Disaster Relief Report - The 2011 off the Pacific coast of Tohoku Earthquake @Minami-Sanriku City in Miyagi Prefecture

Minami Sanriku City Medical Headquarter Director
Miyagi Prefecture Emergency Medical Coordinator
Shizugawa Public Hospital Internal Medicine Department Chief
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Damages in Minami-Sanriku City

Before
- Population: 17,666 people
- Number of Household: 5,362 houses

After (05/07/2011)
- Number of Evacuee: 5,461 people (Max: 10,000 people)
- Number of Death: 509 people
- Number of Missing: 664 people
- Number of Damaged Household: 3,877 houses
- Flooded Houses in the City: 48%

Evacuation Shelters and the number of evacuees

- Utatsu Area: 14 Shelters, 1,970 people
- Iriya Area: 4 Shelters, 708 people
- Outside the Area: 2 Shelters, 720 people
- Shizugawa Area: 21 Shelters, 3,289 people
- Bayside Arena: 1,500 people
- Togura Area: 8 Shelters, 828 people
- Victims in Minami-Sanriku City: 49 Shelters, 7,515 people
Hospital and Clinics in Minami-Sanriku City Before the Disaster

- Shizugawa Area 5 Clinics
  - Shizugawa Public Hospital (126 beds)
    (internal medicine, surgery, orthopedics, pediatrics, otorhinolaryngology, ophthalmology, dermatology, urology, general practice, dental surgery)
- Utatsu Area 1 Clinic

After the Tsunami Disaster

Shizugawa Public Hospital

3rd Floor
- Tsunami wave came up to 5th floor
  → 300 people evacuated to the roof
- 74 admitted patients died (out of 109 patients)
- 3 hospital staff died

Hyper-acute Phase (Onset~Day2)

Role of disaster medical coordinator
- Set-up First-Aid Station
- Triage of many evacuees

Major Disease
- Multiple trauma
- Pneumonia

Problems
- Lack of everything (medicine, man-power, information, etc)
- Limited transport (Only helicopter available)
Main Evacuation Center in Shizugawa
Bayside Arena
(public gymnasium)

Acute Phase
(Day 2〜1 week)

Role of Emergency Medical Coordinator
• Arrangement of transport destinations of dialysis/in-home O₂ care patients
• Provide medicine to chronic disease patients
• Gathering information from each shelters
• Request medical goods including medicine
• Arrange medical teams from outside areas

Major Disease
• Dialysis/in-home O₂ care/mental disorder/pregnant
• Chronic disease (hypertension/hyperlipidemia/DM etc)

Problems
• Too many volunteer teams and medical equipment (including meds) in such a short period of time
• Arrangement donated medical equipment
• Gathering information
• Lack of pharmacist, administrations

First-Aid Station Clinic
(inside Bayside Arena)

Reception
Consultation Room
Pharmacy

Morning Conference and Health Cluster Meeting
**Sub-Acute Phase (1week ~ 1month)**

**Role of Disaster Medical Coordinator**
- Provide Routine Medical Care (traveling clinics and medical teams)

**Major Disease**
- Chronic Disease (Hypertension, Hyperlipidemia, DM etc)
- Infectious Disease (Influenza, infectious gastroenteritis)

**Problems**
- Recovery of lifeline (electronics, water)
- Lack of car and gas

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**Chronic Phase (1month ~)**

**Role of Disaster Medical Coordinator**
- Re-open local hospital and clinics
- Secure the transport to hospital/clinics
- Gathering shelters and mobile clinics to several places

**Major Disease**
- Chronic Disease (Hypertension, Hyperlipidemia, DM)
- PTSD
- Sleepless

**Problems**
- Lack of doctors (even in the normal time)

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**Israeli Medical Team**

**Shizugawa Public Hospital Temporary Clinic**

**Pharmacy**

**Waiting room**
Conclusion

• Centralized controlling the information
• Centralized chain of command
• Gathering information in the early phase
• Cooperating with administration, public health and medicine
• Acceptance of foreign medical team (Israel)
• Early recovery to the pre-disaster situation

Disaster Relief through Education

Daisuke Yamashita MD
Japan Primary Care Association
Oregon Health & Science University
Family Medicine

Challenges

• Changing nature of the project
• Changing needs of communities
• Variety in training background
• Time limitation
  – Preparation of the training and the training.
• Differences in nature of disasters
• Differences in community needs
• Limited human resources
  – Volunteer bases

Overview of Educational Support

• Acute/Subacute Phase (March to July)
  – Pre-participation training course
  – Disaster specific educational materials
• Chronic Phase (July to Current)
  – Psychological First Aid (PFA) for all participants
  – Family Medicine Residents “disaster relief rotation” teaching and formative evaluation
Plan of Improvement Cycle

Disaster Relief Training

Q2Mos

Knowledge Assessment
Usefulness Assessment
Focus Group
Self Assessment
External Evaluation

Feedback

Training for Relief Personnel

• Small group learning
• 5 to 10 participants with 1 to 2 facilitators
• Half-day long

Contents
• Information Sharing: Updates
• Mission briefing
• Case based learning

Educational Materials

• Summery of core contents: 4 to 5 pages
  – Printed as well as stored in iPad
• Voice over slides show
  – Streaming on web and iPad
• Cases for discussion
  – Facilitate multidisciplinary approach
  – Increase communication
  – Promote in depth understanding

Contents Area

• Home Care
• Nutrition
• Dental Care
• Care of Children
• Maternity Care
• Women’s Health
• Psychological First Aid
• Mental Health
• Infectious Disease
• Radiation Damage
• Coaching
Case 1

- You are participating in a community health event at a temporary housing. The event provides space for tea and snacks and you are there to listen to residents of the temporary housing units. Your group of volunteers consists of physicians, nurses, midwives, pharmacists, clinical psychologists and judicial scriveners. One of the residents reports that since the earthquake, he has not been able to sleep. It is getting better but he still wakes up in middle of the night with palpitations and vivid images of the day of earthquake. You suspect PTSD but you do not have enough knowledge. What will you do?

Feedback and Improvement

- Difficult to attend trainings (time)
- Want more updates and increased efficiency for handing over the project
- Increased updates and sign outs
- Reintroduced reports from recent workers
- Decreased time of contents learning
- Utilized case and group learning

Psychological First Aid (PFA) Training

Developed by Intra-Agency Standing Committee

- 10 to 15 participants with 1 to 2 facilitators
- Whole day: 7 hours

Contents

- Foundation of PFA
- Role play
- Case discussion
- Self-Care for PFA providers

http://www.who.int/mental_health/emergencies/en/
Support for Residents

- Provided through 4 weeks
- Scheduled reflection and discussion; weekly
  - Through internet-conference service
  - Semi Structured Reflection
    • What went well?
    • What could be done better?
    • Emotions around these reflections
    • Next Step
- Participant: Residents, PCAT educational director, supporting community faculties, mental health providers

Example of discussion

- How to listen to the patient’s disaster experience.
- How to manage large outpatient volume.
- How to organize home health care.
- Feedback for in-service lecture for nurses.

New Technologies

- Sharing of Resources through the internet
  - Web; http://akkie.mods.jp/311care/
  - SNS (Social Networking Site; ie Facebook)
- Tablet PC (ie; iPad)
- Online streaming
Disaster Preparation

• What are essential contents?
• What are essential skills?
• How do we prepare our residents for future disaster response?
• How do we prepare our organizations for disaster response?

PCAT ACTIVITY REPORT 2011
Japan Primary Care Association
Primary Care for All Team: PCAT

CONTENTS

• Starting Up
• Basic Policy of PCAT
• Special Features of PCAT (1, 2, 3-i, 3-ii)
• PCAT Calendar
• Project Details (1~33)
• PLAN for 2012 (①, ②)
• Counting Report

Starting up PCAT

1st March 2011
An earthquake of magnitude 9.0 occurred.

