

# Initiatives over the 4 years of the Miyagi Disaster Mental Health Care Center — Project analysis based on activity statistics—

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## 1. Introduction

Miyagi Disaster Mental Health Care Center (henceforth, “Center”) was established in December 2011 as an institution to manage support in the mental health fields following the Great East Japan Earthquake. Following the Stem Center, the Ishinomaki and Kesenuma regional centers were established in April 2012, after which support projects began in earnest. Based on the six project criteria of resident support, care worker support, raising public awareness, human resource development, research, and support for various activities, we provided support based on a multidisciplinary team.

Following the Hyogo Mental Health Care Center established after the Great Hanshin-Awaji Earthquake and the Niigata Prefecture Mental Health Care Center after the Niigata Chuetsu Earthquake, disaster mental health care centers were established in Iwate, Miyagi, and Fukushima prefectures after the Great East Japan Earthquake but a distinct characteristic of the center in Miyagi prefecture is that it has conducted support projects primarily using personnel from the Department of Health and Welfare from each municipality, or those of victim support, from the start of its establishment. Five years since the Great East Japan Earthquake and four years since work has begun at the center in earnest, support activities requested of the center from each municipality or associated organization has changed alongside changes in the current situation. In this paper, we reflect on activity results of the past four years; investigate the characteristic roles of the center, which has provided mid- and long-term psychosocial support following the Great East Japan Earthquake; and contribute to how we should think of the future activities of our center and mid- to long-term support following large-scale disasters.

## 2. Methods

We at the center have developed an activity statistical system based on the disaster mental health information support system (DMHISS) and are collecting activity data. We were not able to collect detailed data in FY 2012 but we were able to collect numerical data on activity content from FY 2013 onwards. This paper uses FY 2012 activity report data, as well activity statistical system data in the three years from FY 2013 to FY 2015, and investigated activity performance of four out of the six project criteria (resident support, care worker support, raising public awareness, and human resource development). Activities that were handled by multiple staff members were treated as a single data entry.

## 3. Results

### (1) Summary (Figure 1)

Direct support to residents in the region was tabulated as the total number of times support was given. In FY 2012, which was the first year when the center began work in earnest, this number exceeded 6000, which subsequently increased annually, with 7589 cases in FY 2015. For care worker support, a single case was tabulated in the form of individual advice to care workers or support for their various activities, and this remained at around 1800 cases since FY 2013. Raising public awareness for the general public and human resource development targeted for care workers are activities that primarily focus on the creation and distribution of materials for raising awareness, providing opportunities for communication

and the implementation of various lectures or training programs and each hosted event or completed item was counted as a single data point. Annually, there were approximately 300-400 cases for raising public awareness and approximately 160-170 cases for human resource development.

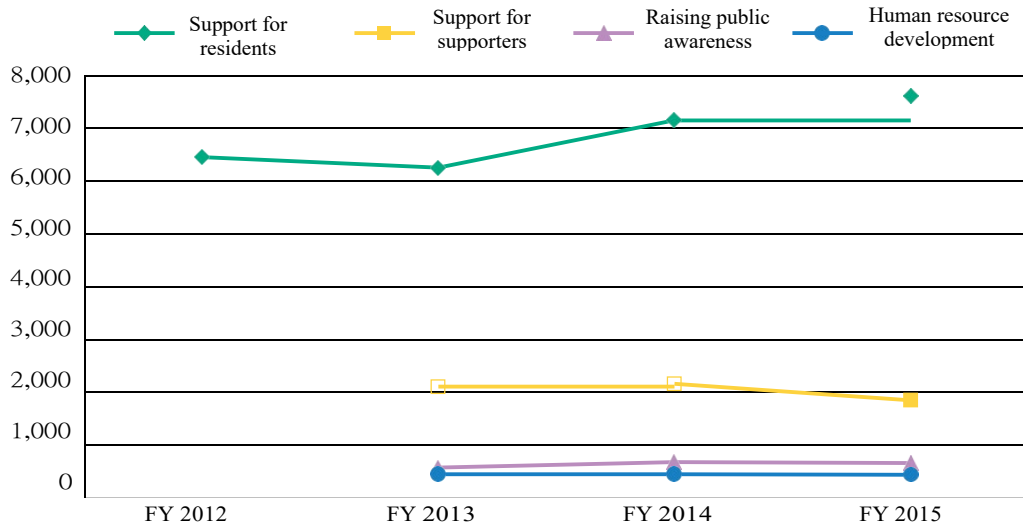


Figure 1 Changes in the number of activities

(2) Results of each project

① Resident support

The number of cases for resident support has increased annually (Figure 1). Increasing tendencies can be observed in the number of cases throughout the year when FY 2013 is compared to FY 2014, but significant increases in the number of support cases are observed in the latter half of FY 2015 (Figure 2).

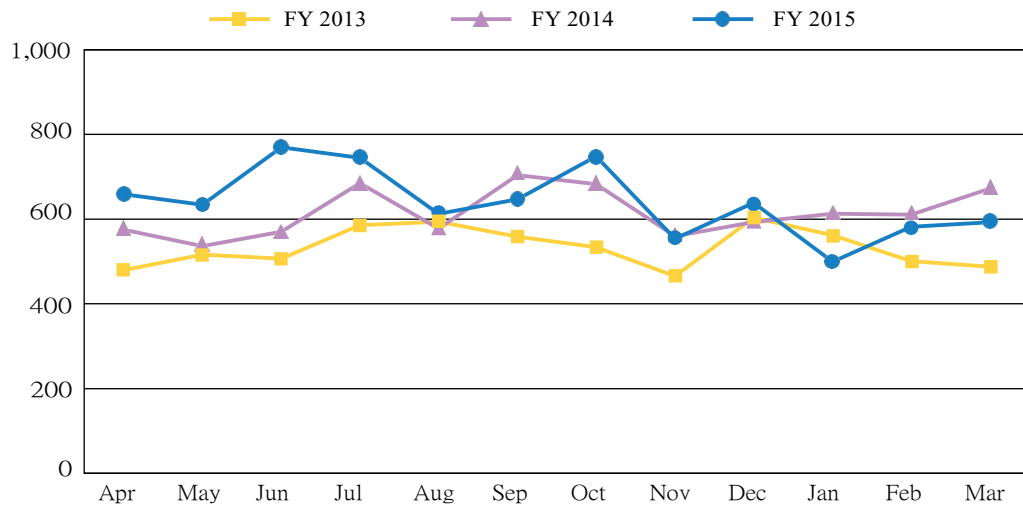


Figure 2 Monthly changes in the number of cases for resident support according to year

## A. Support methods

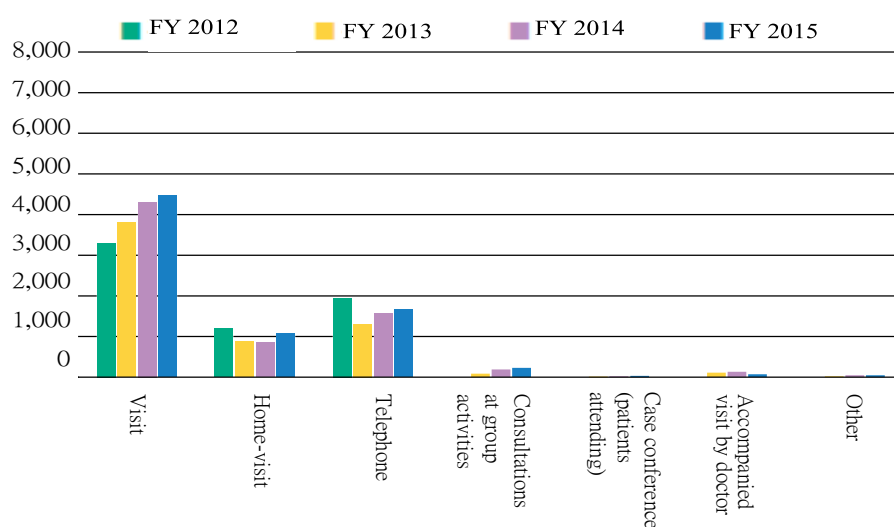
Visit-based support has been consistently high since FY 2012, with approximately 3300, 3800, 4300, and 4400 cases in FY 2012, FY 2013, FY 2014, and FY 2015, respectively. Walk-in visitor support in each municipality, support organization, or center ranged between 800-1200 cases each year and phone-based support for supported patients and anonymous telephone consultations ranged between 1300 and 1900 cases. Consultations at group activities (e.g., salon events) numbered at around 80 cases in FY 2013 but increased to over 180 and 220 cases in FY 2014 and 2015, respectively. Case conferences where the victims receiving support themselves attended numbered around 30 annually from FY 2014 onwards. Additionally, accompanied visits by doctors numbered 70-130 cases, where they promoted ongoing consultations and treatment.

**Table 1 Total number of cases according to support method for resident support**

		FY 2012	FY 2013	FY 2014	FY 2015
	total number of support	6,437	6,236	7,135	7,589
Support	Visit	3,302	3,807	4,309	4,465
	Home-visit	1,190	880	855	1,078
	Phone	1,945	1,310	1,566	1,668
	Consultation at group activities	-	87	188	228
	Case conference (patients attending)	-	12	30	31
	Accompanied visit by a doctor	-	115	134	73
	Other	-	25	53	46
	Letter-based approach <sup>(*)2</sup>	-	155	238	91

\*1 Only the three classifications of visits, home-visits, and telephone were tabulated for FY 2012

\*2 Total number of cases does not include cases supported by letter



**Figure 3 Changes according to support method**

## B. Breakdown of new and ongoing consultations

The annual breakdown of new and ongoing consultations is shown in Table 2. Patients were not given individual ID numbers in FY 2013 and FY 2014, so there are cases where a single individual has received multiple consultations but are counted as new consultation cases. Patients were issued ID numbers from FY 2015 to determine consultation status and progress, so the new consultation patient numbers reflect actual values with no duplicates. For this reason, the new consultation number cannot be simply compared across three years. The number of ongoing consultation cases is the total number for all three years and this number has increased with each year.

