



Never to Be Forgotten

- 3 Years After the Great East Japan Earthquake

Japanese Association of Occupational Therapists

Introduction

We can never forget March 11, 2011.

The major damage from the strongest earthquake we had ever experienced, the subsequent tsunami that swallowed a large number of valuable lives, buildings, assets, and other things, the nuclear plant accident that still has no prospects for a solution, and the harmful rumors caused major changes in the lives of the people who now live in areas affected by the disaster.

According to an announcement by the Fire and Disaster Management Agency, that damage was reported as follows as of March 1, 2014.

- Human suffering: 18,958 people dead, 2,655 people missing, 6,219 people injured
- Housing damage: 127,291 buildings totally destroyed, 272, 810 buildings partially destroyed, 766,097 buildings partially damaged, 3,352 buildings flooded above floor level, 10,217 buildings flooded under floor level
- Non-housing damage: 14,179 public buildings, 81,903 other buildings
- Total number of evacuees: 56,557 people (total number reported by each prefecture)

This was the first time that the total number of missing and dead due to a natural disaster in Japan exceeded 10,000 people since World War II. It was a major disaster that killed and caused people to go missing in 12 prefectures and injured people in 20 prefectures, mainly along the Pacific Ocean coast from Aomori Prefecture to Chiba Prefecture, which was struck by the giant earthquake and tsunami. Since then, measures aimed at support and recovery have been taken up as Japan's highest priority tasks.

I think that in the last 3 years the people in affected areas have moved forward while facing mental, social, and economic tasks and other various problems. It is impossible to express that progress in the single word "recovery."

In the affected areas, reconstructed housing is being completed and people are gradually moving out of temporary housing, but there is also a situation in which damages from the nuclear plant accident cannot be identified and there are no prospects for the daily lives of people who were driven out of their hometowns. In addition, despite the fact that damage from the tsunami and the nuclear plant accident has left massive scars, it can also be felt that society is gradually forgetting about them with the passage of time.

It can also be felt that major differences have developed between the thoughts of people living in affected areas and people living in other places, and even among people living in the same affected areas, depending on their positions.

Immediately after the disaster occurred, the Japanese Association of Occupational Therapists (JAOT) set up the Disaster Headquarters, and we have been working on various tasks in collaboration with occupational therapist associations in Iwate Prefecture, Miyagi Prefecture, and Fukushima Prefecture, as well as other related organizations. In addition, under the JAOT's basic policy of "continuing support for the next 3 years," we have been holding regular meetings to exchange information with the disaster measure departments of occupational therapy associations in affected prefectures, and we have been expanding support activities to meet the current situation of affected areas. In 2013 we newly established the Disaster Prevention Office, and we were able to prepare things such as a "basic policy for support activities in times of large-scale disasters," a "manual for disaster support volunteer activities," and a "manual for accepting disaster support volunteers."

Based on the belief that we should not let experiences with the disaster fade away, we also created opportunities for many members to learn things through events such as symposiums at academic conferences and nationwide training sessions, etc. That belief has led to establishment of the Disaster Prevention Office

and a system in which individual members can be constantly aware of support when disasters occur and thereafter.

The Great East Japan Earthquake provided us with many lessons. Under a slogan that "people become energetic through doing work," in the last 4 years JAOT has been conducting promotion of and education about occupational therapy. Many support activities in affected areas gave us a realization of the nature of occupational therapy. When the basis for daily life is disrupted and people are in a crisis situation, I truly felt that the ordinary work that is repeated every day give people great peace of mind and that the feelings of enjoyment and happiness that are felt through work really make people energetic. I again became aware that we must provide occupational therapy that is useful to people in affected areas as well as many other people throughout Japan.

This book summarizes the support activities mainly by JAOT and occupational therapy associations in 3 affected prefectures in the last 3 years, and preparations against major disasters that should be taken in ordinary times. I hope that this book will be not simply a reference material of a report on activities, but will also be utilized to lead to things such as ways to provide support with the passage of time, ways to collaborate with other organizations and occupations, actual support from various perspectives.

In closing, I pray that the souls of the people who lost their lives due to the Great East Japan Earthquake will rest in peace, and I vow to continue providing support, mainly from the Disaster Prevention Office.

May 2014

Haruki Nakamura, President
Japanese Association of Occupational Therapists

SUPPORT ACTIVITIES CONDUCTED BY JAPANESE ASSOCIATION OF OCCUPATIONAL THERAPISTS

Disaster Prevention Office

Japanese Association of Occupational Therapists (JAOT) conducted support activities centered around the Disaster Headquarters in FY 2011, 2012; the Disaster Prevention Office was established in FY 2013 to make preparation so that support activities can be started promptly in case of disaster.

1. Activities in FY 2011

The efforts made in FY 2011 are described below based in part on the editorial in JAOT Journal No. 3 (June 2012).

The JAOT established Disaster Headquarters on March 12, 2011, the next day after the Great East Japan Earthquake. The first Headquarters meeting was held on 13th to set the following policies, and to promptly post them on the website.

- (1) The Disaster Headquarters set up a dedicated email address for communications with Associations of Occupational Therapists of affected prefectures, and to collect information about members' safety and damage conditions in the affected areas.
- (2) A bank account for disaster support fund was opened (members donated widely).
- (3) 300 thousand yen were given to each of the four Associations (Iwate, Miyagi, Fukushima, and Ibaraki prefectures) as an initial support fund.
- (4) Membership fees waiver requests from the affected members were accepted.
- (5) Volunteer activities were deployed.
- (6) Conditions of training facilities were surveyed.