12th~13th March
Japan Primary Care Association established a new branch, Primary Care for All Team (a.k.a. PCAT), in contact with relief work.

14th March
PCAT sent doctors to investigate and provide support in the south of Shioya Pref. They settled in Fujisawa town hospital in Fujisawa town, a hub for northern Miyagi Pref. and for southern Tohoku Pref.
Investigated and confirmed the situation of the medical institutions, the medical personnel, and the damage of Kesennuma city.
Started to support medical personnel who were to treat the sufferers though they were victims themselves.

15th March
PCAT sent a doctor and an investigator to Fukushima Pref. and settled a hub in Yarumoto clinic in Tanezawa village for operation in Fukushima.
Investigated and confirmed the situation of the medical institutions in Tomone city, Iwaki city and the area within 30 km of the nuclear plants.
Continued the investigation there and started treatment in several small villages.

16th March
PCAT sent two doctors to the northern part of Miyagi Pref. and settled in Wakiura Hospital in Wakiura town, a hub for northern Miyagi Pref.
Investigated and confirmed the situation of the medical institutions in northern Miyagi Pref. (Shinchi city, Higashimatsushima city, Watanabe town), and northern Tohoku Pref. (Iwaki city, Osaki city, Taka city).
Went around regions and gathered information on expecting & nursing victims to find out about their safety.

In this way, PCAT expanded its activities from 1 Fujisawa hub in the southern part of Tohoku & the northern part of Miyagi, to Wakiura hub in northern Miyagi.
**Dr. Naito’s Activity 1**

**Departure for the Assessment Mission**

17th March
~16:00  Working at Jyuntendou University Hospital General Internal Medicine Department
16:00~  Call from JCPA
        Got Permission from Department
17:00~  Purchasing Materials for the Assessment Mission
19:00~  Flight from HANEDA airport to YAMAGATA airport
20:00~  Arriving YAMAGATA airport
Midnight Arriving FUJISAWA township Hospital (FUJISAWA BASE)

**Dr. Naito’s Activity 2**

**First Finding at Disastrous area**

*Evacuation Center*
- Missing people were posted all over evacuation centers

*Disaster Medical Assistance Team (DMAT)*
- Many physicians specializing in emergency medicine and surgical specialists had been dispatched.
- However, there were very few injured patients from the tsunami disaster and the need for these specialists had started to decline

*Lack of the Communication between Local Medical Association*
- Focused on establishing a communication network with members of the local medical association.
- 20 ‘au’ mobile phones were primarily loaned to the members of the Kesennuma medical association.

*Many local medical practitioners themselves had been affected, they had been working tirelessly*
- In order to relieve the local private-practice doctors
- Began to manage the evacuation centers including manning the night shifts.

*Local doctors involved in postmortem inspections*
- 20 to 40 victims per day (after day 7). Taking over these duties from them
- To resume their duties in providing healthcare services in the community and to prepare for the re-opening of their clinics.

**Dr. Naito’s Activity 3**

**Final Direction and Handover before left the Disastrous Area**

- Orientation and Distribution of the Medical Teams
  - There were many medical teams that hoped to assist in Kesennuma city.
  - However, details such as the dispatch location and description of activities had not been adequately assessed.
  - Provided pertinent local and instructed them on the dispatch location and description of activities.

- Emphasized the need for home-visit medical consultations
  - Especially in mountainous areas and remote areas
  - Partnership with local doctors.

- Creation of medical records

**Dr. Naito’s Activity 4**

**Endnotes**

- *Self Care and Emotional Control*
  - During the mission, I did not feel tired or mentally drained
  - After returning to Tokyo, tears started to fall uncontrollably.
  - Returned to work the next day to resume my regular duties however, I could not concentrate on my job at the university.

- *Vaccine Activity*
  - Pneumonia vaccine
  - CDC recommendation for adult evacuees of large-scale disasters:
    1. Pneumococcal polysaccharide vaccine for adults 55 years of age or older or those who are considered to be at high risk
    2. Influenza vaccine
    3. Tetanus and diphtheria

- *After Two Month and now…*
  - Re-visited Kesennuma and attended one of the vaccination sessions. For the first time, I felt a little at ease.
  - However, I still feel overwhelmed with guilt when thinking about Kesennuma.
  - I feel that when I left, I abandoned those who had been displaced by the disaster.
  - Among those involved in medical relief efforts and volunteer work, there may be quite a few people who feel the same way. In the face of such devastation, it is a mistake to think that one was at all helpful.
Fundamental Policies of PCAT

Through research and support of earthquake victims from March to early April 2011, we decided on the following basic policies for our relief work. They are based on five fundamental ideas: Accessibility, Comprehensiveness, Coordination, Continuity and Accountability.

Develop a bottom-up medical and health support system which emphasizes continuity, permanency, and the respect for local people and culture.

Organized support for neglected groups

Features of PCAT Activities

Organized support for neglected groups

One of the special features of the PCAT’s support is its Accessibility to the group/society/service who are neglected by Social Accountability.

Examples of the neglected groups that PCAT supports:
- The physically vulnerable: the elderly, the individuals requiring long-term care, the physically/mentally handicapped.
- The socially vulnerable: the victims at home (who did not take shelter), women (expecting and nursing mothers).
- The suffered aid workers: medical professionals (private clinic doctors, doctors, nurses and clerks of municipal hospitals), public officers (policemen, firemen, emergency life-saving technicians).

Absolute lack of the medical care services:
- Qualitative (night duty of doctors, obstetric medical care, palliative care and autopsy)
- Quantitative (The depopulated area which is difficult to access and which initially lack medical care: Motoyoshi district Kesennuma-Shi, Ogatsu district Ishinomaki-SN, and Kitakami district Ishinomaki-shi).

Feasibility of the intervention by PCAT: Motoyoshi district Kesennuma-Shi, Ogatsu district Ishinomaki-SN, and Kitakami district Ishinomaki-shi.

Absolute lack of the medical care service
- Motoyoshi district Kesennuma-Shi
- Ogatsu district Ishinomaki-SN
- Kitakami district Ishinomaki-shi

The area: idilative village, Minami-izouma-Shi etc. where many of the medical personnel and the youth were left despite the nuclear reactors and residual radioactivity.

Examples of the neglected groups that PCAT supports:
- The development of aid work in Kesennuma.

Medical personnel, who were disaster victims themselves, worked on autopsies that were neglected by external medical supporters. The PCAT substituted for these autopsies so that they could rest.

By supporting doctors in the affected areas to restart at-home diagnosis, we discovered that the victims dependent on residential care have been neglected. For the elderly victims who require long-term care, PCAT established a home-visiting supporting group called JRS, and launched a service which offers at-home diagnosis.

In the Motoyoshi district which originally was neglected medical care, PCAT found that there are many people who require long-term care and who are seriously ill. JRS cooperated with the new director of the Motoyoshi Hospital, and started a system to support Motoyoshi Hospital by sending resident doctors.

Features of PCAT Activities 1- ii

Understanding people’s needs and extending support through the efficient communication of information

A feature of PCAT activities is that victims in the disaster areas are seen and treated comprehensively. Through the coordination of a multidisciplinary health team, we were able to fully grasp the needs of victims. This also enabled a two-way flow of information: from victims to medical professionals, and from medical professionals to social workers and aid workers.

The problems observed by PCAT’s multidisciplinary health team:

- An increase in pneumonia among the elderly population and the solution

The increase of pneumonia among the elderly was reported to the headquarters for disaster control. The reported cause was the use of antibiotics by supporting physicians. New bacteria that are strongly resistant may have bred and caused infections to expand. For treatment, the Disasters Countermeasures office gave instructions to prescribe stronger antibiotics.