**Table 2 Support status**

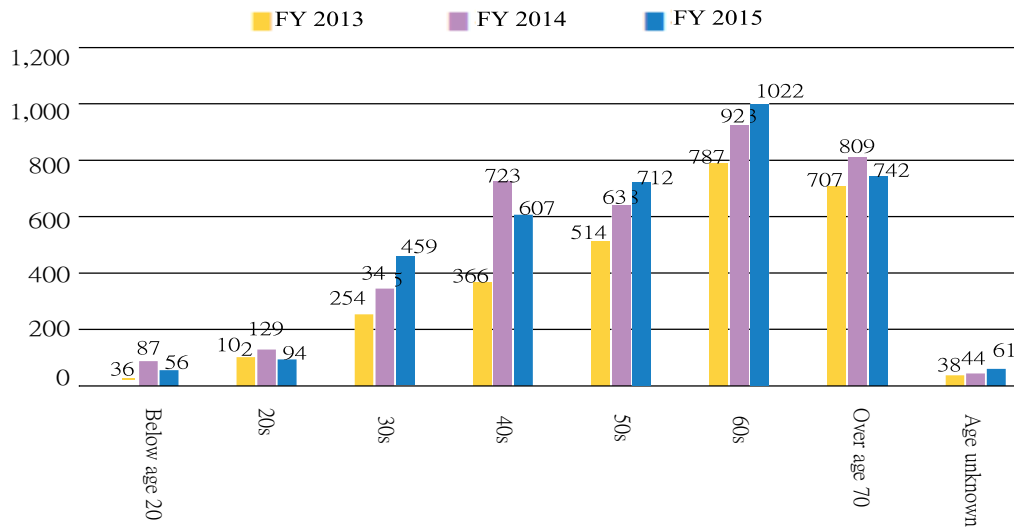
	FY 2013	FY 2014	FY 2015
New ( Actual number ) includes referrals from another hospital) *	2,725	2,798	2,265
Ongoing ( Total number)	3,511	4,337	5,324
Total	6,236	7,135	7,589

\* Duplicates included in actual number for FY 2013 and 2014

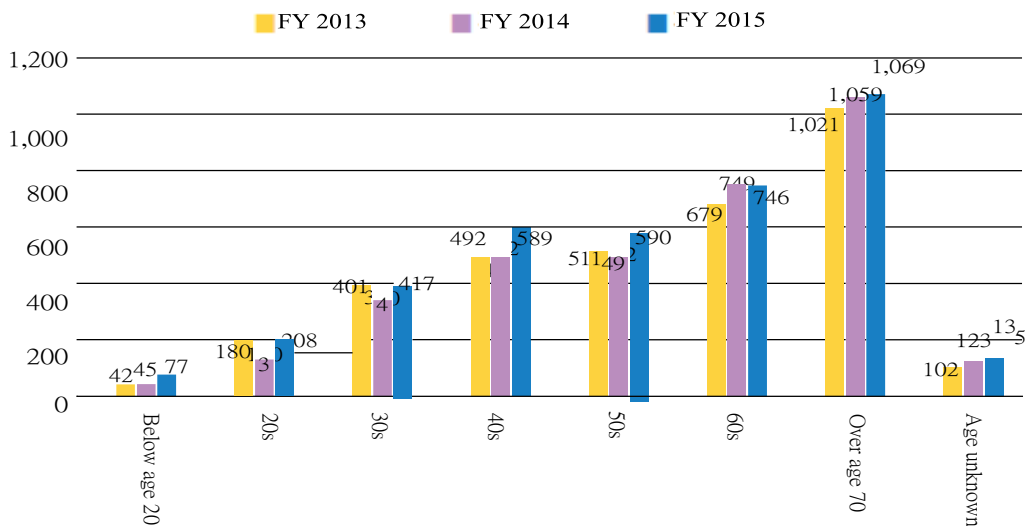
**C. Patient characteristics**

**a. Gender, Age, Employment Demographics**

There have been slightly more women when viewed across all three years but no significant differences were observed. More patients were observed as age increased (Figures 4 and 5). Additionally, the employment demographics showed that there were many unemployed individuals (Table 3). The percentage of individuals over 60 among all patients receiving support was around 50%, and the percentage of unemployed individuals ranged between approximately 71-75%.



**Figure 4 Changes in patients receiving support according to male age group**



**Figure 5 Changes in patients receiving support according to female age group**

**Table 3 Changes in employment demographics ( total number )**

	FY 2013	FY 2014	FY 2015
Employed, self-employed (including those on leave)	1,571	1,561	1,763
unemployed	4,443	5,351	5,577
Student	64	112	100
unknown	158	111	149
<b>Total</b>	<b>6,236</b>	<b>7,135</b>	<b>7,589</b>

b. Earthquake damage situation

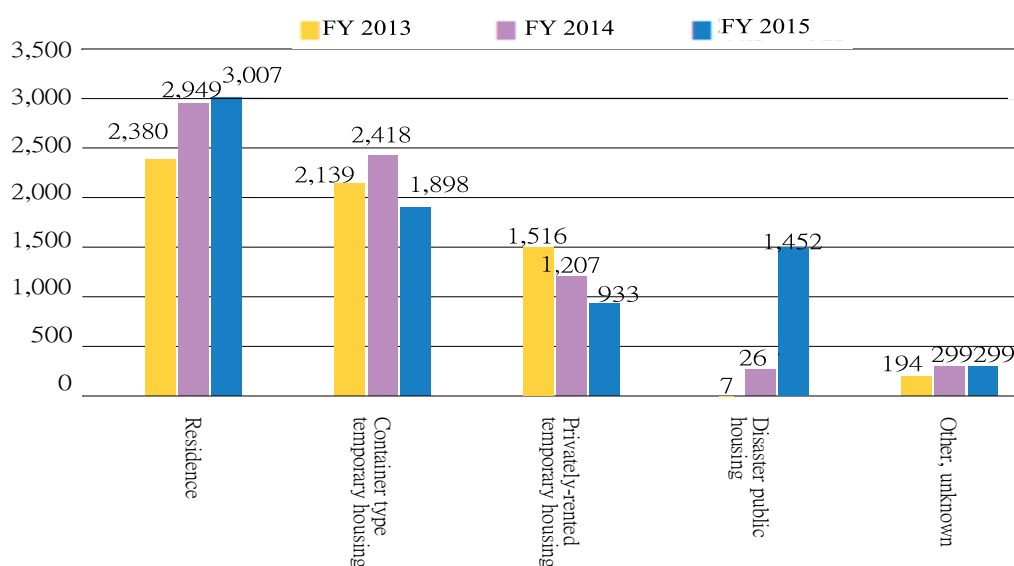
The percentage of patients receiving support who have suffered housing damage was at high levels of around 80%. Additionally, many individuals were severely impacted by the earthquake, with the percentage of individuals who experienced or observed a potentially life-threatening situation at approximately 33-45%, individuals who suffered environmental losses at 50-57%, and individuals who suffered bereavement at approximately 18-20% (Table 4).

**Table 4 Earthquake damage situation ( Total number )**

	FY 2013	FY 2014	FY 2015
Bereavement	1,257	1,402	1,370
The person injured	189	158	88
Housing damage	5,066	5,592	5,778
Life-threatening risks and witnessing of them	2,814	3,132	2,547
Environmental loss	3,281	4,103	3,742

c. Housing status

The percentage of victims receiving support who were residents of disaster public housing increased from 0.1%, 3.7%, and 19.1%, between FY 2013-2015. Alongside this, residents in container type temporary housing decreased from 34.3%, 33.9%, and 25.0%, while those in privately rented temporary housing decreased from 24.3%, 16.9%, and 12.3% (Figure 6). Individuals living in container type temporary housing and non-governmental organization-based privately rented temporary housing need ongoing support, but so too was it shown that individuals who moved into permanent housing also required support.

**Figure 6 Changes in the living environment**

d. Household situation

The percentage of individuals living alone increased slightly, with values of 31.3%, 33.2%, and 35.5% in FY 2013, 2014, and 2015, respectively (Figure 7). Health surveys of individuals living in temporary housing in Miyagi Prefecture showed that the percentage of individuals living alone has increased<sup>1)2)</sup>, and our results show similar trends.

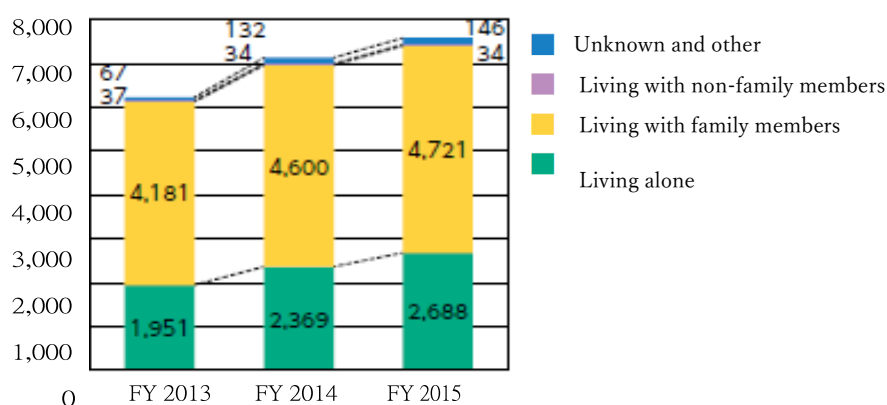


Figure 7 Changes in the presence or absence of a roommate

e. Instigating factors for consultation requests

Support for high-risk individuals based on health survey results conducted on residents in container type temporary housing and privately-rented temporary housing in Miyagi Prefecture and all home-visits conducted in certain regions for residents in container type temporary housing and privately-rented temporary housing was the primary instigating factors for the start of support. Requests from administrative agencies have also increased annually.