Below we report on disaster support activities conducted in FY 2011 in line with these policies.

1) Collection of Information

As soon as the Disaster Headquarters were established, Associations of the affected prefectures were contacted to confirm damage conditions. Disaster headquarters were also established by every Association of the affected prefectures, and confirmation of members' safety was started.

On March 14, persons in charge of disaster response and their contact information were confirmed in every Association of the affected prefectures, and a system for constant liaison and coordination was organized. After that, constant liaison and coordination were maintained through Associations of the affected prefectures and JAOT; in so doing, JAOT staff visited affected areas, meetings were held, and other measures were taken to provide coordination with Associations of the affected prefectures as necessary. In addition, disaster support activities were coordinated with related organizations.

A dedicated page was provided on the JAOT website to report on actions taken by the Disaster Headquarters, and to obtain information and opinions from members. A total of 26 announcements were posted by the Disaster Headquarters by February 2, 2012.

2) Fundraising

A dedicated bank account was opened on March 15 to raise funds aiming at support for Associations of the affected prefectures, resources for volunteer activities by JAOT, purchase of relief supplies, etc. Contributions were made by many members, supporting members, prefectural Associations of occupational

therapists, hospitals, institutions and organizations where members belonged to, as well as foreign donors; the funds collected by June 13, 2012 amounted to 13,531,328 yen (official fundraising campaign was terminated in the end of March 2012 but even after that, some sums were donated in addition to other miscellaneous receipts). The funds were transferred by request to Associations of the affected prefectures for their activities, and used to cover expenses required to dispatch disaster support volunteers to affected areas. In addition to the monetary funds, many members donated also supplies that were delivered to affected areas.

3) Initial Financial Support for Associations of Affected Prefectures

After establishing the Disaster Headquarters, 300 thousand yen were transferred immediately to each of the Associations of Occupational Therapists of Iwate, Miyagi, Fukushima, and Ibaraki prefectures.

4) Response to Affected Members

The following support was provided as a response to affected members. In so doing, a call for applications was published repeatedly via JAOT News, the JAOT website, and Associations of the affected prefectures.

- (1) FY 2011 membership fees waiver for those affected by the Great East Japan Earthquake
Acceptance of applications started from March 23, 2011; 69 applications were accepted by March 1, 2012, among which 65 were approved.
- (2) Installment or deferred payment of FY 2011 membership fees for affected member nor eligible for waiver
One application for installment payment and two applications for deterred payment were accepted during the application period from July 15 to December 15, 2011.
- (3) FY 2011 membership fees waiver for those evacuated because of the Fukushima-Daiichi Nuclear Power Plant accident
Acceptance of applications for restricted areas, deliberate evacuation areas, evacuation-prepared areas and special evacuation recommendation spots started from July 22, 2011; all of 19 received applications were approved.

5) Volunteer Activities

A disaster support volunteer center was opened so that members could register as volunteers. 128 persons registered during the 1st month, and eventually their number amounted to 248.

At the earliest stage (April 3 to May 9, 2011), we arranged coordination with related organizations for efficient rehabilitation activities, and a team of specialists in vital functions implemented a pilot program based in Wakabayashi ward of Sendai City. The program involved 10 volunteers.

After that, on requests of Associations of the affected prefectures (Iwate, Miyagi, Fukushima) and related organizations ("Advice and Help for Disaster-affected Disabled Children Project" by Japan Developmental Disabilities Network, which is commissioned by Fukushima Prefecture), JAOT dispatched appropriate personnel. The program started from April 15, 2011, and a total of 133 volunteers were dispatched by March 31, 2012 (Association of Iwate Prefecture: 37 persons, Association of Miyagi Prefecture: 64 persons, Minamisoma City in Fukushima Prefecture: 23 persons, "Advice and Help for Disaster-affected Disabled Children Project" in Fukushima Prefecture: 9 persons).

The disaster support volunteers deployed the following activities.

- (1) Arrangement and adjustment of living environment in evacuation shelters
By way of initial response, arrangements were made to provide evacuation shelters with communication space and private space, handrails and other safety facilities for elderly and disabled, etc., so as to make the living environment as comfortable as possible.
- (2) Formation of daily rhythms and development of activities
Various measures were taken in order to create daily rhythms in often monotonous life in evacuation shelters, such as compilation of daily schedules and small-group activities to awaken interest (gymnastics, handicraft, hiking, etc.).

(3) **Individual support for elderly and disabled with physical depression in evacuation shelters, homes and provisional housing**

Upon confirmation and evaluation of physical conditions and living situation as well as the needs for rehabilitation, guidance was provided regarding decline in ADL (standing up, roll-over, eating, etc.); in addition, assistive devices were fabricated and provided as necessary.

(4) **Individual support for evacuees with mental disorders in evacuation shelters, homes and provisional housing**

Living conditions of persons with schizophrenia, depression and other disorders were confirmed and evaluated, and support was provided including continued counseling to dissolve anxiety. In addition, somatic interventions and other therapies were provided to persons with lack of impulse or depressive tendency.

(5) **Support for disaster-affected disabled children**

Advices about evacuation destinations and procedures were provided to families with disabled children requiring special support; evacuation destinations and new living conditions were assessed, and individual support plans were drawn for disabled children, including assistance for special schools.