Examples of the intervention by PCAT: Motoyoshi district Kesennuma-Shi

- The doctors on night duty walk around the shelter, and see the elderly patients with aspiration pneumonitis.
- By communicating and collaborating with the multidisciplinary health teams, PCAT has the opportunity to discuss and consider the high risk of pneumonia.
- PCAT reported the possibility of an aspiration pneumonitis to be higher than the possibility of a spread of drug-resistant pneumonia.
- To PCAT executed these measures and also reported to the disaster countermeasures office to call for aid by other professionals.

Features of PCAT Activities 2

Understanding people’s needs and extending support through the efficient communication of information

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Features of PCAT’s activity 3- i

Extending continuous support by multidisciplinary professionals and volunteers

It is difficult to carry out the basic idea of Primary Care and maintain ‘Continuity’ in the practice. However, PCAT has been ruling the situation by using the concept of ‘Kizuna’, which means the ‘link’ between people.

The organizations that we have linked together:

- The rehabilitation nursing: Hiroshima University, Academy of Home Care Physicians, National Center of Neurology and Psychiatry, Japanese Midwives Association, Chronic Care Nurses of Japan

- Narita Clinic, Yu Home Clinic Ishinomaki, Kesennuma Otomo Hospital, Mori Obstetrics Clinic, Muraoka Surgical Clinic

- Onagawa Municipal Hospital, Ishinomaki Municipal Hospital, Ishinomaki Ogata Clinics, Ishinomaki Red Cross Hospital, Higashimatsushima City Hospital


- Iwate prefecture: Ichinoseki city, Fujisawa town, Toono city, Rikuzentakada city.

The organizations that we have linked together of “Kizuna”, which means the ‘link’ between people.

It is difficult to carry out the basic idea of Primary Care and to maintain ‘Continuity’ in the practice. However, PCAT has been ruling the situation by using the concept of ‘Kizuna’. It is a difficult task to introduce professionals to the Temporary housing areas.

Features of PCAT Activities 3- ii

- n. g. 1. The project of perinatal medical care in the northern part of Miyagi prefecture

Through the research conducted in Kesennuma, it was revealed that there was no information on the safety of maternity women. PCAT, Primary Care Obstetricians and midwifery nurses started a search for care for pregnant women. PCAT established a team of PCAT (Primary Care Obstetricians) consisting of the gynecologists and midwifery nurses, and began health consultations for pregnant women in shelters and at homes. PCAT cooperated with Japan Midwife Association and Tohoku Midwives Association to establish the ‘Tohoku Kizuna Project’, which aims to ensure that women are able to give a birth in safe places.

The public health nurse in Higashimatsushima city asked PCAT to visit newborn babies. PCAT started health consultations for the pregnant women, newborn babies, and newborn babies.

PCAT launched a mobile phone website for pregnant women and children.

It was discovered that over 60% of the facilities for childbirth in the northern part of Miyagi prefecture did not function. PCAT sent obstetricians and pediatricians to those areas where childbirths concentrated.

In Kesennuma area, children that were concentrated in Kesennuma City Hospital. To avoid the concentration of childbirths in one hospital and to enable reconstitution in the area, rebuilding the Midwifery Hospital became necessary.

Since PCAT cannot support this alone, our association asked the medical management consultant Mediva to help. The group for protecting the local medical care in the Tohoku disaster area was established and has started work.

- n. g. 2. The project to aid people who requiring special care in Ishinomakai city

From previous experience in Kesennuma city, we expected that people requiring long-term care at home are neglected. Thus, we made the decision to intervene in Ishinomakai City. We cooperated with the ‘HAREI’ (HAREI) which had already started the search for people requiring long-term care and investigated with them.

To gather more people requiring long-term care in one place, we cooperated with the Ishinomakai City Hospital team which was finally in charge of establishing the largest evacuee center for long-term care.

In association with the local welfare conference, we started to move the individuals requiring long-term care from the shelters to general nursing facilities; however, the lack of nursing facilities was a critical issues.

Because the Ishinomakai City Hospital was damaged, the patients suffering from terminal cancer concentrated in Ishinomakai Hospital. It pointed out the lack of palliative care services.

To offer medical and palliative care in temporary housing, we cooperated with caring and support societies (CSBS) to establish local health care services for temporary housing. PCAT continues to introduce professionals to this Home health care services for temporary housing. We also conduct health consultations in temporary housing and diagnostic visits for victims who require long-term care or who are terminally ill.

Activities in March

Works

red : Support for evacuee in shelters
green : for evacuees at home
blue : particular group
purple : public health support
orange : relief work for the residents in temporary housing

- PCAT conducted health consultations for pregnant women in shelters and at homes.
- PCAT conducted health consultations for the residents in temporary housing.
- PCAT provided health consultations for pregnant women in shelters.
- PCAT provided health consultations for the residents in temporary housing.
- PCAT provided health consultations for pregnant women in shelters.
- PCAT provided health consultations for the residents in temporary housing.

Project

- Fudosawa Hub (to Kesennuma city - Rikuzen Takata city)
  - Office of Dr. M
  - Medical support in the shelter K-Wave

- Kesennuma Hub (to Kesennuma city - Rikuzen Takata city)
  - Medical support in the shelter K-Wave

- Wakisawa Hub (to Ishinomakai city - Minami Sanriku city)
  - Medical support in the shelter K-Wave

- Ten-ri Murayama Hub (to all areas in Fukushima Pref.)
  - Medical support in the shelter K-Wave

- Project to aid people requiring special care in Ishinomakai city
  - Medical support in the shelter K-Wave

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### Activities in April

**Works**
- **red**: Support for evacuees in shelters
- **green**: for evacuees at home
- **blue**: particular group public health support
- **purple**: relief work for suffering doctors
- **orange**: relief work for the residents in temporary housing

**Projects**
- **Fujisawa Hub**
  - (to Kesennnuma city - Rikuzen-Takada city)
  - Medical support of home visiting care doctors
- **Wakuya Hub**
  - (to Ishinomaki city - Higashi-Matsushima city - Minami-Sanriku town)
  - Medical support for people requiring long-term care at home in Kihoku town
  - Medical support in the shelter Yu-Gakukan
- **Ten-Ei-Mura Hub**
  - (to all area in Fukushima Pref.)
    - Medical support in Ten-Ei-Mura Uмотo clinic
    - Health counseling in the shelter in Kihoku town

### Activities in May

**Works**
- **red**: Support to the evacuee in shelter
- **green**: to the evacuee at home
- **blue**: particular group public health support
- **purple**: relief work for suffering doctors
- **orange**: relief work for the residents in temporary housing

**Projects**
- **Fujisawa Hub**
  - (to Kesennnuma city - Rikuzen-Takada city)
  - Medical support in the shelter Kesennnuma High school
  - JRS, support team of home visiting care doctors
  - Oxfam project
- **Wakuya Hub**
  - (to Ishinomaki city - Higashi-Matsushima city - Minami-Sanriku town)
  - Search for pregnant women / Public health counseling (PCOT Project)
  - Relief of Dr. S: Medical support for people requiring long-term care at home in Kihoku town
  - Medical support in the shelter Yu-Gakukan
  - Oxfam project
- **Ten-Ei-Mura Hub**
  - (to all area in Fukushima Pref.)
    - Medical support in Ten-Ei-Mura Uмотo clinic
    - Health counseling in the shelter in Kihoku town

### Activities in June

**Works**
- **red**: Support for evacuees in shelters
- **green**: for evacuees at home
- **blue**: particular group public health support
- **purple**: relief work for suffering doctors
- **orange**: relief work for the residents in temporary housing

**Projects**
- **Fujisawa Hub**
  - (to Kesennnuma city - Rikuzen-Takada city)
  - Medical support of home visiting care doctors
- **Wakuya Hub**
  - (to Ishinomaki city - Higashi-Matsushima city - Minami-Sanriku town)
  - Medical support of people requiring long-term care at home in Kihoku town
  - Medical support in the shelter Yu-Gakukan
  - Medical support in the special shelter, Short Stay Base in K.S.S.
- **Ten-Ei-Mura Hub**
  - (to Iitatevillage Minami-Soma city/ Soma city.)
    - Health counseling to residents around the nuclear plant