Table 5 Route of referral ( Total number : Multiple answers allowed )

	FY 2013	FY 2014	FY 2015
From individual	818	1,121	1,253
From a family member	362	615	337
From a neighbor	47	31	37
From work	56	90	120
Health survey / home-visit	2,964	2,970	3,310
From administrative agency	1,204	1,933	2,459
From support center / temporary facility support staff	615	744	805
From medical institution	151	221	198
From welfare institution	526	165	308
Unknown	0	3	3
Other	93	149	236

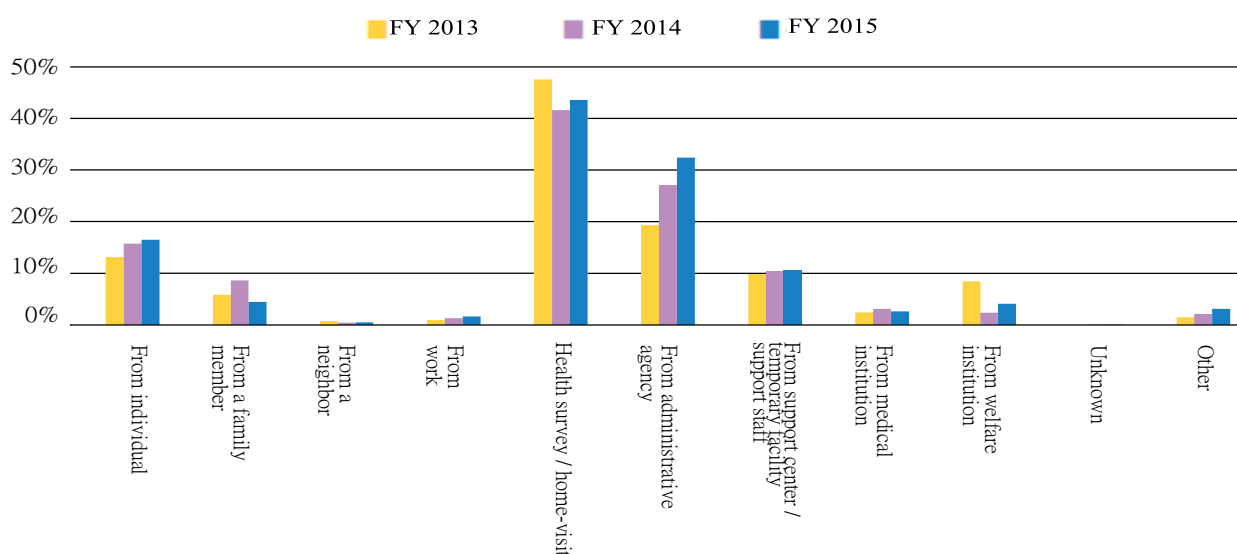


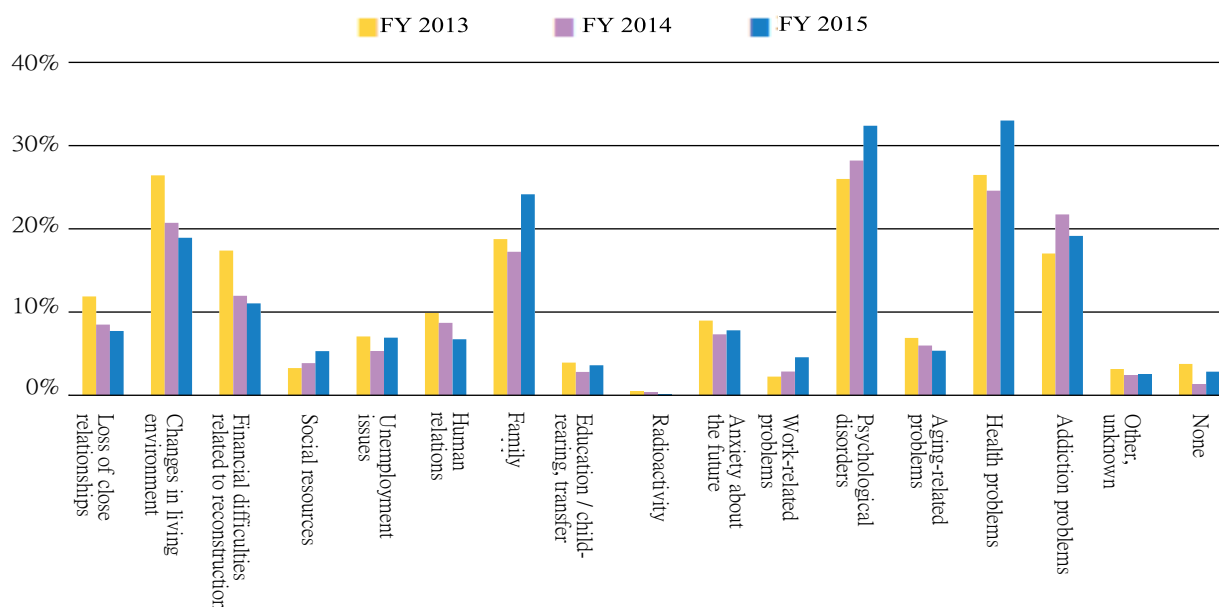
Figure 8 Changes in Route of referral (percentages of all patients)

f. Background of consultation requests

The primary background of consultations since FY 2013 has consistently changed in the living environment, family problems, psychological disorders, health problems, and addiction disorders. Consultations relating to psychological disorders, health problems, and family problems in particular increased annually.

**Table 6 Background of Consultation requests ( Total number : Multiple answers allowed )**

	FY 2013	FY 2014	FY 2015
the loss of close relationships	740	606	587
changes in living environment	1,648	1,479	1,436
financial difficulties related to			
reconstruction	1,084	852	837
social resources	203	275	403
Unemployment issues	442	379	524
human relations	617	619	510
family problems	1,170	1,228	1,832
Education/child rearing/transfer	244	201	273
radioactivity	31	25	8
anxiety about the future	558	520	593
Work-related problems	139	202	348
psychological disorders	1,621	2,011	2,457
Aging-related problems	429	425	406
health problems	1,649	1,752	2,504
addiction disorders	1,062	1,549	1,454
other/unknown	197	172	188
None	235	96	216



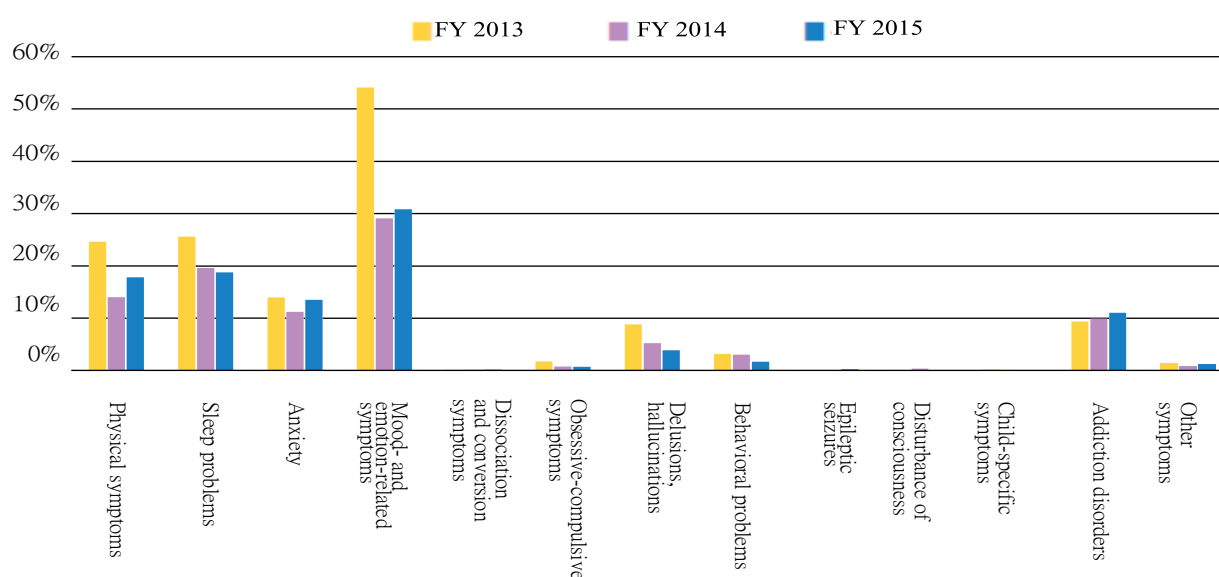
**Figure 9 Background of Consultation requests Changes in (percentage of all patients)**

g. Psychological disorders

The percentage of individuals with mental illness symptoms were consistently at around 56% since FY 2013. Additionally, the percentage of individuals with mood or emotion-related symptoms was the highest, followed by those with sleep problems and physical problems. Anxiety and addiction problems were ongoing as well.