6) Education and Training

An emergency email survey was conducted on March 17, 2011 to confirm damage conditions of training institutions in affected areas; besides, a more detailed questionnaire survey was carried out on April 21. In addition, opportunities for clinical training in institutions where members belonged to were urgently examined; 892 institutions nationwide confirmed such opportunities. After that, the Training and Education Division took charge of introducing available training facilities.

7) Providing Job Opportunities Information to Affected Members

Aiming at providing disaster-affected members with re-employment opportunities, we requested for cooperation from occupational therapy facilities nationwide, occupational therapy training schools and regional associations of occupational therapists; thus acquired job opportunities information was posted on the JAOT website. The number of job postings amounted to 166 by the end of March, 2011.

The above is a report on JAOT disaster support activities in FY 2011 but extensive support activities deployed around the country can hardly be exhaustively represented here.

2. Activities in FY 2012

Activities of FY 2012 followed the same basic policies as in FY 2011. As regards response to disaster-affected members, membership fees waiver was continued only for those evacuated because of the Fukushima-Daiichi Nuclear Power Plant accident. Volunteers activities included dispatch of 4 persons more to "Advice and Help for Disaster-affected Disabled Children Project" in Fukushima Prefecture; another major project was "Creation of New Motivation in Life for the Elderly 2012" commissioned by Iwaizumi Town in Iwate Prefecture. A report on that project was published in JAOT Journal No. 16 (July 2013). The project involved efforts of occupational therapists to promote self-activities of elderly people aiming at a new motivation in life; 30 volunteers were dispatched to support the project.

3. Activities in FY 2013

The Charter of the Association was changed with its restructuring into a general incorporated association in April 2012; as a result 'Projects Aiming at Support of the Disabled, Elderly, Children etc. Affected by Accidents and Natural Hazards' were added to the scope of activities (Art. 4, Par. 6 of the Charter). After a one-year preparation period, the Disaster Prevention Office was established for realization of such projects. The major projects undertaken in FY 2013 include summarizing and publishing a full report in JAOT Journal on "A Questionnaire Survey Related to Disaster Support Volunteers", holding a volunteer meeting

combined with the 47th Japanese Occupational Therapy Congress and Expo (Osaka), compiling essential documents such as "Basic Guidelines on Large-scale Disaster Support Activities" (based on "Manual for Large-scale Disaster Support Volunteer Activities" of 2007, completely revised with regard to experience of the Great East Japan Earthquake), "Manual for Disaster Support Volunteer Activities", or "Manual for Acceptance of Disaster Support Volunteers", and issuing "Report on Disaster Support Activities in Great East Japan Earthquake" to summarize disaster support activities through 3 years of FY 2011 - 2013. In so doing, the Association recognized the importance of disaster awareness, and deployed projects toward building a framework for cooperation with regional associations of occupational therapists, related organizations, national and local governments, etc.

Besides, participation of specialists in "Advice and Help for Disaster-affected Disabled Children Project" in Fukushima Prefecture was continued in FY 2013, and 5 members were dispatched as volunteers. This project is to be further continued in FY 2014.

4. Consequences in Affected Areas

How does it feel for disaster-affected people to live after the Earthquake? Kahoku Shimpō Publishing Co. conducted, together with Tohoku University International Research Institute of Disaster Science, a questionnaire survey among disaster victims; results were published in the morning edition on March 10, 2013, two years after the Great East Japan Earthquake. The survey covered 1,150 victims in 12 municipalities in the coastal area of Miyagi Prefecture. Below we cite the article in Kahoku Shimpō.

The questionnaire included 6 entries related to emotional state such as "feel restless" and 6 entries related to physical state such as "have a palpitation"; in so doing, actual feelings experienced for the last month were evaluated on a 5-point scale, from "never felt" through "felt constantly". The scores were then summed up and divided by the number of respondents (1,150) to derive emotional and physical "stress levels." As a result, the emotional stress level was 14.17 points, and the physical stress level was 10.15 points. As compared to the previous survey conducted among 1,097 respondents in the same 12 municipalities in the year of the Earthquake, the stress levels increased by 1.2 points and 0.08 points, respectively. Both indicators changed only slightly, which means that no substantial improvement was achieved in one year.

The entries evaluated by many respondents as "felt often" and "felt constantly" were "reluctant to do anything" (23.2%) and "felt restless" (21.7%) for emotional state, and "had a headache or stuffy head" (12.4%) and "felt thirsty" (12.0%) for physical state. There was a difference among municipalities; thus the emotional state improved by 3 points in Minamisanriku Town and Iwanuma City, and on the contrary, worsened in Kesennuma City, Onagawa Town and other places. On the other hand, the physical stress level improved in Sendai City and Yamamoto Town but worsened in Higashi-matsushima City, etc.

Besides, a "life recovery index" calculated from life fullness and other parameters was 39.60 points, which was only slightly different from the previous score of 39.32 points.

Analysis of the life recovery index showed strong correlation with the emotional stress as well as anxiety about "income," "neighborly ties in provisional housing" and "health".

In case of Natori City, anxiety about house reconstruction and relocation was high and regional revitalization speed was evaluated low; on the other hand, anxiety about neighborly ties and income was relatively low, which boosted the life recovery index. On the other hand, the life recovery index did not grow, despite of few complaints about revitalization conditions, in Higashi-matsushima City where the emotional stress level was high, in Watari Town with high anxiety about neighborly ties, or in Tagajo City with high anxiety about income and jobs.

These results suggest that 'Emotional and physical states of the victims did not improve in one year after the previous survey, while strong stress is felt. Besides, sensation of life recovery is determined rather by emotional and physical stress and local community situation, than by infrastructure restoration.' These findings are important indicators for future support policies. Namely, the main topics are relaxation of emotional and physical stress, and enhancement of local communities.