### Activities in July

**Works**
- **red**: Support for evacuees in shelters
- **green**: for evacuees at home
- **blue**: particular group public health support
- **purple**: relief work for suffering doctors
- **orange**: relief work for the residents in temporary housing

**Projects**
- **Fujisawa Hub**
  - (to Kesennnuma city - Rikuzen-Takada city)
  - Health counseling in temporary housing (Health Café project)
- **Wakuya Hub**
  - (to Ishinomaki city - Higashi-Matsushima city - Minami-Sanriku town)
    - Medical support in the shelter Yu-Gakukan (Medical counseling in Yagatanba) (9 Project)
    - Medical support in the special shelter, Short Stay Base in K.S.S. (Medical counseling in S.S.B. 9 Project)
  - Oxfam project
- **Ten-Ei-Mura Hub**
  - (to Iitatevillage Minami-Soma city/ Soma city.)
    - Health counseling to residents around the nuclear plant

Activities in August

**Works**
- red: Support for evacuees in shelters
  - green: for evacuees at home
  - blue: particular group
  - purple: relief work for suffering doctors
  - orange: and damaged hospitals

**Projects**
- Fujisawa Hub
  (to Kesennuma city - Rikuzen-Takata city)
  - (in Japanese)
  - Health counseling in temporary housing (Health Care Project)
- Wakuya Hub
  (to Ishinomaki city - Miyagi Prefecture)
  - (in Japanese)
  - Health counseling in temporary housing (Health Care Project)
- Ten-ri-Mura Hub
  (to Ishinomaki city - Miyagi Prefecture)
  - (in Japanese)
  - Health counseling to residents around the nuclear plant

Activities in October

**Works**
- red: Support for evacuees in shelters
  - green: for evacuees at home
  - blue: particular group
  - purple: relief work for suffering doctors
  - orange: and damaged hospitals

**Projects**
- Fujisawa Hub
  (to Kesennuma city - Rikuzen-Takata city)
  - (in Japanese)
  - Health counseling in temporary housing (Health Care Project)
  - Mental counseling in temporary housing (Health Care Project)
  - Dispatch of residents doctors to Kesennuma Municipal Hospital
- Wakuya Hub
  (to Ishinomaki city - Miyagi Prefecture)
  - (in Japanese)
  - Health counseling in temporary housing (Health Care Project)
  - Mental counseling in temporary housing (Health Care Project)
  - Mental counseling for individuals in temporary housing
  - Health counseling for children in temporary housing
- Ten-ri-Mura Hub
  (to Ishinomaki city - Miyagi Prefecture)
  - (in Japanese)
  - Health counseling to residents around the nuclear plant

Activities in November

**Works**
- red: Support for evacuees in shelters
  - green: for evacuees at home
  - blue: particular group
  - purple: relief work for suffering doctors
  - orange: and damaged hospitals

**Projects**
- Fujisawa Hub
  (to Kesennuma city - Rikuzen-Takata city)
  - (in Japanese)
  - Health counseling in temporary housing (Health Care Project)
  - Mental counseling in temporary housing (Health Care Project)
  - Dispatch of residents doctors to Kesennuma Municipal Hospital
- Wakuya Hub
  (to Ishinomaki city - Miyagi Prefecture)
  - (in Japanese)
  - Health counseling in temporary housing (Health Care Project)
  - Mental counseling in temporary housing (Health Care Project)
  - Mental counseling for children in temporary housing
  - Health counseling for children in temporary housing
- Ten-ri-Mura Hub
  (to Ishinomaki city - Miyagi Prefecture)
  - (in Japanese)
  - Health counseling to residents around the nuclear plant

4/3/2012
Activities in December

Works
- red: Support for evacuees in shelters (for evacuees at home)
- blue: particular group
- purple: relief work for suffering doctors and damaged hospitals
- orange: relief work for the residents in temporary housing

Project
- Fujisawa Hub (to Kesennuma: Recovery-Takotamity)
  - Health counseling in temporary housing (Health Care Project)
  - Dispatch of resident doctors to Kesennuma Municipal Hospital
- Wako City Hub (to Kesennuma: Recovery-Takotamity/Weaver’s Settlement)
  - Child mirror counseling Project (PCOT Project), Support Dr.
  - Dispatch of rehabilitation specialist ("W" Project)
  - Health counseling in temporary housing (Health Care Project)
  - Mental counseling in temporary housing ("W" Project)
  - Mental counseling for staff workers ("W" Project)
  - Dispatch of doctors to the persons requiring long-term care in temporary housing
- Tomioka Mura Hub (to Ishinomaki: MinamiSoma city/Soma city)
  - Health counseling in temporary housing (Health Care Project)
  - Dispatch of rehabilitation specialists to MinamiSoma Municipal Hospital

Number of the doctors dispatched

<table>
<thead>
<tr>
<th>Profession</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physicians</td>
<td>209</td>
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<tr>
<td>Obstetricians and Gynecologists</td>
<td>10</td>
</tr>
<tr>
<td>Midwives</td>
<td>22</td>
</tr>
<tr>
<td>Registered Nurses</td>
<td>49</td>
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<tr>
<td>Pharmacists</td>
<td>27</td>
</tr>
<tr>
<td>Acupuncturists</td>
<td>64</td>
</tr>
<tr>
<td>Medical Students</td>
<td>15</td>
</tr>
<tr>
<td>Mite Buster, Mold Researchers</td>
<td>13</td>
</tr>
<tr>
<td>Dentists, Hygienists</td>
<td>11</td>
</tr>
<tr>
<td>Physical Therapists, Occupational Therapists, Rehabilitation Staff</td>
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<tr>
<td>Public Health Nurses</td>
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<tr>
<td>Nutritionists</td>
<td>8</td>
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<tr>
<td>Social Welfare Workers</td>
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<td>Psychologists</td>
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<tr>
<td>Emergency Rescuers</td>
<td>9</td>
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<tr>
<td>Office staff</td>
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<tr>
<td>Volunteers</td>
<td>11</td>
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<tr>
<td>others</td>
<td>25</td>
</tr>
<tr>
<td>Total</td>
<td>530</td>
</tr>
</tbody>
</table>

Activities in January

Works
- red: Support for evacuees in shelters (for evacuees at home)
- blue: particular group
- purple: relief work for suffering doctors and damaged hospitals
- orange: relief work for the residents in temporary housing

Project
- Fujisawa Hub (to Kesennuma: Recovery-Takotamity)
  - Health counseling in temporary housing (Health Care Project)
  - Dispatch of resident doctors to Kesennuma Municipal Hospital
- Wako City Hub (to Kesennuma: Recovery-Takotamity/Weaver’s Settlement)
  - Child mirror counseling Project (PCOT Project), Support Dr.
  - Dispatch of rehabilitation specialist ("W" Project)
  - Health counseling in temporary housing (Health Care Project)
  - Mental counseling in temporary housing ("W" Project)
  - Mental counseling for staff workers ("W" Project)
  - Dispatch of doctors to the persons requiring long-term care in temporary housing
- Tomioka Mura Hub (to Ishinomaki: MinamiSoma city/Soma city)
  - Health counseling in temporary housing (Health Care Project)
  - Dispatch of rehabilitation specialists to MinamiSoma Municipal Hospital

Project Details 1

① Support for Doctor S’s rescue efforts

Doctor S is an orthopaedist in Kesennuma whose home and clinic were entirely lost to the earthquake and Tsunami. When he reached the K-Wave gymnasium during the disaster by swimming, he faced a grave situation and saw that people needed him. He immediately started examinations but lacked the necessary medicines and tools. Even though there were many patients in serious condition, there was not a way for him to contact the hospitals to receive aid or to send these patients out.