**Table 7 psychological disorders ( Total number : Multiple answers allowed )**

	FY 2013	FY 2014	FY 2015
Has psychological disorders	3,500	3,958	4,255
physical symptoms	1,537	1,000	1,354
sleep problems	1,595	1,398	1,422
anxiety	871	802	1,025
mood and emotion-related symptoms	3,375	2,074	2,337
dissociation and conversion symptoms	8	9	13
obsessive-compulsive symptoms	107	56	53
Delusions, hallucinations	550	373	295
behavioral problems	195	214	129
epileptic seizures	5	7	19
disturbance of consciousness	5	23	4
child-specific symptoms	10	6	9
addiction disorders	584	707	836
other symptoms	95	64	91

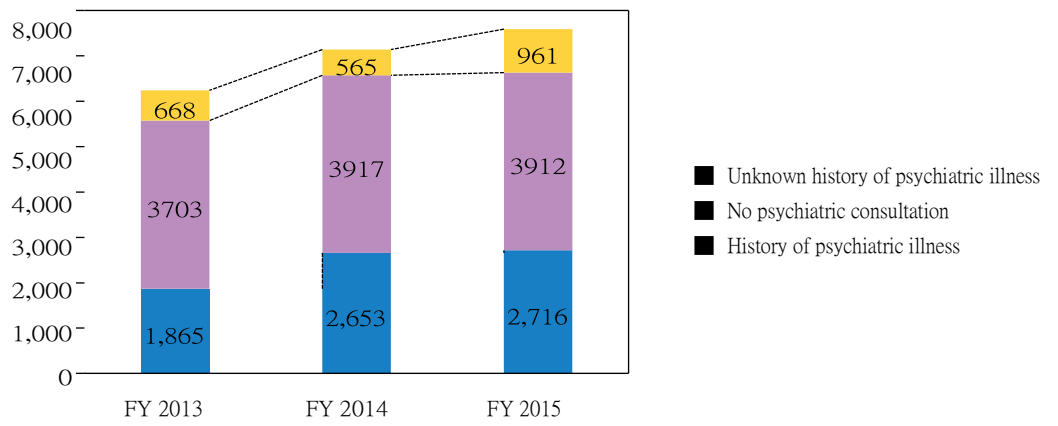


**Figure 10 Breakdown of changes in psychological disorders (percentages of all patients)**

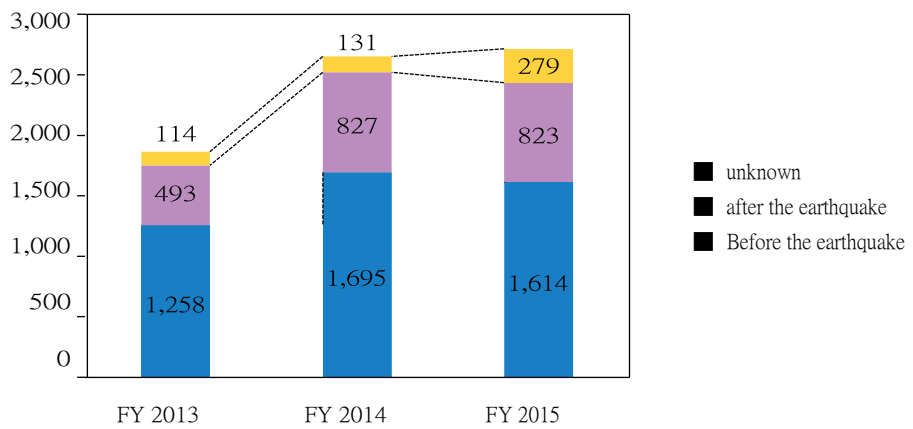
**h. Psychiatric illness history, disease name, onset time**

The percentage of individuals with a history of psychiatric illness has consistently been around 30-40% since FY 2013 and we have conducted support not only for those with a medical history associated with the Department of Psychiatry but also for those with no connection to the Department of Psychiatry services (Figure 11). When looking at the onset time of individuals with a history of psychiatric illness and whose diseases are named, many individuals who have had their illness since before the earthquake received support, and individuals whose illnesses occurred after the earthquake has received support in regions as well (Figure 12). When classified by illness, there were many with schizophrenia/schizotypal disorder/delusional disorder (ICD Code F2), mood disorders (F3), and mental/behavioral disorders due to psychoactive substance use (F1) (Figure 13). The F1 and F2 categories which greatly increased in FY 2014 have decreased in FY 2015, whereas F3 and neurotic disorder/stress-related disorders/somatoform disorders (F4) have tended to increase over time, with the same level of onset before and after the earthquake. These data indicate that the influence of earthquake-related stresses, including that of PTSD, has increased over time. Intellectual disabilities (F7) and psychological development disorders (F8) have also sharply increased since FY 2015. Lifestyle problems in temporary housing have not surfaced until now, but these individuals are thought to have difficulties in the communication and procedures necessary for adopting to future lifestyles during the rebuilding of lifestyles in the region and this indicates that these individuals have demanded more support during these times.

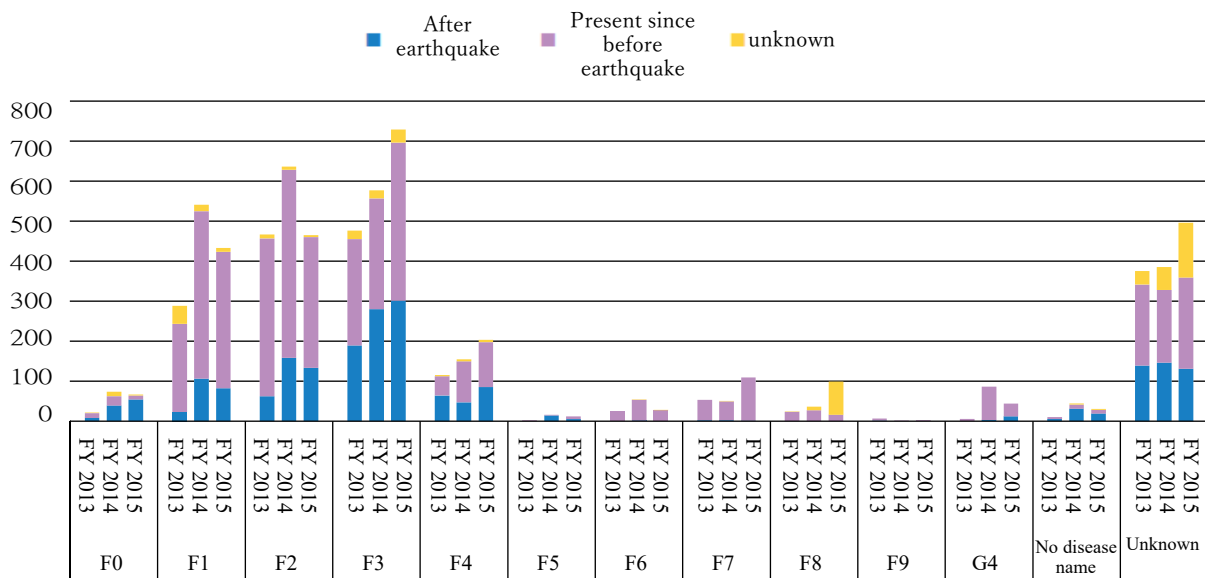




**Figure 11 Changes in the presence of psychiatric illness history**



**Figure 12 Onset time of individuals with named disease out of those with a history of psychiatric illness**



**Figure 13 Number of patients according to disease classification and onset time**

D. Support content

Consultations from the client comprise over half of the cases, but there were also support cases where consultations came from family members or care workers (Table 8).

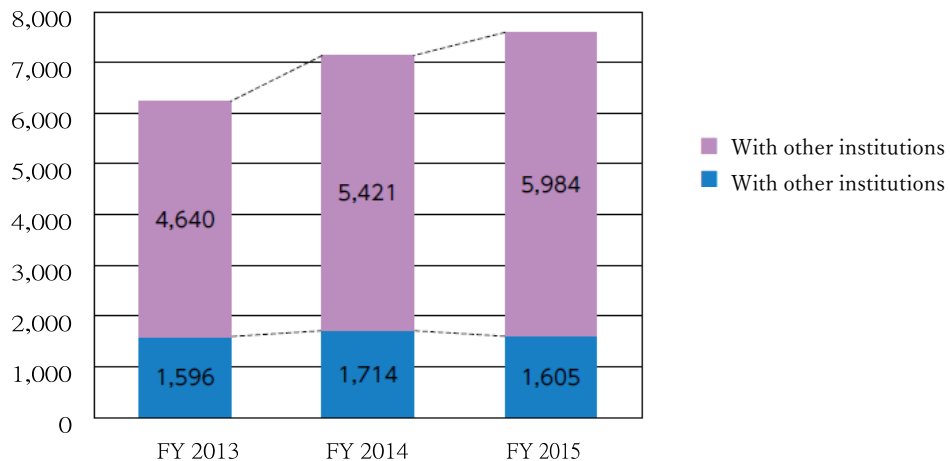
**Table 8 Changes in counselees ( Total number )**

	FY 2013	FY 2014	FY 2015
client	5,414	6,144	6,734
Family and relatives	770	888	798
Residents in neighborhood, acquaintances, friends, workplace supporters	22	43	25
Other	29	57	29
	1	3	3
<b>Total</b>	<b>6,236</b>	<b>7,135</b>	<b>7,589</b>

We have conducted resident support with a priority on coordination with other institutions from the onset, but one form of coordination was to conduct accompanied visits with municipalities, support centers, and medical institutions (Table 9, Figures 14 and 15). This reflects the fact that there are regions that have conducted accompanied visits with medical institutions, which have been entrusted with victim support by municipalities and support cases with medical institution affiliations are present have increased annually.

**Table 9 Changes in the (total) number of cases with other organization affiliations**

	FY 2013	FY 2014	FY 2015
With other institutions	1,596	1,714	1,605
Without other institutions	4,640	5,421	5,984
<b>With other organizations</b>			
municipalities	609	781	761
Health care center	127	92	56
medical institutions	41	128	226
Welfare-related	130	166	120
Support center	561	468	424
Other	212	192	103



**Figure 14 Presence of other organization affiliations**

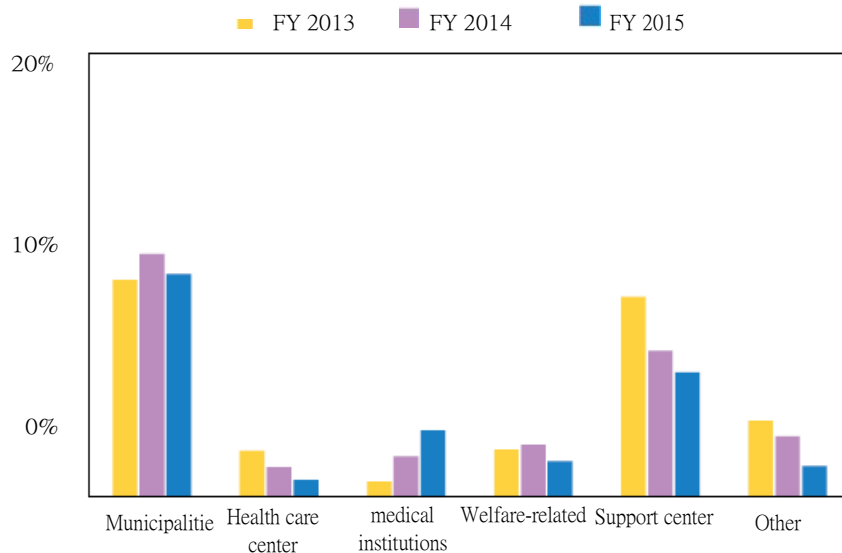


Figure 15 Breakdown of other organization affiliations

E. Conditions at the end of support

Many outcomes at the end of support were either case where conditions improved or where no support was deemed necessary. Additionally, this reflects the characteristic role of the center is acting as a point of contact for municipal managers for providing spot triage for support and cases referred to other institutions were mostly succeeded by municipally managed divisions, followed by referrals to medical institutions such as psychiatric/neurological departments and psychiatric care.