5. Possible Contribution of Occupational Therapists to Reconstruction Support and Regional Development

According to the mentioned survey among residents of the affected areas, one can think of relaxation of emotional and physical stress, and enhancement of local communities, as the factors to promote sensation of life recovery. This just means that occupational therapists have to support the residents based on a long-term perspective, and that the following approaches at which occupational therapists are good can contribute to recovery support and regional development.

- (1) Assistance in improvement of quality of life with regard to both emotional and physical aspects.
- (2) Bringing together individual efforts toward enhancement of local communities.
- (3) Building a framework for activities of occupational therapists in cooperation with municipal authorities, health workers and other local supporters.
- (4) Continued support to local residents in a long-term perspective.

As humans, we will hardly forget this earthquake disaster and the lesson learned from it.

6. Conclusion

We learned a great deal from the Great East Japan Earthquake, and are perhaps to learn more in future. Experiences of the atomic bombings in Hiroshima and Nagasaki, and severe battles in Okinawa, are still talked about. We, too, believe that the experience of the earthquake disaster has to be remembered. Those who experienced the atomic bombing in Hiroshima have kept silent until now but after the Fukushima nuclear accident, some of them, now in their eighties, decided that it was the time to tell about their experiences. Their motivation is to convey how important human lives are.

What we can do now is to think seriously about the present, and to live every moment with all our energy.

SUPPORT ACTIVITIES CONDUCTED BY IWATE ASSOCIATION OF OCCUPATIONAL THERAPISTS

Iwate Association of Occupational Therapists

Safety Confirmation

Iwate Association of Occupational Therapists (hereinafter referred to as the Association) began confirmation of members' safety from March 15, 2011, in 4 days after the Great East Japan Earthquake. As lifelines and communication channels failed immediately after the disaster, safety confirmation and information collection were performed via phones, email and website by officers in the inland area with relatively little damage. However, it was difficult to directly obtain information from the coastal area hurt by the tsunami; thus, information was collected via members' friends, age peers, etc. Safety confirmation of all members was completed in the beginning of April; fortunately, no members were dead or missing; after that, however, there were reports about the dead and missing among members' families. Besides, 7 members were living in evacuation shelters.

Toward Establishment of Disaster Headquarters

Because of the gasoline deficiency and destroyed transportation system, Disaster Headquarters of the Association were set up as late as 16 days after the disaster, on March 27, when train service on the Tohoku Line was partly restored. In the meanwhile, an emergency response network was developed in cooperation with Japanese Association of Occupational Therapist (hereinafter referred to as JAOT). In addition, 13 medical and welfare institutions including JAOT created a team of specialists in vital functions, and one of our members was delegated to explore guidelines for support activities.

In Preparation for Support

The Association's Disaster Headquarters held discussions on the support system, provision of human resources, funds, and role sharing with Iwate Physical Therapist Association, Iwate Association of Speech Therapists and Iwate Rehabilitation Center; however, the issue of local coordinators remained unsolved. In a situation like that, we learned that members of the Association entered health-care group of the Kamaishi Region Disaster Headquarters, and on April 2, decided on giving support to Kamaishi Region in coordination with the mentioned prefectural associations and the rehabilitation center.

Support Policies

Support activities were started on April 3, 2011 via the members participating in health-care group of the Kamaishi Region Disaster Headquarters. We then received instructions from the Headquarters Chief to the effect that 'Many medical institutions and long-term care insurance facilities in Kamaishi region were damaged, and availability of medical treatment and health care in the region was substantially impaired. Therefore, any increase in the needs for medical treatment and health care cannot be handled. Moreover, health workers and other supporters, being themselves victims of the disaster, kept working without rest. Therefore, the Association should provide support autonomously.' To that end, the Association began activities

within health-care group of the Kamaishi Region Disaster Headquarters, based on the concept of avoiding increase in the needs for medical treatment and health care and providing support autonomously.

Support Activities

During the initial period of support activities from April through July, we provided support to the disabled, elderly and other high-risk groups, surveyed living conditions in evacuation shelters and homes, gave advises to supporters in welfare evacuation centers, etc. In so doing, we first focused on confirmation of conditions and evaluation of needs, then issued requests for cooperation and constructed a support network; besides, local services were launched when persons in need of help moved to provisional housing.

Support was provided to 357 persons in 842 cases. From June onward, the persons in need moved to local hospitals and long-term care insurance facilities. After the end of the initial period, in the end of July, support activities were continued with focus on rehabilitation.

We believe that, as a part of health-care group of the Kamaishi Region Disaster Headquarters, we have contributed to rehabilitation of the disaster victims, in evacuation shelters and homes, during the early period after the disaster. Particularly, based on the concept of avoiding increase in the needs for medical treatment and health care and providing-support autonomously, the primary support played an important role to make possible the local rehabilitation. We received letters of appreciation from Iwate Prefecture and Kamaishi City, as well as a request from Iwate Prefecture to cooperate in emergency drills, which was indicative of social recognition of the support activities.