The PCAT group discovered Doctor S’s situation and how other medical personnel in Kesennuma also did not have means for communication. The PCAT donated 20 mobile phones through the Kesennuma medical association, so that members contact the headquarters for disaster control and medical associations. (19 March, 2011)

In the K-Wave gymnasium, the DMAT and IMAT who were there to help set their regulation hours from 9am to 3pm. Doctor S had to see the 2000 evacuees during the remaining 18 hours without sleep and rest. Through this, he became physically and mentally fatigued.

PCAT helped Doctor S on May 21, 10 days after the earthquake. Following this, PCAT started medical support for K-Wave gymnasium which included night medical examinations.

(3 dispatched doctors and 1 voluntary worker)
The headquarters for disaster control increased and the medical health environment in the shelters stabilized.

society, our relief work in the K

With new accumulated knowledge on disaster medical care and the treatment in the shelters in the aging care in shelters.

The point previously mentioned about "The cause of an increase in pneumonia among the elderly condition during the 18 hours. The J-MAT’s system of fixed daytime hours and the situation of doctors not having the time to research the cause of the symptoms are issues to be considered for the future.

Project Details ②- ii

Research and the support in K-WAVE shelter.

① On the 11th day after the earthquake, a PCAT doctor was asked at night by the J-MAT team to observe a child with dehydration symptoms. On that night, several patients claimed to have stomachaches and asked for examinations. The PCAT doctor speculated that people showing signs of gastrogenic, watery diarrhea meant that an infectious disease could be spreading. By doing research, the doctor supposed that the indoor toilets were the cause.

Over 2000 people were using the 20 flush toilets that could not be flush. When people tried to flush with the bottled water, dirt scattered. People could not wash their hands because there was no running water, no alcohol and no towels. With cleaning done only one time a day, it was natural that bacteria and viruses spread.

Accordingly, PCAT and a group of public nurses called CANNUS cooperated and collected high school student volunteers and started to clean four times a day using chlorine. After that, we reported this case to the Self-Defence forces, the person in charge in the shelter, and the headquarters for disaster control. We discussed the fundamental measures such as creating volunteer groups that could be taken and applied it to all of the shelters.

On the night of the 18th, patients with fever increased to 30 people. During the daytime, two of these patients were isolated in a private room with doubts of having influenza. To prevent the spread of the flu, there was a need to set up a special medical office for fevers and to communicate the situation among all evacuees to prevent the further spread of the infection. On that night, we set a large secluded space for the patients and started preventive administration to the people who were around the infected patients. We informed this method of infection prevention to the heads of each group in the shelter, and set up a medical office for fevers by the next morning. We reported these methods to J-MAT and the headquarters for disaster control. After this, our methods were followed by many other shelters as a role model.

Project Details ③

The support for Doctor M

Doctor M owns a surgical clinic. His house and the clinic were completely destroyed by the earthquake and tsunami. After the earthquake, all of the family members took refuge in Kesennuma high school, Kesennuma junior high school, and the public hall. On the second day, the local residents who found Doctor M complained about their health conditions and their anxieties.

Because people took refuge by the unit in the area where M clinic is situated, Doctor M was strongly linked with the local residents and refused outside intervention. However, he gradually came to accept the PCAT’s stance which respected the locals. Also, Doctor M started to speak out about the fear, anxieties, and terror of the experiences he and the locals hesitated to reveal until then.

PCAT’s support gave Doctor M the time to start research his home-visiting patients. With this, the situation of the people requiring care at home was revealed and it led to the establishment of a home-visiting supporting group (JRS) in Kesennuma, as seen in the Features of PCAT Activities 1.

(3 Dispatched doctors, 1 beneficiary)
After the initial support for the Doctor M, PCAT took over the night duties and Doctor M’s responsibilities. At that time, there were about 1800 evacuees in the coalition of shelters consisting of Kesennuma junior high school, Kesennuma elementary school and the public hall. The three shelters together held the second largest number of evacuees following K-Wave. Because there were three locations, the issue with public hygiene was not as serious compared to K-Wave. Yet, the PCAT conducted examinations thoroughly at these shelters based on its basic policy of interdisciplinary intervention.

The findings mentioned in ‘Special Features of PCAT 2’ were discovered in these combined shelters, except for the discovery of aspiration pneumonitis patients found in K-Wave. Information contributed to swiftly improving shelter administration and the support of victims.

Although the shelter was divided into three locations, the symptoms of cough spread among the elderly. While living spaces were divided, condition was very poor and infection tended to spread between the shelters. Therefore, it was necessary to intervene and prevent the weak elderly from infectious diseases. In this case, we concluded that pneumococcus vaccine was needed to prevent the infection of pneumonia. In Japan, since the rate of people who have received vaccination for measles is very high, we inoculated against pneumococcus.

(56 dispatched doctors in Kesennuma area, 10 nurses, dispatched dietitian, 4 physiotherapists and occupational therapists, 55 acupuncturist shared the projects. 1800 beneficiaries)

The supports of the shelter in Ogatsu Ootsu Junior High School.

In Ishinomaki city, even after three weeks after the disaster, there was a lack of aid in distant and less accessible areas. The area which required support was too vast while the area in which the headquarters for disaster control regulated was limited. There were also not enough medical teams dispatched. The request for support from the shelter of Ohtsu primary school came to PCAT through the local hygenia.

We moved the PCAT doctors who were at K-Wave in Kesennuma to Wakuya town to support Ohsu junior high school. Initially, the area was mountainous and inconvenient for access. The road condition was also very poor. Furthermore, we received information that a group of people likely to be locals held up and robbed a car which belonged to the supporting group. With extra security precautions, we dispatched additional medical personnel and provided support.

PCAT finished the relief work in Ogatsu Ohtsu junior high school after Ishinomaki headquarters for disaster control was reinstated. Although most of our medical team was once withdrawn, we now support Yu-Shin-En, which was once a temporary clinic in the temporary housing area in Ogatsu.

(One dispatched doctor, One dispatched nurse, 500 beneficiaries)

The search of expectant and nursing mothers and health consultation support. (PCOT Project)

PCOT (Primary Care for Obstetrics Team) was established as a special unit of the PCAT. On March 24th, the second week after the disaster, a PCAT doctor was dispatched to help the coordinator in Minami-Sanriku town, Doctor N, take time off to rest. The dispatched doctor and Dr N discovered a lack of information on the safety of expectant and nursing mothers and that mapping was also not done. At that time, none of the doctors sent to Minami-Sanriku town specialized in obstetrics and gynecology. So in response, PCAT dispatched a primary care obstetrician and a midwife to Wakuya hub, where Ishinomaki city and Minami-Sanriku town are accessible.

PCAT searched the areas where public transportation and telecommunication were stopped, and confirmed the safety of expectant and nursing mothers. Brief medical checks were offered to them. To the foreign mothers who did not speak Japanese, a translator from Tokyo was dispatched for support.

(Two dispatched Primary care doctors, One obstetrician and gynecologist, two pediatricians, two midwives)

The support for the clinic in Tenei town.

The relief work started with supporting the Yumoto clinic in Tenei town, where Doctor Y examined patients. Due to the particular situation with the nuclear power plant accident in Fukushima, we chose to support the clinic in Tenei town which is located a little distant from the disaster area. The PCAT doctors in Tenei contacted the local medical association and the disaster countermeasures office to arrange relief work and support the area affected by the nuclear disaster.

We helped Doctor Y, who had been working continuously since the disaster first hit, to take some time to rest. We established the smaller hub in Koriyama 9 days after the disaster, to take some time to rest. The dispatched doctor and Dr N discovered a lack of information on the safety of expectant and nursing mothers and that mapping was also not done. At that time, none of the doctors sent to Minami-Sanriku town specialized in obstetrics and gynecology. So in response, PCAT dispatched a primary care obstetrician and a midwife to Wakuya hub, where Ishinomaki city and Minami-Sanriku town are accessible.