Table 10 Conditions at the end of support

	FY 2013	FY 2014	FY 2015
Improved situation / No support needed	1,680	1,448	1,675
Denial of support	75	44	70
Referred from another institution	184	144	142
Department of Psychiatry, Department of Neurology, psychiatric care	44	16	24
Other than the above medical institutions	12	3	4
municipalities	72	62	75
Judicial	3	2	1
Elderly welfare	22	24	8
Welfare for Persons with Disabilities	14	20	7
Child welfare	8	1	2
Employment center	6	4	0
Other	22	20	27

Referral site breakdown

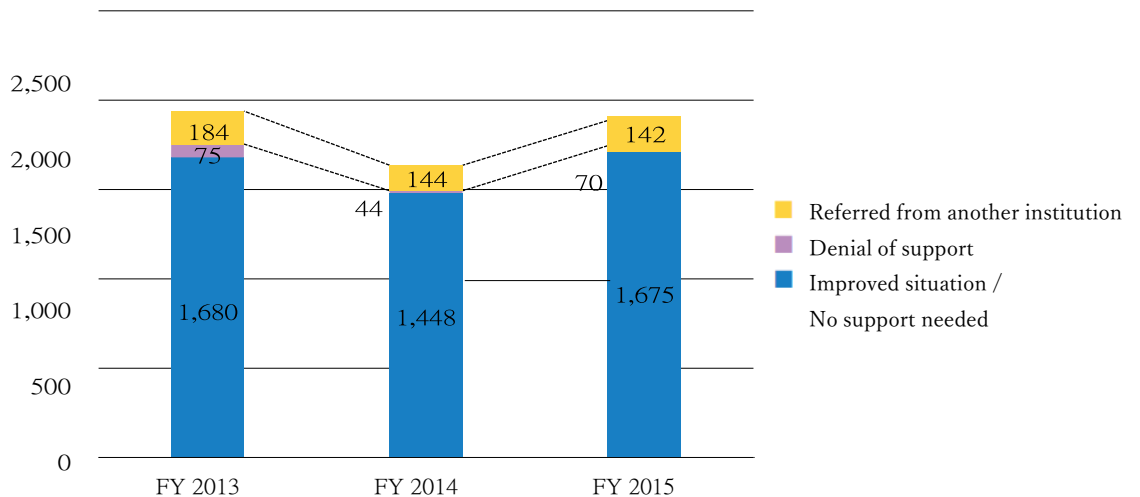


Figure 16 Conditions at the end of support

② Care worker support

The number of activities for care worker support and the number of patients decreased in FY 2015 (Figure 17). Government officials comprised the majority of patients (Figure 18). Besides this, support was provided for support staff of institutions or temporary housing set up for victim support after the earthquake and regional care workers who have been present since before the earthquake (health care providers, school officials, etc.).

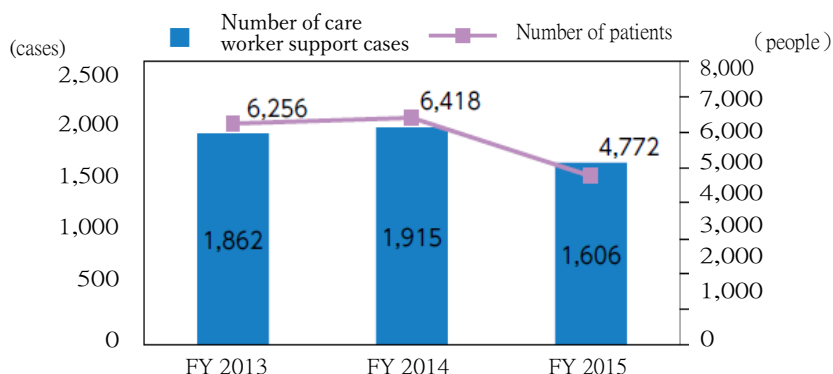


Figure 17 Changes in care worker support

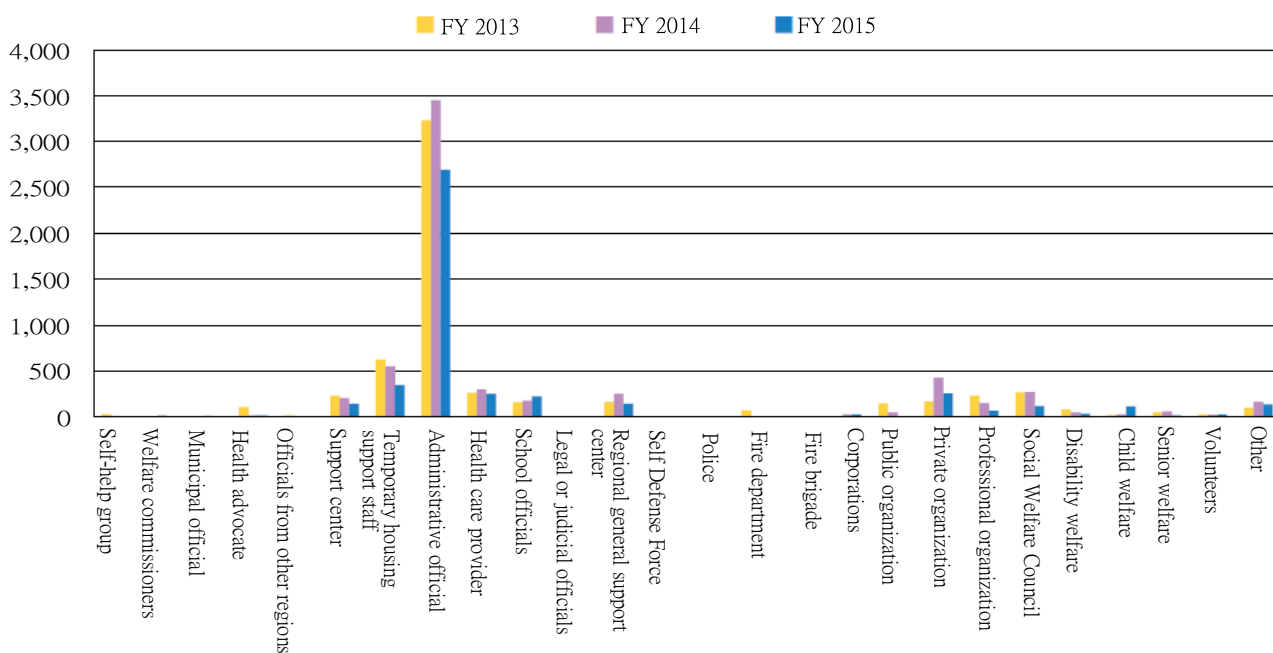


Figure 18 Changes in care worker support patients

The number of professional guidance and advice and the number of cases both decreased in FY 2015 (Figure 19). Breaking down professional guidance and advice (Figure 20), there was initially a high number of guidance/advice requests regarding depression, but this gradually decreased. Needs for Alcohol-related problems remain high. Guidance and advice for abuse problems have also increased. “Other” categories include cases with schizophrenia, dementia, and developmental problems, as well as advice on general support and advisors in study groups.

Administrative support was expected to decrease with time, but the quality of administrative support has changed with not only requests for direct support but also data analysis relating to victim support and collaboration with all forms of mental health welfare activities. Office work, including data analysis and activity operations, has increased, reflected this trend.

The establishment of mental health consultation desks for care workers has been ongoing as well, and support needs for the mental health of the care worker themselves have increased alongside workplace mental care even years after the earthquake