Support for Living in Provisional Housing

In mid-August, when the primary support was already finished, the Association worked out a plan for the secondary support, namely, "Plan of Support Activities for Living in Provisional Housing", and submitted it to the Social Welfare Council of Yamada Town, Kamaishi City, being in charge of support in provisional housing. This plan demonstrated that living in provisional housing posed risks of social withdrawal, loneliness, and disuse syndrome, and that the Association was ready to avoid such risks through scheduling and implementation of work activities using temporary meeting places, and counseling on living in provisional housing. In addition, we determined our participation in such work activities at various stages (introductory, active, transitional and progressive stages) to be concluded with work activity classes and events held by the residents, thus contributing to formation of communities in provisional housing areas. Such classes have been held in Yamada Town and Kamaishi City for 120-150 minutes, once or twice a month. In so doing, content of activities is announced one week in advance, and local members of the Association, together with other supporters, stick posters and pass out leaflets, while determining members to participate, and preparing materials. During the classes, the residents exchange their ideas, and plan next activities. In addition, activities of the day are reported in a newsletter distributed among the residents next day.

We continue these activities, while adjusting their content and frequency to the current situation. At the end of August 2013 (in 26 months), 425 our volunteer members have provided support to 1,039 persons.

Initially, the participants even did not know each other by name but their ties became closer through mutual activities. On completion, the activities are debriefed to plan the next class. In so doing, we offered each participant parts among the group so as to encourage individual initiative of them. Some persons got involved in extended activities such as a walking event using a walking map (Fig. 1). In addition, the support staff learned the activities to become instructors in other provisional housing; thus, the participants were motivated to analyze past stages, and to proceed to the next stage. As a result, risks of social withdrawal, loneliness, and disuse syndrome in provisional housing could be avoided through scheduling and implementation of work activities using temporary meeting places; on the other hand, it appears that those suffering from severe social withdrawal and loneliness were not actually involved in the classes. However, we believe that these activities were very helpful in terms of rebuilding communities in provisional housing, and support for the staff.



Fig. 1

Future Issues

When considering a rehabilitation support system immediately after a disaster, formation of prefectural teams focused on medical treatment including rehabilitation is perhaps more important than activities of professional organizations. In our case, both primary and secondary support was launched when no bridges with affected areas existed. Fortunately, the primary support was implemented within a health-care group of regional disaster headquarters, which provided an official status to our activities. However, we submitted a report on rehabilitation support based on the concept that prefectural professional organizations were assigned respective roles under the guidance of prefectural government in case of a disaster (Fig. 2).

As regards risks that occur in relocation from evacuation shelters to provisional housing, each municipal authority acts in a different way, and a support model for provisional housing should be prepared on the prefectural level. Assuming a large-scale disaster, it is necessary to find out what an association of occupational therapists can do immediately after disaster, and then in evacuation shelters and provisional housing. After that, possible disaster support activities, including specifics of the support targets, procedures and methods, should be presented to prefectural and municipal authorities.

It was difficult to evaluate rehabilitation in the emergency conditions but evaluation at the initial intervention phase and later is necessary to revise further activities. Such evaluation should not be restricted to medical treatment but also involve psychological evaluation and subjective evaluation (questionnaires); both supporting and supported sides have to work toward a shared awareness of support and evaluation. Besides, the support activities were not sufficiently recorded; therefore, preparation of appropriate record forms and management of records are important issues.

Our Association and JAOT have done our best since the disaster. Even now we have an unprecedented program in mind. In future, we are ready to continue support activities, and to improve them so as to contribute more to the local society.

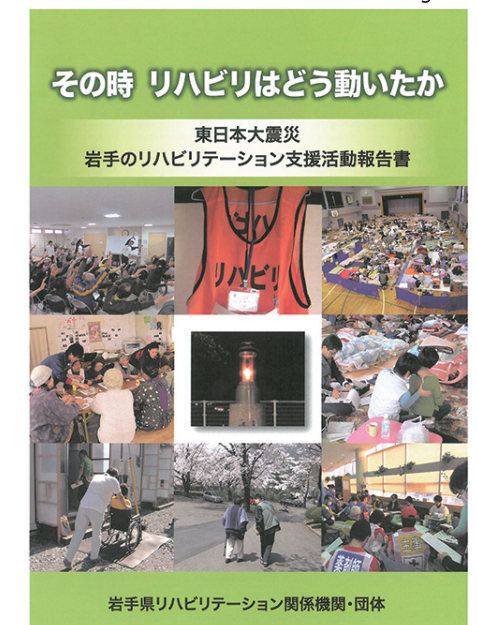


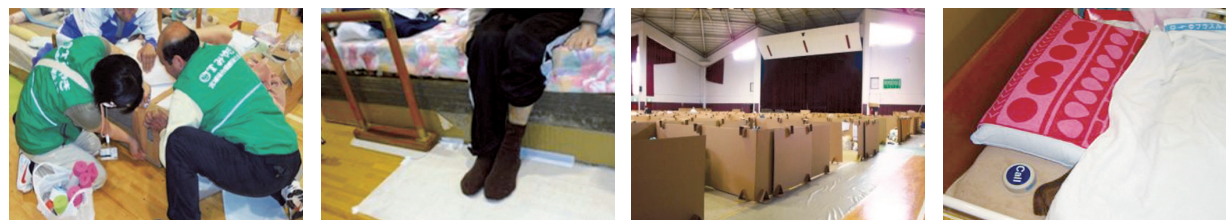
Fig. 2

SUPPORT ACTIVITIES CONDUCTED BY MIYAGI ASSOCIATION OF OCCUPATIONAL THERAPISTS

Miyagi Association of Occupational Therapists

Introduction

Since 2001, Miyagi Association of Occupational Therapists dispatched members to Miyagi Rehabilitation Council, and conducted various activities including support for local rehabilitation structures in Miyagi Prefecture, requests for rehabilitation personnel placement, etc. As a result, physical therapists, occupational therapists, speech therapists and other specialists were assigned to public health and welfare offices (regional support centers) in 7 regions of Miyagi Prefecture; these rehabilitation specialists played an important role in evaluation of needs and creation of a support system after the disaster. Rehabilitation services in Miyagi Prefecture were concentrated in the urban area around Sendai City; this resulted in a delay in obtaining information from northern coastal areas such as Kesennuma and Ishinomaki where administrative bodies were affected by the tsunami, and support functions were impaired. Those areas lack rehabilitation resources, and even under normal conditions, rehabilitation services could be hardly considered sufficient there. When the disaster occurred, proposals of support concentrated around Sendai City, which may be attributed to convenient access, and support activities lost touch with the local needs at the beginning.