The visits for medical care and health consultations in Tenei town continued until May 2009 until the sub-acute phase of the disaster passed. We terminated the work as the situation stabilized.

The above activities were later developed into the 10 project, which provides health consultation for residents living near the nuclear plants. We collaborated with the Kami laboratory of the Institute of Medical Science at the University of Tokyo.

(5 dispatched doctors and 1 coordinator)
Project Details

① Shelter health consultations in the area 25km from the nuclear plants. (see project details ⑦)

On March 19th, 8 days after the disaster and 1 week after the realization of the nuclear accident, PCAT dispatched a medical team to Fukushima pref.

The aim of this team was to measure the radiation dose of the area around the nuclear power plants as well as to support the doctors in⑦ the ‘Yumoto clinic in Tenrei town’. We visited the Hamadoori area (Iwaki city in the south, Minami-Soma city in the north, and Tamura town in the west) to measure the radiation levels in these areas and share the information with subsequent health care teams.

In addition, we stopped at several shelters along the way to respond to the managers at the shelters who requested their patients to be seen.

(8 dispatched doctors, 1 coordinator)

Project Details

② Project for the home visiting aid group (JRS)

Support for the home visiting aid group (JRS)

【Reference p.5 Features of PCAT's activities and p.25 The support for Doctor M.】

The condition of the patient who the PCAT had examined for Doctor M deteriorated. Saving this, headquarters for disaster control in Kesennuma had the need for special support for at-home disaster victims requiring long-term care.

At the same time, PCAT, which mainly targeted its support for the aged, at home victims requiring long-term care, and the area lack of medical care, were strongly asked from the headquarters for the disaster controlo participate in the team that does medical care visits for the victims in the mountainous area in Kesennuma (Karakuwa peninsula). On 26 March, a PCAT coordinator cooperated with a NY doctor who examines mainly in Matsuyama city in Ehime pref. A nurse who is a professor at the Miyagi University School of Nursing and another nurse in Kesennuma-honcho established a committee to improve medical care for the people requiring long-term care in Kesennuma. Doctor M became the representative of the special committee on the next day. PCAT took on the responsibility of coordinating and dispatching home visiting doctors, and also started mapping these activities. Later, the doctors who were researching in the Motoyoashi area in Karakuwa peninsula and ‘NPO Share’ joined in the activities. The team helping the at-home victims requiring long-term care was named as JRS (home-visiting medical supporting group).

JRS conducted the relief work, involving the many volunteer medical personnel. The work finished at the end of August and we entrusted the core for people requiring long-term medical care at home to the local revived institution.

PCAT has been continuing support by setting the Motoyoashi district as the central area for patients with most serious symptoms. PCAT dispatches Primary care doctors and resident doctors to Kesennuma City Motoyoashi hospital, which is the only one medical institution in the area.

(Some of 56 dispatched doctors to Kesennuma area and 10 dispatched nurses joined in the activities. 262 beneficiaries.)

Project Details

③ The support for Doctor N and the medical support for disaster victims requiring long-term care at home in Kesennuma area.

In previous projects (①) the search for neglected mothers and the health consultation support (PCCT project) and ⑥ the support for the shelter of the Ogatsu-chou Junior High School, it was realized that many victims especially in Ishinomaki city were neglected in terms of medical care and needed support. Since PCAT could not conduct research by itself on the people requiring long-term care at home, we gained information from doctors who were doing home visiting care.

We were able to obtain information from Doctor N, who had been doing home visiting examinations in Kesennuma area. This area is the largest in Ishinomaki and it is where population is sparsely spread. Also, the local public care nurse and NGO JIC-NET provided us information. With this, we conducted medical support for the disaster victims requiring long-term care.

This PCAT support enabled Doctor N, a pediatrician, to visit Kesennuma and Ogatsu area to conduct children’s care activities with the local nurses. He offered protective inoculation to new-born babies and children. The PCAT’s dispatched pediatricians conducted observations and examinations for children requiring continuous medical care.

The medical support for people requiring long-term care and Doctor N’s support in children’s care were continued until June 2011. Due to the stabilization of the medical environment, projects except children’s examinations finished.

(102 dispatched doctors, 33 nurses, 32 pharmacists in Ishinomaki city conducted the work together.)

Project Details

④ Project for the Fukushima Yurakukan welfare shelter (see Features of PCAT Activities 3-8 a.g.)

Ishinomaki city has the second largest population and the largest area in Miyagi prefecture. Therefore, PCAT’s target population is large; there are many elderly people and people who require long-term care. In addition, there were a considerable number of the victims requiring visiting examinations and at-home medical care. In order to provide support effectively, it was necessary to gather these victims requiring long-term care and the specialists offering the medical care. Under this situation, the largest welfare shelter in this area was created using the cultural institution called ‘Yurakukan’, located a little distant from the coast.

PCAT established this facility with 120 beds, 20 of which were electrically powered beds. We cooperated with external groups including the Japan Association of Medical Social Workers in Health Services, the health care team gathered by Japan National Council of Social Welfare, the Hokkaido administrative team, and the general volunteer groups such as Peace Boat. The team who contributed most to the establishment was the Ishinomaki city hospital medical care team, whose members critically suffered from the disaster themselves and had finally evacuated after one week of the disaster. Features of PCAT activities such as the support for neglected people was seen in this project, as we cooperated with the Ishinomaki city hospital medical care team to support the victims.

The first activity at the Yurakukan welfare shelter was repairing the facility. To facilitate care, toilets and slopes were repaired, beds were made out of cardboard, and electric powered beds were introduced. We intervened in various ways: we provided individuals with meals overseen by the nutritionists and introduced rehabilitation programs that would better the ADL of survivors. At the same time, preparation for closing the temporary shelters started. Medical Social Workers, doctors, care workers, care managers, and clinical psychologists contributed to making this process effective, discussing and executing the closings together. As a result, the shelter which held at most 100 people could replace the evacuees to new locations by the end of October.

(102 dispatched doctors in Ishinomaki city, 33 nurses, and 32 pharmacists worked together. 100 beneficiaries.)
**Project Details**

⑫ Health consultation for evacuees living around the Fukushima nuclear power plants in Koriyama district. (see Project⑧.)

PCAT substituted examinations for Doctor Y in Yumoto clinic in Tenei town, and supported the shelters located within the 25km radius of the nuclear power plant. The PCAT research team was also involved in setting a small hub in Koriyama city. As time progressed, shelters were established in the suburban facilities around Koriyama city.

In Koriyama city, where the damages from the disaster was limited, medical examination could be conducted normally after several weeks. However, the sufferers in Hamadori area, who had to move to the suburban shelter had difficulty getting transportation to distant medical facilities. Particularly, the aged tended to hesitate asking their families for help because their families had also suffered from the disaster. So although their chronic maladies deteriorated, they tended to keep the fact to themselves. PCAT conducted visiting examinations for evacuees living in the suburbs of Koriyama city, based on the information obtained by the research team. Later, we reported our findings on the lack of transportation for patients and worked with the local medical association to improve the situation. We finished the project in this district with this activity.

(3 dispatched doctors)

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**Project Details**

⑬ RHITE Project

RHITE is an abbreviation of ‘Research and Health Improvement and Tohoku Empowerment’. This project was established in collaboration with the School of International Health: The University of Tokyo, and Jichi Medical University. We researched preventive medicine in the stricken area and conducted medical examinations to contribute to the revitalization of the Tohoku area.

The process was similar to a mass medical examination, but specifically, we conducted examinations that consisted of an optional blood test and a questionnaire created by the professors with different specialities. We returned the examination results to the evacuees and gave them advice in terms of medical and health care. Based on the mental care related questions in the questionnaire, PCAT doctors conducted medical examination.

In early May 2011, approximately 500 people were examined in Kesennuma, Minami-Sanriku, and Ishinomaki.