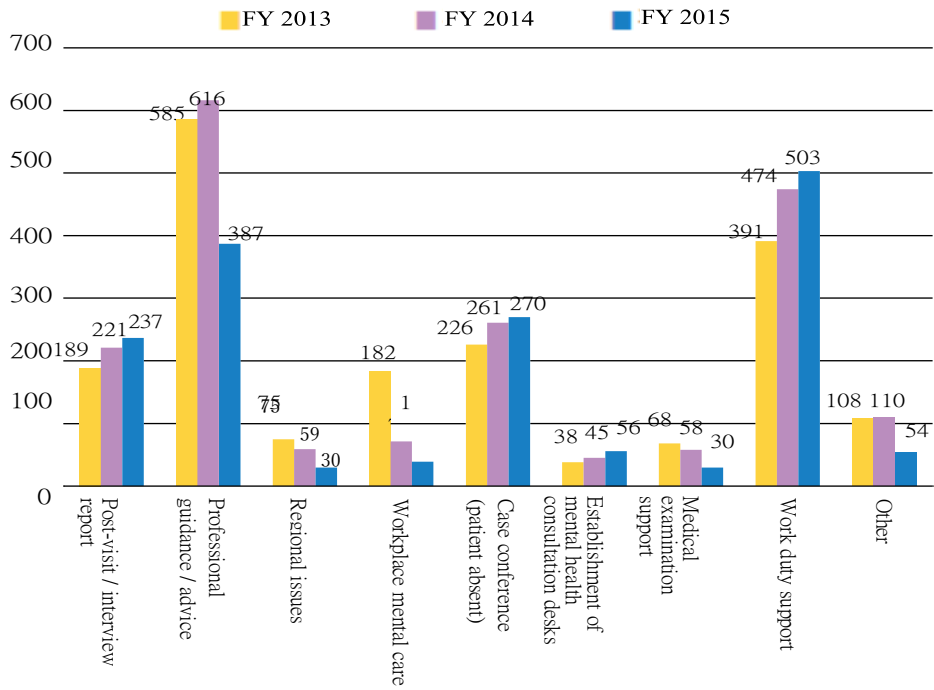


Figure 19 Changes in each care worker support activity

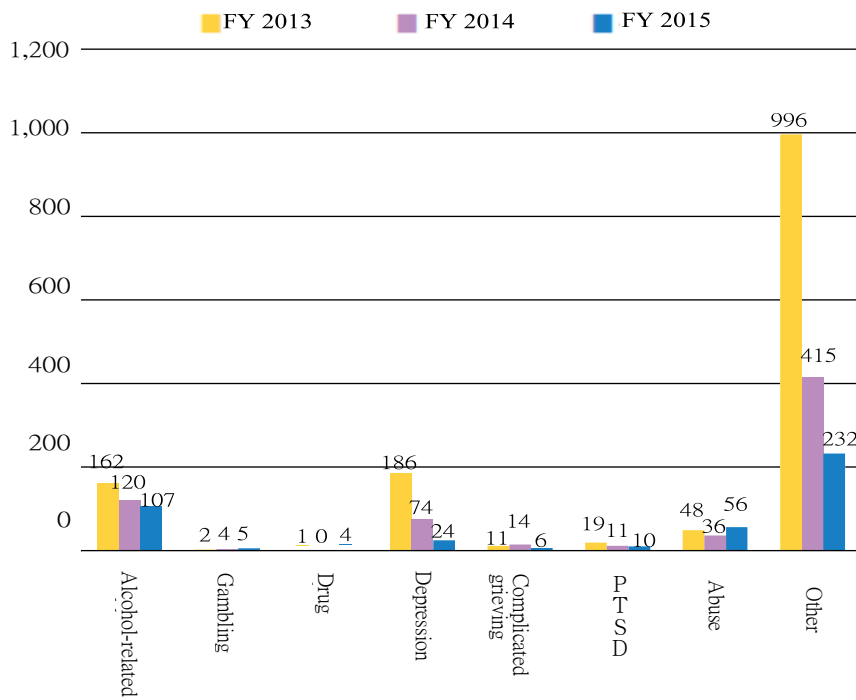


Figure 20 Changes in broken-down professional guidance and advice

Until now, a total of 16 individuals have been dispatched to 6 cities, 2 towns, and one health welfare office, and as of the end of FY 2015, eight individuals were dispatched to 5 cities and 2 towns. Dispatched staff members responded to the needs of each administrative agency and coordinated with mental health activities, as well as responding to activity support needs.

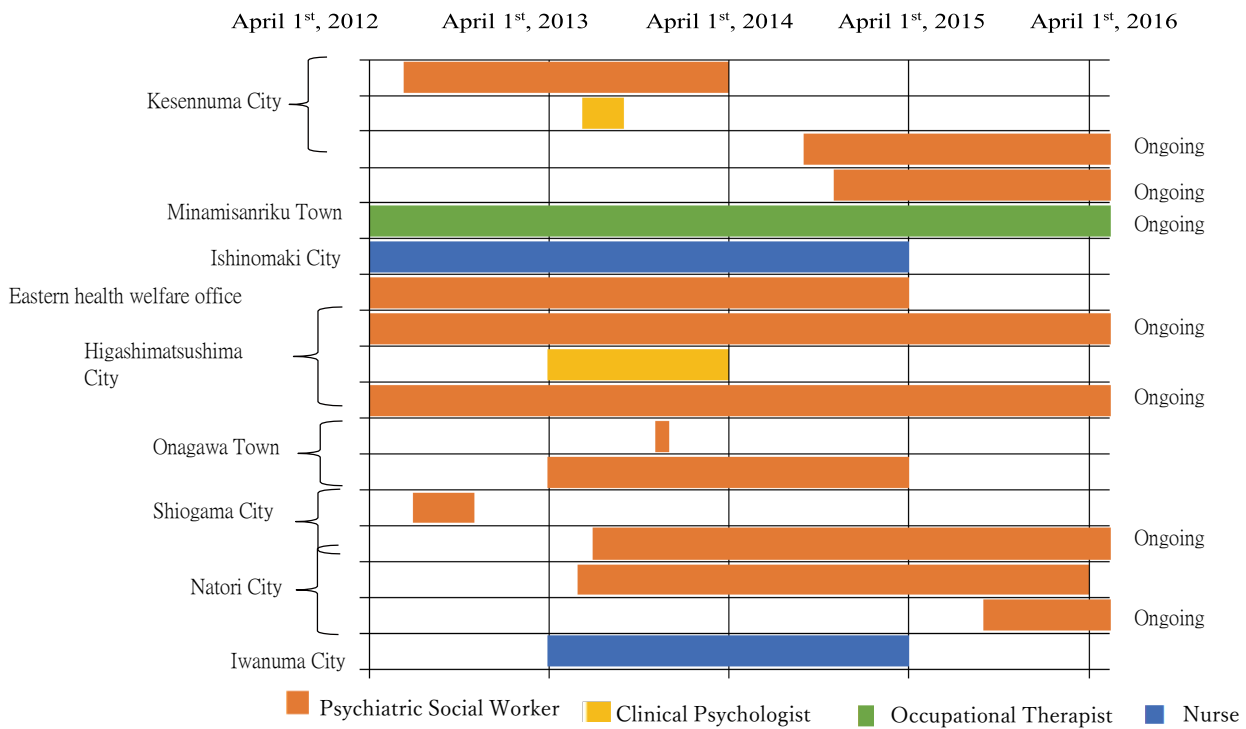


Figure 21 Deployment of dispatched staff members

③ Raising public awareness

The number of public awareness activities for the general public increased by over 100 cases from FY 2014 to FY 2015 (Figure 22). Simultaneously, the number of patients also increased by approximately 1000.

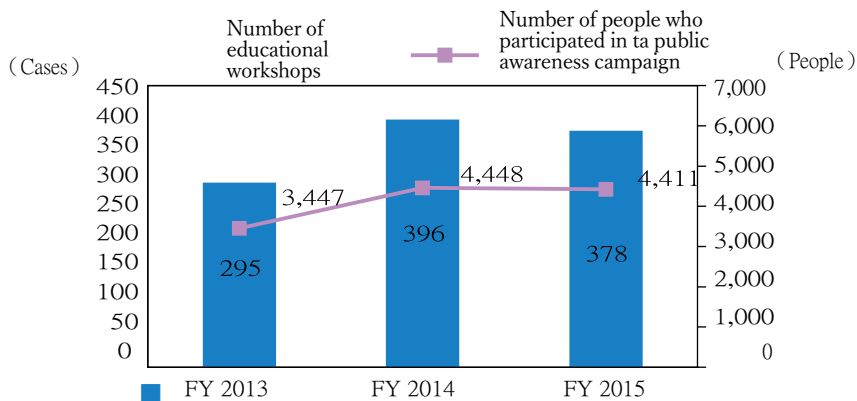


Figure 22 Changes in raising public

Conducting and cooperating with salon activities as well as educational workshops were the focus of public awareness activities. Salon events that have achieved their objectives of communication promotion were continued, but from FY 2015, salons targeted to specific regional issues, such as sobriety, dementia, and isolation prevention for individuals under the age of 60, were established. Additionally, in FY 2015, several salons were ended due to the withdrawal of institutions that hosted them or the end of victim support projects and there are salons that the center wishes to succeed and continue hosting.

There are initiatives related to alcohol-related problems that involved coordination with the Medical Corporation Tohokukai Tohokukai Hospital, the Miyagi Prefectural Danshukai, and other associated organizations. The number of regions that have been involved in the study group or sobriety meetings that include stakeholders to launch Danshukai in their area has gradually increased with time. Stakeholder participation in alcohol-related initiatives is an ongoing struggle, but we sought to stabilize this as a local resource by continuing to work with regional care workers. We hosted a training session relating to the basics of cognitive-behavioral therapy (mental training workshops) with the Tohoku University Department of Preventative Psychiatry. Additionally, upon request of the Miyagi branch of the Japan Health Insurance Association, we conducted lectures on workplace mental health in corporations until FY 2014, but in FY 2015, we established a contract with the association to conduct “mental health promotion delivered lectures” at 9 offices. There were over 770 participants in total, and it was an opportunity to raise public awareness to groups that work during the day and have difficulty connecting with support through individual home visits.