Objectives of Support Activities

Support aiming at self-reliant life including prevention of impairment of vital functions and nursing skills was provided to elderly and disabled in evacuation shelters and other facilities. Another core direction was mental health support through work activities and role-sharing activities. Specific objectives of support activities are described below.

- Assessment of physical performance in daily life (need for support, support plan)
 - Evaluation of basic motions, standing up and sitting down, mobility
 - Applicability evaluation of assistive devices for basic motions (walking sticks, wheelchairs, etc.) and welfare equipment
 - Functional assessment using ADL index
- Prevention of disuse syndrome (prevention of impairment of vital functions)
 - Exercise guidance for prevention of impairment of physical function (individual guidance, maintenance of fitness habits through group exercises)
 - Environment improvement for maintenance of basic physical performance (personal space, inside and outside evacuation shelters)

- Other related support

○ Backup of health care aiming at prevention of mid- to long-term disuse syndrome, and preventive care

Preparatory Stage of Support Activities

After the Iwate-Miyagi Nairiku Earthquake in 2008, Miyagi Association of Occupational Therapists produced 'Manual for Disaster Support Activities', and offered intraprefectural cooperation in case of disaster. Occupational and physical therapists in Miyagi Prefecture were concentrated in public health and welfare offices; on the second week after the earthquake, when some information about living conditions in evacuation shelters etc. was acquired, Public Health Promotion Division, Department of Public Health and Welfare, Miyagi Prefecture Government asked our Association together with Miyagi Physical Therapist Association to dispatch rehabilitation specialists for prevention of disuse syndrome related to life as evacuees because of the Great East Japan Earthquake. After that, both associations joined efforts to confirm conditions in the affected areas and to survey local needs; support activities were started in the coastal areas of Miyagi Prefecture that were most damaged by the earthquake and tsunami, such as Kesennuma City, Minamisanriku Town, Ishinomaki area, Tagajo City, Natori City, and Yamamoto Town.

As regards support activities conducted in evacuation shelters, information was becoming snarled, and conflicts occurred among volunteers. Approach adopted by our Association was to respond to requests only from the prefectural government, public health and welfare offices, or municipalities.

Content of Support Activities

One month passed after the disaster. In line with the emergency manual, President of the Association, Chief of the Secretariat and other officers confirmed safety of the association members and convened an Emergency Response Committee.

Initial support activities of our Association included the use of websites and other means to aggregate and transmit information, coordination with related institutions, recruiting volunteers for disaster support, fundraising, establishment of spending procedures, and other steps stipulated in the manual. In addition, we sent status reports and requests for information to all prefectural associations with experience of support activity. Besides, on request from Public Health Promotion Division of Miyagi Prefecture Government, we exchanged information on disaster support with Miyagi Physical Therapist Association. Since the Japanese Association of Occupational Therapists (JAOT) launched a model project (team of specialists in vital functions), President Nakamura and other officers held a meeting with representatives of related institutions at Wakabayashi ward office, inspected the current conditions at Wakabayashi Gym, and recruited volunteers among members of our Association for providing support in evacuation shelters.

Volunteer support activities in Kesennuma region (Kesennuma City, Minamisanriku Town) and Ishinomaki region (Ishinomaki City) began in one month after the disaster. Specifically, in Ishinomaki region, such activities included rehabilitation support in welfare evacuation centers (Yurak-



Activity Report

ukan Hall and Monou Farmers Training Center), environment improvement, ADL support, individual support, provision of activities and other mini-day services.

Support activities in Kesennuma region were focused on visiting guidance in evacuation shelters and homes in Kesennuma City and Minamisanriku Town, individual support for persons in need of care, continued ADL surveys for victims who moved from evaluation shelters to provisional housing, environment improvement surveys, and extended support to secondary evacuation destinations (Tome region, Kurihara region, Osaki region, and Murone City in Iwate Prefecture). In 6 months, evacuation shelters were closed as the victims moved to provisional housing; in so doing, patrolling support was implemented in Ishinomaki region to examine living conditions in provisional housing, and to prevent disuse syndrome.

Since September 2011, our Association has held classes called "Kosheru" every 4th Saturday at emergency provisional housing in Neko region of Higashi-matsushima City; the classes offer activities based on the concept of 'making' - own body, things and friends. In addition, checks on disuse syndrome, measurement of physical fitness, exercise guidance and other support activities are continued at emergency provisional housing in Ishinomaki region.

Role of Prefectural Association

Continued support activities of the Association included aggregation of information, preparation of documents, liaison and coordination with other organizations, setting up a platform for occupational therapists to continue volunteer activities, dispatching volunteer staff according to local needs, arranging transport, accommodation etc.