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**Project Details**

⑭ Vaccination against pneumococcal.

From May 12th (three months after the occurrence of the earthquake), we gave pneumococcal vaccinations to 5500 elderly people at the Kesennuma shelter for free. The flu season had already passed at that time, and the pneumococcal was the biggest factor that could cause death for the elderly. We executed this project because the vaccination was the most effective method for prevention.

By collaborating with the headquarters for disaster control in Kesennuma, Kesennuma medical association and Juntendo University, we conducted this project. Vaccinations were given on site by J-MAT which were dispatched from each prefecture. The preparation for the cold chain was conducted by the PCAT doctors and coordinators.

(5 dispatched doctors and coordinators. 5500 beneficiaries.)
In August, many people moved into temporary housings and the necessity of the SSB gradually decreased. Local hospitals became critical and patients with chronic maladies or mental diseases all could get infected or get stressed easily under these conditions. Therefore, the doctors were shocked that the disaster and mental stress had triggered suicides in adolescents. In response to this, PCAT decided to approach mental care in terms of primary care and family therapy. In addition, PCAT underlined the importance of supporting care for aid workers such as doctors and policemen. These things developed into the Project, which have been the starting point of mental care activities led by the PCAT.

To solve the problem, a special shelter called SSB (Short Stay Base) was established in a vacant hospital ward. There was no chronic maladies or other health issues. We conducted adequate medical treatments and moved the patients to suitable medical facilities.

SSB special shelter support

In Ishinomaki, the transition to temporary housings was delayed due to the large number of shelters. The long-term stay in the shelter stressed not only the aged requiring long-term care but also the general people living in the shelters. Babies, infants, school age children, adolescents, and patients with chronic maladies or mental diseases all could get infected or get stressed easily under these conditions. There were no private spaces and it was difficult to cope with the situation in a communal living. This could cause the expansion of infections and bring about further stress on people.

To solve this problem, a special shelter called SSB (Short Stay Base) was established in a vacant hospital ward. There was no water and sewage services because of the earthquake.

PCAT was consigned to establish the facility by the headquarters for disaster control of Ishinomaki. It was to be done in June, before the summer season when waterborne infectious diseases and heatstroke would likely break out. At this time, other medical supporting teams were reaching their limits and so the PCAT, which still had the capacity to manage various resources, was requested to aid with human resources and logistical support.

PCAT managed the SSB shelter by cooperating with the NGO ‘Project Hope’. By our request, the NGO dispatched a medical team of Japanese doctors based in America. Although the initial activity was to set up a water purifier, SSB shelter took care after infants with measles, children with an early digestive organ infection and diarrhea, people who were stressed with the life in shelters and got mental disorders, and patients with chronic maladies or other health issues. We conducted adequate medical treatments and moved the patients to suitable medical facilities.

By August, many people moved into temporary housings and the necessity of the SSB gradually decreased. Local hospitals became ready to accept the patients and the shelter was closed at the end of July.

(102 dispatched doctors, 53 nurses, 32 pharmacists divided the projects.)
Health consultation support in temporary housing (Health Cafe Project)

After several months of the disaster, the number of the people moving into temporary housing increased. The PCAT which took on the responsibility of conducting inquests observed suicide cases in temporary housing. Cases of death by alcoholism and solitary deaths of the aged were also seen.

Under these circumstances, Starbucks Coffee collaborated with Canon to open an open-air cafe in the temporary housing at Rikuzen-Takada in July. They requested PCAT to join this project by offering blood pressure checks at the cafe. This was the start of the health cafe project.

The temporary housing residents who usually did not come out for health consultations came out interested in the cafe. People were able to come together for casual health consultations without white robes and uniforms.

We became busy with people coming to share their sadness, fear, anxieties or their struggles with child raising. People also came concerned about their blood pressure. As the restoration of the local hospitals came underway, the health consultations in this health cafe contributed to linking the people, the hospital, and the community.

Since then, PCAT has regularly held ‘health consultation with tea’ sessions as part of the ‘Health Café Project’. It is conducted not only in Rikuzentakada, but also in Kesennuma, Ishinomaki, Higashi-Matsushima, and Minami-Souma. In response to the local needs, clinical psychologists and psychiatrists have been dispatched and are collaborating with the department of mental care in PCAT and thePsi Project.

(10 dispatched doctors, 100 beneficiaries)

Mental Health Care for the Evacuees in the Shelter in YuGaku-Kan (Psi Project)

The PCAT which conducted inquests for suicide cases understood that various causes of stress led to victims’ sadly ending their lives. In June at YuGaku-Kan, evacuees started to move into temporary housings. Many of these evacuees required long-time care, and individuals as well as their families were highly stressed from it.

The PCAT discussed what we can do for the people leaving YuGaku-Kan to enter temporary housings. One thing done with the cooperation of a psychiatrist sent by Project Hope in the US was the assessment of PTSD and depression among evacuees in the shelter. The result was that most of them needed care with their mental health.

The mental health care team of the headquarter for disaster control had no more capacity to do such assessment or provide care, so the PCAT united a team of psychiatrists, clinical psychologists, psychotherapists and primary care doctors to start a mental health care project in YuGaku-Kan. This was the beginning of the Psi Project.

The results of inquest offered by Ishinomaki Police and these assessments on mental health were shared with the Ishinomaki headquarter for disaster control. It helped to warn the authorities about mental health issues.

Mite Busters Project

In Ishinomaki city, 7000 evacuees live in 100 separate shelters. As time passed, futons and cardboard boxes containing personal belongings became subjects of mold outbreaks. Hygiene became a serious issue. In response, the Mite Buster Project started to air out futons, exterminate mites, and suppress mold. In coordination with other groups, 1900 people joined this project and assisted in disposing moldy beddings, delivering fresh beddings, and managing the environment of the shelters.

Specific activities
1. Investigating the sanitation environment in the shelter. Lecture on how to remove mites and mold.
2. Disposal of old bedclothes. Providing new bedclothes for the summer.
3. Drying of bedclothes.
4. Disinfecting and cleaning the shelter in cooperation with the evacuees.
5. Providing disinfectants, insecticides, seasoned lumber and beds made by corrugated cardboard.

The PCAT in cooperation with government sent specialists to advise the environments in the shelters.

Fifty three shelters have been visited in Ishinomaki city, Rikuzentakada city, Onagawa cho, and Higashi-Matsushima city. So far 4300 people have benefited from these activities.
The project of dispatching an obstetrician and gynecologist for Doctor A.

In this disaster, perinatal medical treatment along the coast of Miyagi prefecture up to the north of Higashi-Matsushima were disabled. There were 7 hospitals and clinics that could accept childbirths along the coast of Higashi-Matsushima to Rikuzen-Takada: Abe maternity clinic, Ishinomaki Redcross hospital, Aneha maternity clinic, Saito maternity clinic, Honda maternity clinic (in Kesennuma), Kesennuma city hospital (in Kesennuma), and Mori maternity clinic. However, all of these facilities except Ishinomaki Redcross hospital and Kesennuma city hospital were damaged by the Tsunami.

In the middle of April, Abe maternity clinic, which received the least damage, recovered and started to assist in childbirth. However, the other facilities could not restart and so the childbirths concentrated in the few hospitals. In addition, Doctor A, who is the director of the hospital, had suffered from the disaster himself and was highly exhausted at that time. Therefore, PCAT dispatched an obstetrician and gynecologist to oversee childbirth on behalf of Doctor A. (See the details on our report submitted to UNICEF.)

Currently, hospitals and clinic for childbirth do not have plans to restart except Saito maternity clinic. Aneha maternity clinic and Honda maternity clinic have decided to shut down. Mori maternity clinic needs their boiler, service room, operating room and interior furnishing restored as soon as possible.

Medical Support at the First Aid Station, Yu-Shin-En in Ogatsu District in Ishinomaki City.