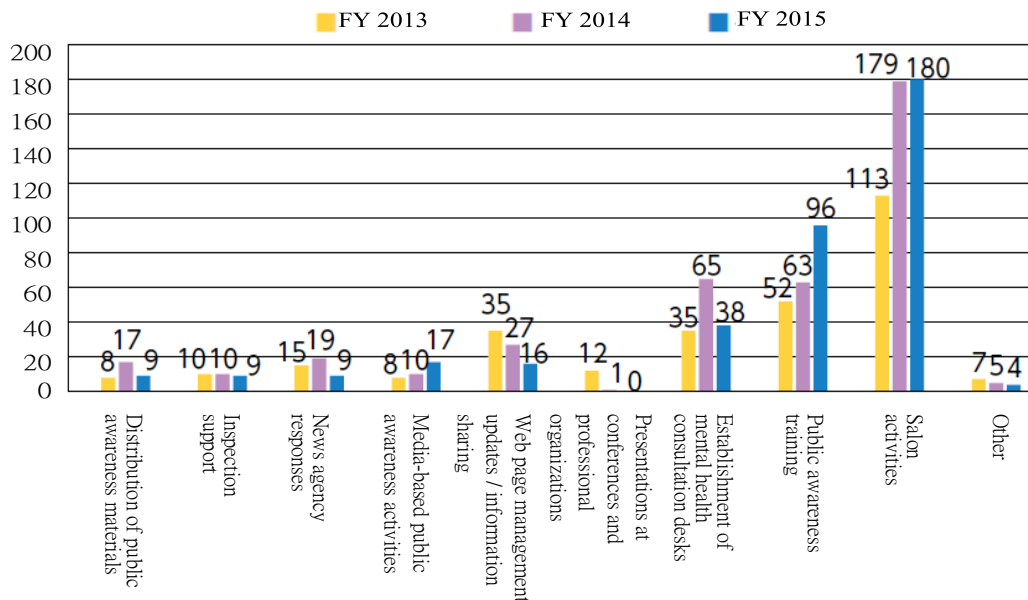


Figure 23 Changes in public awareness activities

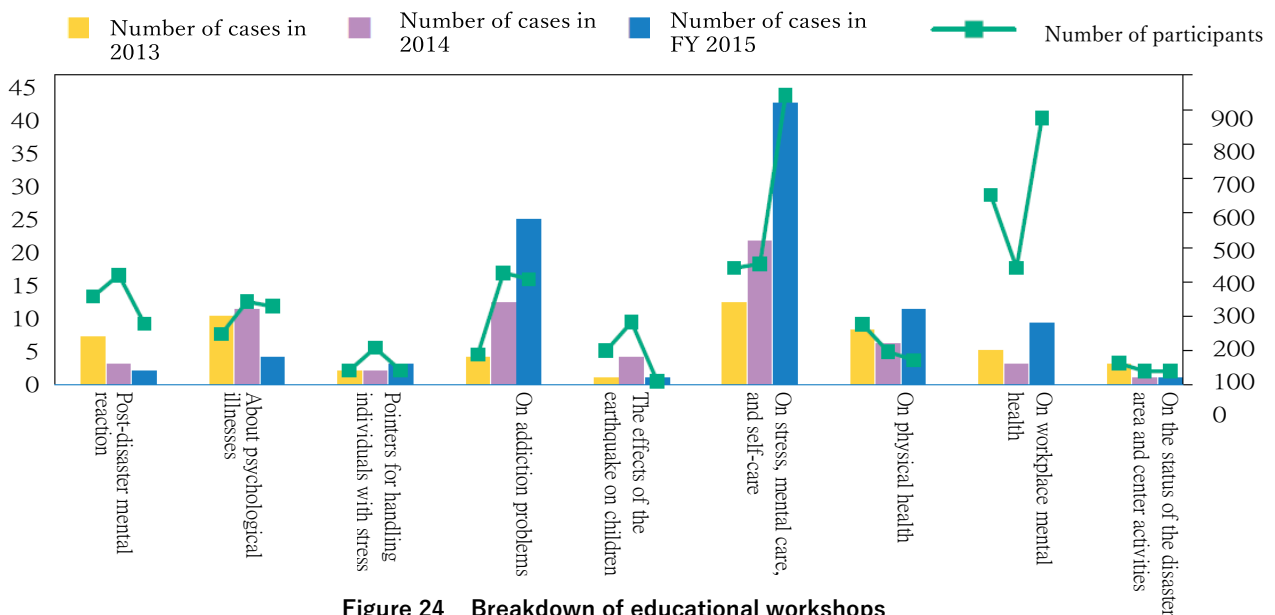


Figure 24 Breakdown of educational workshops

④ Human resource development

No major changes in the number of human resource development cases or patients were observed (Figure 25). Events were conducted for a wide range of professions, including welfare commissioners and school officials, and were centered around administrative officials (Figure 26). The number of temporary housing care support staff participants decreased, which corresponded to the decrease in container type temporary housing and the increased skills of these support staff. We also continued to provide support for the human resource needs of the general public, including gatekeepers and dementia supporters.

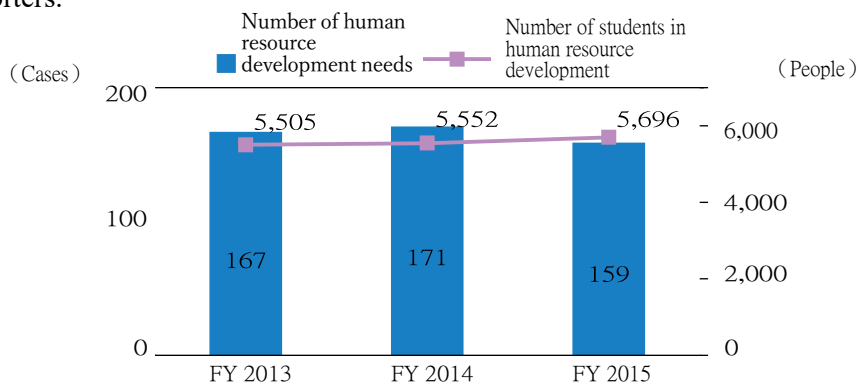


Figure 25 Changes in human resource development

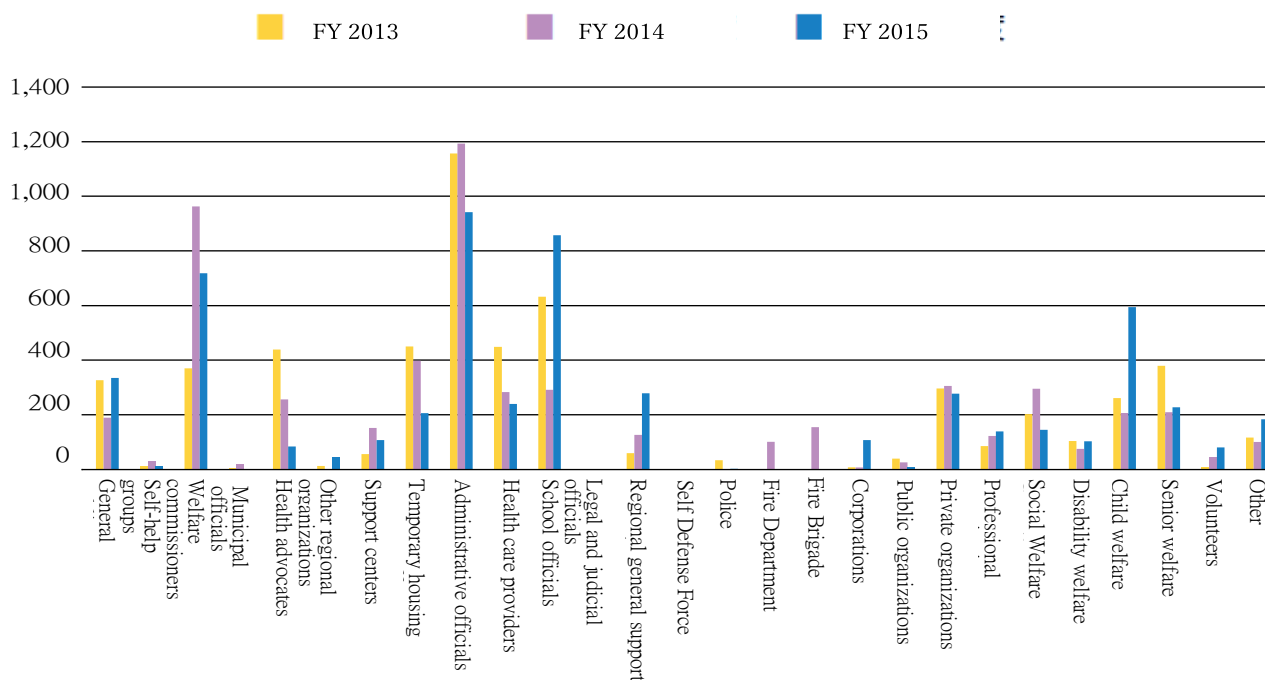


Figure 26 Changes in human resource development candidates

Workshops on addiction problems and support skills were the focus of human resource development care worker training content (Figure 27). Additionally, there was increased support for training needs relating to mental health in children. When broken down by support skill workshop, support for training needs relating to listening skills was consistently conducted since FY 2013 (Figure 28). Besides this, a wide range of content was implemented for the needs of each region, including psychological first aid (PFA).