Since the 6th week after the earthquake, we have provided constant support to welfare evacuation centers in Ishinomaki and Kesennuma regions; support from volunteers dispatched by JAOT was especially strong during the Golden Week holidays. After that, as the victims were moving to provisional housing, support was extended from prevention of disuse syndrome to improvement of living environment, introduction of welfare equipment, etc. At the same time, continued support was provided through September to persons staying in evacuation shelters because of disabilities, deficiency of provisional housing, etc.; there were, however, claims for advanced rehabilitation in some regions. Thus, focus was put on support for resuming normal life. In that period, inexhaustible enthusiasm of volunteers had to be somehow controlled, and we felt difficulties of disaster support in terms of inner conflicts.



SUPPORT ACTIVITIES CONDUCTED BY FUKUSHIMA ASSOCIATION OF OCCUPATIONAL THERAPISTS -PHYSICAL AND EMOTIONAL RELIEF THROUGH WORK ACTIVITIES-

Fukushima Association of Occupational Therapists

Priorities of Association

In Fukushima Prefecture, there were strong regional differences in the damage, and the Association decided to conduct disaster support activities at the local branch level. At that time, many residents of the Hamadori area escaped to inland regions of the prefecture, and response to the evacuees was needed in every region. Thus we asked every branch to provide support activities suitable for respective areas, without burdening members too much.

While giving priority to support activities for disaster victims, we recognized that members of the Association were victims themselves, and therefore, had first to resume their normal lives and working patterns, and to have sufficient rest on holidays. We therefore gathered people who had some extra energy at every branch to provide support at a reasonable level, without clarion calls.

Objectives of Support Activities

As regards post-earthquake activities of the Association, in addition to members' safety confirmation, it was important to set guidelines for disaster support; the following three agenda items were confirmed at a board meeting held in about 1 month after the disaster.

- First of all, to stabilize and normalize members' private lives and professional activities.
- To provide volunteer activities at the branch level, as far as reasonable for individuals and organizations.
- To request support from Japanese Association of Occupational Therapists (JAOT) for Soso region where the local branch collapsed.

In addition, the following objectives were set initially when visiting evacuation shelters.

- Using our knowledge and skills, as physical and occupational therapists, to promote prevention of disuse syndrome in elderly people with decreased activity.
- To provide people forced to live in evacuation shelters with some opportunities for pleasure and comfort.

However, actual visits to evacuation shelters showed that people were widely aware of prevention of disuse syndrome, and that other organizations and individuals already provided guidance on gymnastics, exercises, etc. Thus, we revised the objectives as described below.

- To give advice on prevention of falls and other daily risks, and provide welfare equipment (walking sticks, rehabilitation footwear, rollators, etc.) as possible, to disabled and elderly people.
- To provide a space for work activities (mainly, creative activities).
- To establish communication with elderly people with decreased activity through work activities.

Content of Support Activities

1) Support activities at evacuation shelters

Various support activities were conducted at every evacuation shelter depending on particular conditions; here we report on activities of Aizu and Minamiaizu branches that were first to start visiting evacuation shelters.

Using holidays in April, Aizu branch chief and other members started visiting evacuation shelters to question evacuees about difficulties they have experienced. Many answers were unexpected, e.g., 'Every morning and evening we do radio gymnastic exercises with a health worker' or 'It's OK because I can walk'. Indeed, taking the lessons learned from the Great Hanshin Earthquake, Mid Niigata Prefecture Earthquake and other past disasters, many health workers and volunteers were aware of disuse syndrome and economy-class syndrome (deep-vein thrombosis), and acted appropriately to prevent the diseases. Thus, for some period, we were doing nothing but just saying 'Please contact us if you have any trouble'. However, we understood later that it was a big mistake.

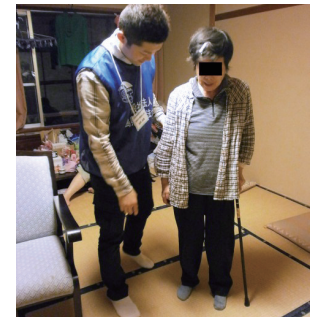
By lapse of time, an eagerness to do something real as occupation therapists, to make lives of evacuees more pleasant, gained momentum; thus, we changed the approach and decided that we should provide work activities to evacuation shelters at any rate. As a result, we prepared materials for beanbags and origami, coloring books etc., and revisited evacuation shelters on May holidays.

Although the participants were few at first, as the ice was broken by having fun, they started speaking about their problems: 'Actually, I had a mild stroke 5 years ago, and now my hands are not what they used to be. Here at the shelter, it is worsening because there are no household chores to do.', 'Here I wear slippers, it is difficult to walk, and I stumble often. The other day, too, I slipped down in the toilet.', 'I was sleeping in a bed at home, and it is difficult to rise from the floor mat here', and so forth. We hurriedly did simple checks on balancing ability and other physical functions, and were surprised to find some problems in almost everyone. Those who kept saying 'It's OK' actually suffered severe conditions, about which they began to speak due to relaxation achieved through work activities. Also, a health worker brought up one's concern about a man's way of walking. That is, we could not know the truth by just coming to a shelter, and asking if there were any problems. Work activities provided us with a communication vehicle. After that, we radically revised our plans, and visited the shelters every day during the Golden Week holidays. As regards the urgent problem of stumbling, we brought walking sticks and shoes. Since this problem is related to mobility, we immediately called to Fukushima Physical Therapy Association and prosthetists, and started joint visits to evacuation shelters.