In July, headquarters for disaster control Ishinomaki asked PCAT to provide support again in the Ogatsu district.

Although most people had moved out of shelters into temporary homes by then, there was a lack of doctors and a lack of medical services especially in the Ogatsu area, where it was most distant from Ishinomaki city. The doctors sent by Gem Net (NGO), Ishinomaki Red Cross and PCAT started taking care of the residents at the first aid station built in Yu-Shin-En, the facility for elderly people in Ogatsu.

As scheduled, another new temporary first aid station has been built in September. We finished our support in Yu-Shin-En by handing over this facility to a physician who had moved into the district to work full-time.

Mental Health Care for Aid Workers (Ψ Project)

PCAT recognized the importance of mental health care support through inquest. A psychiatrist from Project Hope pointed out the extraordinary high stress his coworkers carry while working at the Ishinomaki Municipal Hospital.

Until then, all of the medical staff at Ishinomaki Hospital was from Ishinomaki city. They were all victims because they had lost their family or friends, their house, or their car to drive to the hospital. In addition, they were traumatized from being isolated on the sea for 3 days after the tsunami. No one provided them care to overcome these experiences.

So, the PCAT started the Ψ Project for mental health care. First, we planned a one day tour for physical and mental care. It included lectures and consultations for the staff working in Yu-GakuKan and a trip to the sea next to our base in National Health Insurance Wakuya Hospital. The chief of nurses talked about home visiting care, a psychotherapist working in US did art therapy, and we also brought in acupuncturists, aroma aestheticians and nailists. We accepted the company of their children, and there were some participants who enjoyed this tour to relax with their family.

PCAT also helped at the closing ceremony of Yu-GakuKan in the end of September.

Furthermore, in September, we sent acupuncturists to the Ishinomaki Police to take care of the policemen who spend all of their time searching for victims. After that, upon request from the Ishinomaki Police, PCAT lectured ways to handle mental stress to the policemen.

Mental Health Care in Temporary Houses (Ψ Project)

PCAT recognized the occurrence of suicide cases while supporting inquest, and pointed out the importance of mental health care support in temporary housing. Currently, we provide mental care through the Health Care Café Project.
Project Details

Dispatch of doctors for home visiting care for residents in temporary housing. (c.f. [Features of PCAT 3: ex.2])

The issue we faced in the welfare shelter Yu-Gaku-Kan in Ishinomaki city was how to help the evacuees recover their lives before the disaster. Supporting the people who require long-term care move into temporary housing was extremely difficult. In cooperation with the social welfare council, PCAT started to transfer them to nursing facilities. However, because there were not enough facilities, they had to be moved into ordinary temporary housing.

Also, there was another problem in Ishinomaki city. Ishinomaki Municipal Hospital, which had cared for patients with digestive diseases such as malignant growth, was damaged and these operations became centered in Ishinomaki Red Cross Hospital. The surgeons of the Municipal Hospital moved to the Red Cross Hospital, but they could not provide sufficient care. We needed another facility that could provide the service.

Meanwhile, the resident of Leading Aging Society Forum (NGO) started a clinic for home visiting care and specialized in caring for residents at temporary houses. PCAT introduces our home visiting and primary care doctors to help provide terminal care and long-term care in Ishinomaki city.

Project Details

Dispatch of resident doctors to Kesennuma Municipal Motoyoshi Hospital (c.f. [Features of PCAT])

From October 2011, PCAT started dispatching resident doctors who are training to become family doctors to Kesennuma Municipal Motoyoshi Hospital. As noticed in [Features of PCAT 1], Motoyoshi district has been a medically depopulated area which continues to face difficult medical situations. By providing medical service to such area, we think that we can learn the concept of [Health for All: HFA] addressed in the Declaration of Alma-Ata by UNICEF and WHO. It emphasizes the importance of [Primary Health Care: PHC] that is indispensable for family and primary care doctors.

PCAT provides advance training for resident doctors before being dispatched. We provide training contents on the web and also set up Skype sessions to discuss medical treatments with experienced doctors at least once a week.

(4 resident doctors dispatched)

Project Details

Advance Training

To facilitate the activities in the stricken areas, PCAT conducts training to give knowledge and information to people before they are dispatched.

PCAT has made training material that teaches general medical care. It includes perinatal care, child infection, basic knowledge about radioactive exposure, basic knowledge about home visiting care, method for bedshore treatment, mental care for victims and aid workers themselves. Also, through the summarization of our principles and effective information in the stricken areas, we learned the importance of acquiring the support of doctors from a variety of specialties as well as teamwork in discussion in groups.

The facilitation is done by doctors who have experience in the stricken areas, and they have renewed and improved the training material. Since September, we have opened these contents on the web so that they can be studied at home and to be used by volunteers. Since November, we have started the section “Psychological First Aid” as an obligatory advance training for all dispatch persons.

PCOT Project
Project for perinatal care and for care of infants and adolescent children. Hereafter it will be absorbed into the Health Cafe project.

By Project
Project for mental health care. Hereafter it will be absorbed into the Health Cafe project.
PROJECT 2012 ①

- Doctor Dispatch to Hospitals Lacking Medical Personnel
  PCAT continues short-term dispatch of family doctors and general doctors, and long-term dispatch of resident doctors who specialize in home care programs.

  - Kesennumamotoyoshi Municipal Hospital
    This hospital has suffered major damage from the tsunami and sections which still need repairing remain. Also, the regular doctors and nurses are burdened with a lack medical personnel. To continue treating outpatients and conduct necessary home visits, PCAT sends short-time dispatch doctors as well as resident doctors who have the intention to support and train in this hospital. They are sent for a period of one month.

  - YU Home Clinic Ishinomaki
    This Clinic provides home health care services to the newly constructed temporary housing in Ishinomaki city. Doctors are dispatched here for short periods. They treat those who require home care or who are terminally ill. They also provide general health consultations.

  - Minami-Soma Municipal Hospital
    This hospital is within 35km from the Fukushima Daiichi Nuclear plant. After the explosion, the medical personnel have retreated. At this moment, rehabilitation section, especially lacks medical professionals. The PCAT sends PT/OT in collaboration with the rehabilitation team of Hiroshima University.

PROJECT 2012 ②

- PCOT project: Obstetrics and Gynecology Clinic Support, Mother and Child Support
  After the tsunami, many pregnant women, infants and mothers worried about their future. More than a few children also cry every night and have nightmares. In response, the PCAT continues activities to expand its mailing service ‘KIZUNA (bonds) MAIL’ so that mothers can share the benefits of living in their town.

  - Visit to the mothers who have just given birth by obstetricians and gynecologists. 10 times/month
  - Expansion of our mailing service ‘KIZUNA MAIL’ not only for pregnant women but also for mothers taking care of their children and babies, so that they can share the benefits of living in their town.
  - Counseling on child raising at the health center in Ishinomaki city, Higashi-Matsushima city and Minami-Soma city.
  - Cooperation with Ishinomaki city, Higashi-Matsushima city and Minami-Soma city to put these programs into effect.

- Pay Project
  A. Monthly holding of ‘Psychological First Aid a.k.a. PFA’, mental care program for aid workers. PCAT has started PFA as an obligatory training program for dispatched personnel and it is held once a month. Mental health experts, students interested in emergency support and medical professionals participated in the first session held on November 27th, 2011. This disaster has revealed the importance of care for aid workers, so PCAT continues its activities to pass on self-care methods to the people who are starting to support or who are thinking of future disasters.

PROJECT 2012 ③

B. Health Counseling
  The residents in temporary housing need relief from stress caused by living in a particular environment. People with chronic diseases also need care. PCAT runs weekday counseling by long-term dispatch medical team consisting of 3 staffs. and weekend counseling by long and short-term dispatch doctors. We cooperate with Ishinomaki city, Kesennumama, Higashi-Matsushima city and Minamisoma city, to continue our medical support in providing doctors who can talk with people about their physical and mental problems.