuilding mental health after a disaster[6)7)8)]. Past disasters may trigger insights from outside the region following the disaster, which may lead to significant improvements in social systems, including mental health[9)]. However, it is sometimes unacceptable for outside experts to propose legitimate remedial measures based on scientific evidence if they do not conform

to the local culture[10]. In particular, schizophrenia and other mental illnesses often have large stigmas, and it is very difficult to revise values based on these regional characteristics. It is reported that a large number of supporters helped with the Sumatra Earthquake and that a psychiatric patient who had been left in the area without appropriate treatment was found by an external supporter who had flown in after the disaster[11]. A disaster has the potential to significantly change existing mental health, and in the Great East Japan Earthquake, one-on-one visits have been conducted more actively and have the potential to break away from mental health centered on visitors.

Generally, it is difficult to introduce an orderly support method immediately after disasters. If you have some degree of basic mental health infrastructure before the disaster, simple screening techniques (e.g., rating scales) will be used, and you will gradually adopt a public health perspective. High-risk individuals are chosen and followed based on a list, but after the acute phase, supporters will look back on their activities, the data, and analyze it. Experts in epidemiology and public health will be involved. They will understand the trends from previous activities and predict what will happen in the future. Research results with statistical techniques tend to increase several years after the disaster[12]. We are now in the fifth year, and it is time to do an activity analysis from human wave tactics.

In areas with scarce resources, it is necessary to develop human resources for mental health, but it is difficult to rapidly increase the number of professions such as doctors because the emphasis is placed on raising awareness toward residents, causing residents' activities and various gatherings to increase[13]. Australia's post-fire assistance has reported some success with the introduction of intensive education programs for the general population[14]. Eventually, the number of professions will not increase significantly in the region but will increase the number of residents with general mental health knowledge. If the educational base is stable, educational institutions will be able to raise awareness for younger generations[15]. Disaster prevention education is provided at educational institutions, and measures for emergencies (evacuation drills, communication networks, etc.) are performed in the region. To be able to adapt to any crisis, they will try to spread Psychological First Aid (PFA) as an adhesive plaster for human support[16]. In fact, in some parts of the Tohoku region, disaster prevention education is being advanced, and PFA is gradually being introduced.

8. Conclusion

We have experienced a once-in-a-lifetime disaster and are dedicated to the unique task of rebuilding mental health in the region. What I feel is that there is a need for a technique that considers the region as a unit and overall health promotion, rather than one that assesses individual mental symptoms and provides appropriate support and treatment. I feel that this is not based on a psychological, psychotherapy, or pharmacotherapy technique, but a public health mindset and power to facilitate groups. More important than that, I think, is a technique that connects well with the local people and other organizations that provide the same support. This is a patient attitude that draws on the other person's feelings, respects them, and cooperates without criticism. Once again, we need to confirm what is necessary for community development and hope that we can turn this major disaster into a turning point in mental health.

References

1) Yoshiharu Kim (Research Representative). Research contributing to the understanding of information on mental disorders in the affected areas, verifying the effects of intervention, and improving intervention techniques. FY2012-2014 comprehensive research report, 2015 [in Japanese]

2) Naru Fukuchi. Current status and issues of mental health in affected areas. Hospitals and community psychiatry, 55 (4), 2013,15 -17 [in Japanese]

3) Hyogo Prefecture Mental Health Welfare Association Mental Health Care Center (Edit) Mental Health Care Center Activity Report 1999 -After five years of activities, Kobe, 2001 [in Japanese]

4) Niigata Prefecture Mental Health Welfare Association Mental Health Care Center (Edit) Summary of project implementation report for 7 years (FY2005-2011), Niigata, 2011 [in Japanese]
5) Junichi Furusho, et al. Advances in Developmental Disorder Medicine 25. Diagnosis and treatment company, 2013, Tokyo [in Japanese]
6) Greg Miller. Who needs Psychiatrists?. Science, 335, 2012, 1294-1298
7) Natural Disasters, coping with the health impact. Disease Control Priorities project, 2007. Available at http://www.dcp2.org/file/121/
8) Shoaf K, Rottman S. Public health impact of disasters. Australian Journal Emergency Management, 15, 2000, 58-63
9) Harry Minas. Leadership for change in complex systems. Australas Psychiatry, 13, 2005, 33-39
10) Yasuhide Nakamura, Hiroyuki Yamamoto. Seeking support for an open society - Aceh Earthquake Tsunami Support Interdisciplinary Survey. MEXT. Needs-responsive area research promotion project for the world, 2009 [in Japanese]
11) Greg Miller. The Tsunami' s Psychological Aftermath. Science, 309, 2005,1030
12) Frits van Griensven, M. L. Somchai Chakkraband, Warunee Thienkrua, et al. Mental Health Problems Among Adults in Tsunami-Affected Areas in Southern Thailand. JAMA, 296, 2006, 537-548
13) Vikram Patel, Helen A Weiss, Neerja Chowdhary, et al. Effectiveness of an intervention led by lay health counselors for depressive and anxiety disorders in primary care in Goa, India (MANAS): a cluster randomized controlled trial. Lancet, 376, 2010, 2086-2095
14) David Forbes, Susan Fletcher, Bronwyn Wolfgang, et al. Practitioner perceptions of Skills for Psychological Recovery* a training programme for health practitioners in the aftermath of the Victorian bushfires. Australian and New Zealand Journal of Psychiatry, 44, 2010,1105-1111
15) Betty P, Jon A, American Academy of Child and Adolescent Psychiatry Committee on Quality Issues. Practice parameter on disaster preparedness. J American Academy of child & adolescent psychiatry, 52, 2013,1224-1238
16) 0. Lee McCabe, Natalie L. Semon, Carol B. Thompson. Building a National Model of Public Mental Health Preparedness and Community Resilience: Validation of a Dual-Intervention, Systems-Based Approach. Disaster Medicine and Public Health Preparedness, 8, 2014, 511-526