2) Support activities at secondary evacuation shelters

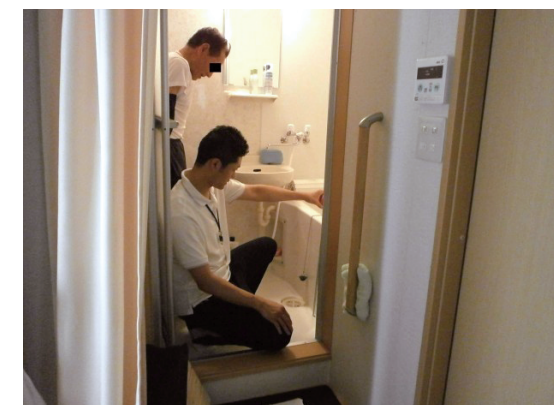
As days go by, evacuees were moving from gymnasiums and other primary shelters to hotels and other secondary shelters. Accordingly, the branch activities extended to such secondary shelters. Living condition in hotels and inns were much better; on the other hand, the evacuees stayed locked up in their rooms, and we went round the rooms together with health workers and welfare council representatives.



3) Support activities at provisional housing

Support at provisional housing started from advice on hardware such as handrails and other elements of barrier-free environment. In cooperation with the Physical Therapy Association, we provided advice regarding steep doorsteps, inconvenient handrails in bathrooms and many other items to be improved.

Then we participated in efforts by support centers toward preventive care and prevention of withdrawal. Support projects by support centers and other institutions have lasted for a long time, being continued in many provisional housing to the present day.



4) Activities as members of specialist teams for advice and support in Fukushima Prefecture

In the meantime, specialist teams for advice and support were launched. Specifically, on request from Fukushima Prefecture, teams were composed of specialists of 6 prefectural organizations -Care Manager Association, Association of Certified Social Workers, Medical Social Worker Association, Association of Psychiatric Social Workers, Physical Therapy Association, and Association of Occupational Therapists.

Initially, there was some confusion at every branch but gradually, the specialists learned how to work in a team and to improve cooperation.

5) Support activities in Minamisoma City

As explained above, our Association arranged support activities by every branch; however, in Soso branch based in Minamisoma City, many members escaped beyond the prefecture, and only two remained. Under normal circumstances, other branches would come to help; however, the Association as a whole was busy with support activities in addition to regular professional duties, while considering total evacuation. Thus we asked JAOT for full support. While other organizations announced that they would not conduct support activities in this region because of radiation, JAOT was providing support from November 2011 through March 2012. We greatly appreciate the wide support from JAOT and other prefectural associations.

6) Others

a) Pamphlets and instruction courses on winter living

Fukushima Prefecture has a large territory, while climate conditions differ considerably in the affected Hamadori area and inland Aizu area. Particularly, for people who moved from snowless Hamadori area to snowy Aizu area, it was difficult to adapt to new lives involving walking on snowy roads, snow shoveling, etc. Thus, our Association, in cooperation with Physical Therapy Association, compiled a pamphlet called 'Winter living', and held an instruction course prior to the snowfall.

b) Compilation and distribution of "Wisdom of Occupational Therapy" brochure

It was impracticable to send occupational therapists to every provisional housing area; thus, to contribute to activities of support centers and other institutions, we compiled a brochure called "Wisdom of Occupational Therapy" about how-tos of recreation, various handicrafts, gymnastics, etc. The brochure was distributed free of charge in provisional housing areas through municipalities and social welfare councils. The brochure got a very favorable reception, and extra issues were printed; besides, favorable reports were published in local newsletters.



Conclusion

Looking back at our activities, we think that important things in support activities are not only projects and events like "We did this" and "We did that", but how to restore everyday activities and normal life. Anyway, we stay seated here in Fukushima. And we believe that living normal lives and doing regular work toward reconstruction is the real support.



WHAT CAN BE DONE AT THE TIME OF DISASTER?

1 Maintenance and Enhancement of Victims' Mind and Body Functions, Activities of Daily Living and Quality of Life through Work Activities

Occupational therapists evaluate each victim (through gathering information and identifying problems to be solved) so as to provide activities for activation of mind and body functions. Such support plays an important role in improving social adaptability, which includes activities of daily living in evacuation shelters and provisional housing, participation in household chores, shopping, leisure, school attendance, working and other social activities. Occupational therapists help victims to assume appropriate roles in new lives and to find motivation toward life reconstruction.

2 Psychological Support to Victims

Occupational therapists deal mainly with mental disorders, and rehabilitate both mind and body. Many of victims have significant psychological stress related to disaster experience and post-disaster living, which may require dealing with depression, PTSD (posttraumatic stress disorder), etc.

3 Improvement of Living Environment of Elderly and Disabled, Selection of Welfare Equipment, etc.

Based on medical evidence, occupational therapists put effort into improvement of living environment toward victims' self-reliance. This may include, as necessary, selection and adaptation (adjustment) of welfare equipment.

- Prevention of fall accidents when living in restricted conditions of evacuation shelters, marking of traffic lines, provision of shared spaces
- Advice on elimination of steps, installation of handrails, furniture arrangement etc. in provisional housing
- Selection of welfare equipment and self-help devices (walking sticks, footwear, lumber corsets, mats, chairs, tables, wheelchairs etc.) tailored to victims' disorders.

4 Support for Employment of Disabled

Based on medical evidence, occupational therapists gather information about mind and body functions of disabled, identify problems to be solved, conduct motor training and adaptive training required at work, improve environment. In case of disaster, they provide support the work of disabled people with due regard for damage conditions and environmental features in affected areas.