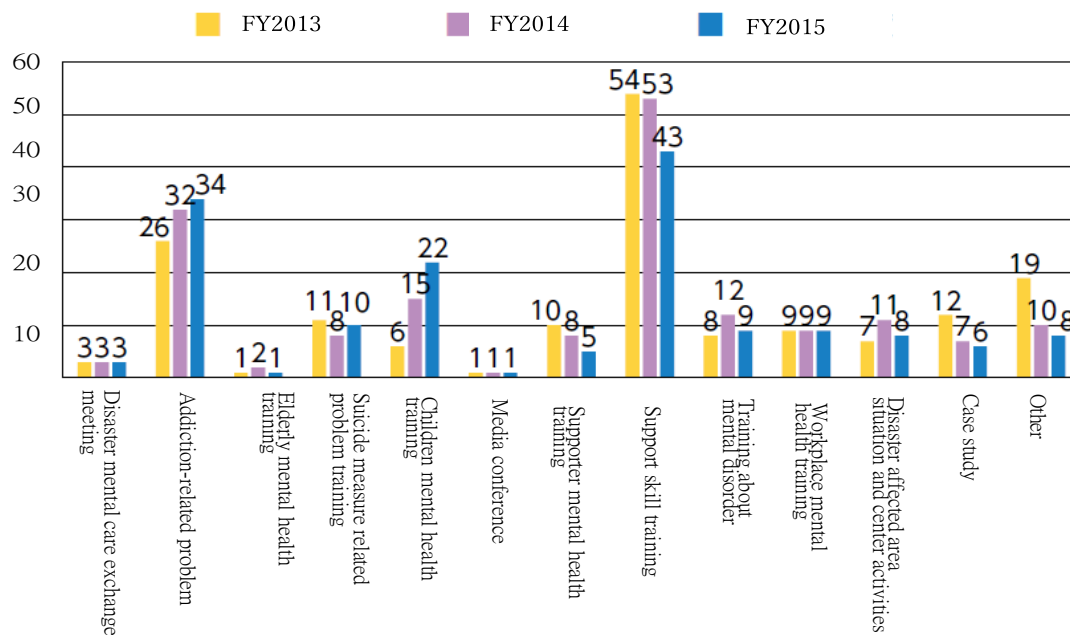


Figure 27 Changes in each human resource development

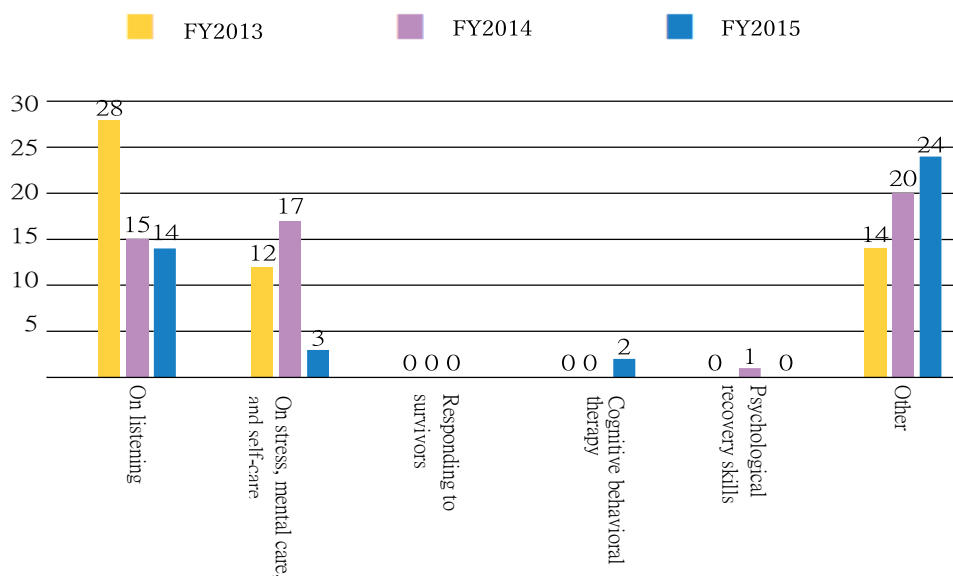


Figure 28 Breakdown of support skill workshops

The first mental health care meeting for disaster victims in Miyagi was sponsored by the Natural Disaster mental health care network Miyagi in FY 2011 for information sharing and network-building among care workers, and the second meeting was co-hosted with the center. They have been conducted in three locations within the prefecture every year and the meetings included timely themes, lectures, group work, and information exchange sessions. The number of participants has tended to decrease (Table 11), but we intend to continue these meetings in the future as they not only deepen collaborative efforts and provide the support that fits the actual conditions of each region, but so too do they provide mutual support among care workers involved in victim support.

**Table 11 Implementation status of mental health care meetings for disaster victims in Miyagi (FY 2012 onwards)**

Hosting time / location		Theme	Number of participants
FY 2012	Session 3 (Sendai City)	1 year and 8 months since the earthquake ~ current status of the disaster area and challenges)	60
	Session 4 (Ishinomaki City)	Discussing the present and future of victim support	83
FY 2013	Session 5 (Kesenuma City)	Reflecting on post-earthquake activities ~trying to build better relationships~	80
	Session 6 (Ishinomaki City)	Connecting the future, making the future	60
	Session 7 (Sendai City)	Making support connections a circle	81
FY 2014	Session 8 (Minamisanriku Town)	Support heading into the future	73
	Session 9 (Sendai City)	Making support connections a circle	49
	Session 10 (Ishinomaki City)	The people and forces heading into the future	33
FY 2015	Session 11 (Ishinomaki City)	Making support connections a circle	27
	Session 12 (Kesenuma City)	Anybody can support anybody ~ the resources of this city are “people” and	48
	Session 13 (Ishinomaki City)	“connections with people”~ Five years since the earthquake – discussing the present and future	63

\* the Natural Disaster Mental Health Care Network Miyagi sponsored the first meeting, and the center was a co-host from the second meeting onwards (first and second meetings were conducted in FY 2011).

## 4. Discussion

### (1) Resident support

Resident support provided by the center is an outreach activity for high-risk individuals based on health surveys primarily conducted on residents in container type temporary housing and privately rented temporary housing. For these reasons, this area a high percentage of patients who have suffered housing losses due to the earthquake witnessed or experienced life-threatening situations, environmental losses, and bereavement. As a result, these individuals needed a variety of psychological and psychosocial support. We collaborated with each organization to respond to individual cases and it was often the case that we would connect individuals to care workers who supported regional lifestyles, such as municipal managing division or temporary housing support staff. There were times where we also conducted casework that connected to diagnoses from appropriate medical institutions or accompanied visits by a doctor.

The fact that many victims receiving support at the center are senior citizens or unemployed individuals reflects the emphasis of initiatives on these demographic groups, which have previously been indicated as high risk. Meanwhile, this may also reflect the restrictive nature of the support system, which is concentrated during the day during weekdays. There are regions where we conduct visits on the weekends upon request of municipalities, and future challenges include how to approach groups that are difficult to encounter during the daytime hours of the weekday.

When the center was first established, there was a lot of support provided for individuals suffering from schizophrenia or mood disorders who'd suffered before the disaster, and increases were observed over time in the support for alcohol-related problems, as well as mood and stress disorders that began after the disaster. Furthermore, increased relocation to disaster public housing and the home reconstruction resulted in increased responses to individuals who have problems with self-sufficiency, various procedures, and communication, such as those with mild intellectual disabilities or those who have developmental problems. Additionally, when looking at the background of consultations, we can see that many responses included support for health for the mind and body, particularly sleep problems, mood and emotion-related

symptoms, anxiety, addiction disorders, and family problems. The number of consultations for addiction disorders has slightly decreased, but this may be a result of our efforts in care worker support and human resource development relating to alcohol problems, as well as the increased response capabilities of regional care workers. However, we believe that initiatives for alcohol-related problems require ongoing work, and the progress of such initiatives needs to be carefully monitored.

There are various victims receiving support at the center, ranging from healthy individuals to those with mental illness. Since the establishment of the center, our ongoing policy for regional resident support activities has been to continue detailed outreach activities and accompany victims, and to connect them to regional resources as needed in coordination with associated institutions. Future investigations on how staff members responded to various problems affecting regional residents and what approaches were effective will be necessary.

## (2) Care worker support

Care worker support can be considered in terms of the two following points. The first point is the quality and quantity of victim support. We conducted support relating to the fields of mental health by providing professional advice and guidance (i.e., supervising, case conferences) and meanwhile, we also continued administrative support as well as outreach based on government request and sought to reduce workloads. The center has conducted support in all regions of the prefecture except for Sendai city and the advantage within the center is that information in each region can be shared and initiatives in other regions can be taken back as a reference. In particular, the introduction of the dispatch system is thought to be effectively functioning in both the “quality and quantity” of support.

The second point is the support provided for the mental health of the care workers themselves in disaster areas and we are involved in initiatives such as providing support for workplace mental health and the establishment of mental wellness consultation booths for care workers. Many care workers have been overworked since immediately after the disaster, and they are victims. Perhaps the organizational support for line care and the opening of mental wellness consultation booths as a consultation source are demanded by the center to handle the fatigue of these care workers.

In this context, the number of cases where guidance and advice are given from professionals has decreased in FY 2015. This may indicate improved mental health-related support capabilities of regional care workers but ensuring a system that continues to provide effective care worker support while incorporating the changing needs of care worker support as the regional situation changes will be an important future issue.

## (3) Raising public awareness

With regards to raising public awareness in the general public, the need for addition and self-care skills, particularly the basics of cognitive-behavioral therapy (mental training workshops), has increased year by year. Even salon activities have become more restrictive in their audience, shifting from communication promotion to sobriety, dementia, and the prevention of isolation in relatively young demographics. This is likely a change from training and salon sessions that address a wide range of health issues relating to the mind and body to more specific needs corresponding to the issues of each region. Concerning salons, coordination with regional care workers needs to be strengthened and support needs to become autonomous to ensure that salons are established and continued as a regional resource.

## (4) Human resource development

There is an ongoing need for training relating to listening skills in workshops for care workers. It is thought care workers are being advised through individual cases in supervisions and case conferences with regards to individual support skills. These skills contribute not only to workshops for specialists but also for the development of gatekeepers and dementia supporters and will likely be connected to the expansion of human resources that manage regional mental health issues.

Increasing the communication of regional care workers and establishing smooth cooperation are also important roles of the center. Support organizations will withdraw from the area with time, but it is precisely for this reason that venues where care workers can gather and share current activities and issues,

such as the mental health care meetings for disaster victims, are thought to be important.

## 5. Conclusions

Reflecting on the past four years of activities since the establishment of the center, we can see that we have conducted activities alongside regional care workers, which include administrative public health nurses, in care worker support, raising public awareness, and human resource development, with a focus on resident support based on outreach. Kato (2016)<sup>3)</sup> has mentioned that the fundamental aspect of mental health countermeasures in recovery periods are “the activation of regional health networks and its reinforcement”. The center has also engaged in various projects, setting the coordination and collaboration with regional health networks as an important goal. It is thought that this aspect is reflected some extent in the present results as well. Additionally, the present results reinforce the fact that the activities of our center have addressed issues from multiple layers and angles and have responded to needs that have varied by region and period. In the future, we need to reflect on these initiatives to date and extract issues, further strengthen coordination with regional care workers, and conduct effective support that incorporates regional needs and situations.

This paper analyzed the results of center activities based primarily on the activity statistical system data, so we cannot discuss the characteristics of specific initiatives and their effects. Even initiatives that seem identical at first glance may vary in content depending on the region and period, so it is thought that we need to evaluate future changes, including qualitative investigations of the activities conducted.

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