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Practice report

Psychoeducation for Caregivers and Children in Camps after the Great East Japan Earthquake and Tsunami

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Abstract: A total of 10 camps were built from 2011 to 2019 for caregivers and children living in areas affected by the Great East Japan Earthquake. Programs were offered to caregivers and children, including psychoeducation and relaxation. Psychoeducation for children was titled "studying the heart"; it included instruction and drawing with picture-story shows, and breathing techniques using toys, such as blow-up pipes. The psychoeducation content needs to be adjusted according to the recovery period of the region. The condition of the children in the region must be monitored on a daily basis. Some of the participants were children who had experienced various traumatic experiences caused by the earthquake and children with mental illness. Managing the camp by talking to specialists who were involved on a daily basis would have the secondary effect of building ties within the community.

Introduction

The Great East Japan Earthquake that occurred in 2011 caused extensive damage to the coastal areas of the Tohoku region and had a major impact on the physical and mental health of all residents. As a member of a mental health care team, the author has been visiting the homes of children immediately after the earthquake disaster. A major concern is the loss of play spaces. The school gymnasium was used as an evacuation shelter; the schoolyard, as a parking lot for evacuees; and a nearby park, as a food kitchen. The children's entire community was in a tense state, with the family members who lived with the children unable to have peace of mind. The children sensed this atmosphere and suppressed the expression of their emotions. Children learn to regulate their emotions and behavior through play, so when the lack of play spaces continued for a long period of time, involved parties became concerned about the impact on the children's general development.

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Table 1-1. Overview of each camp

Hosting period	First July 2011	Second October 2011	Third October 2012	Fourth October 2013	Fifth October 2014
Children psychoeducation	Picture-story show and drawing	Picture-story show and drawing	Picture-story show and drawing	Breathing method and muscle relaxation	Breathing method and muscle relaxation
Caregiver program	Absent	Present	Present	Present	Present
Alumni program	Absent	Absent	Absent	Absent	Absent
Number of children	21	22	18	21	19
Boys	11	12	10	5	12
Girls	10	10	8	16	7
Average age (years)	8.1	8.3	8.3	8.3	8.8
House completely destroyed	2	6	6	7	6
Had a near-death experience	2	6	6	5	5
Injured	0	1	0	0	0
Saw an injured person	0	4	4	1	2
Death of a loved one	5	9	8	8	6
Loss of something precious	2	12	7	10	9
Witnessed Tsunami	2	6	7	7	6
PTSSC-15 before camp was above the cutoff value	13	16	9	9	7

I. Background of this project

We aimed to restore the children's peace of mind by taking them to a campsite in an inland area away from the coast and providing a series of programs. With the Sendai Children's Mental Study Group, which has been continuing for many years in Sendai City, as the parent organization, we decided to work with the cooperation of specialists in medical institutions and multiple volunteer groups. The project started in July 2011 and continued approximately once a year since then, with a total of 10 sessions by FY 2019 (Fukuchi et al., 2012; Fukuchi, 2017; Fukuchi et al., 2019). This article presents an overview of this project in the form of a practice report.

II. Program structure

The heart of this project was the program that was provided within the camp; and its subjects were children, caregivers, and alumni (children who were former camp participants and had graduated from elementary school) (Table 1). At the start, we offered a series of programs, including psychoeducation only for children. There was a subsequently increasing need for an exchange of opinions with caregivers, and in the second to eighth sessions, we also provided a caregiver program that included psychoeducation and relaxation. Furthermore, starting with the eighth event in 2017, we provided a training program for junior high school students (former participants who graduated from elementary school) and asked them to help out as staff on the day of the event.

This article is positioned as a practice report, but it was compiled with the approval of the ethics committee of the MDMHCC. This article was prepared with sufficient consideration for the protection of personal information so that the individuals who participated would not be identified.

1. Children's program (First to tenth sessions)

Purpose: This program was conducted with the purpose of providing a safe space for children to play, to help them understand how their mind works, and to learn to deal with their anxiety.

Targets: Application guidelines were distributed to elementary school children through the boards of education of the municipalities from which consent was obtained. We sought to understand the living conditions at the time of the earthquake and the children who needed special consideration by conducting a pre- and post-questionnaire survey of the children and their caregivers. We conducted the Post-Traumatic Stress Symptoms for Children 15 items (PTSSC-15) (Tominaga et al., 2002; Usami et al., 2014) to understand the children's state of mind.

Table 1-2. Overview of each camp

Sixth October 2015	Seventh October 2016	Eighth October 2017	Ninth October 2018	Tenth October 2019	Total
Breathing method and muscle relaxation	Breathing method and yoga	Breathing method and yoga	Picture-story show and breathing method	Picture-story show and breathing method	
Present	Present	Present	Absent	Absent	
Absent	Absent	Present	Present	Present	
14	18	12	10	19	174
7	10	3	7	9	86
7	8	9	3	10	88
8.9	9.0	9.0	8.7	8.2	8.51
6	4	4	0	1	42 (27.1%)
3	3	2	0	0	32 (18.4%)
0	0	0	0	1	2 (1.15%)
3	1	3	0	1	19 (10.9%)
5	5	3	0	2	51 (29.3%)
7	7	7	0	2	63 (36.2%)
7	5	4	0	1	45 (25.9%)
5	4	5	5	8	81 (45.6%)

Implementation content: We provided a unified package program for all 10 events (Table 2). In the one-day camp, the groups were organized evenly by age, with upperclassmen appointed as leaders and sub-leaders and organized to work in groups. Group work was done at the beginning and end of the program, "today's goals" were set, and the groups investigated whether they were able to achieve them. They used the campsite facilities to practice cooking with the support of the staff. Recreation was conducted after lunch, after which psychoeducation was conducted under the title of "studying the heart." The psychoeducation contents were repeatedly examined among the staff, and activities such as teaching and drawing by picture-story show (Fukuchi, 2016), breathing methods and muscle relaxation methods using toys (Document 1), and yoga were conducted.

2. Caregiver program (second to eighth sessions)

Purpose: This program aimed to help caregivers understand their own mental state and that of their children and provide appropriate support to their children. The program also aimed to provide time for parents to relax themselves.

Targets: They were the caregivers of the children who participated in the camp.

Implementation content: After seeing the children leave for the campsite, the caregivers were guided to another venue and were provided with a series of programs. A specialist gave a mini-lecture on "children's mental reactions after a disaster." Relaxation sessions, such as yoga and hand massages, were provided by specialist instructors, with places for individual consultation provided to those who wished for it. We explained the psychoeducation and relaxation content that were provided to the children in the camp, and we devised ways for the caregivers to practice with their children at home after the camp.

3. Alumni program (eighth to tenth sessions)

Purpose: This program was conducted with the purpose of allowing the camp graduates who had experienced being supported after the earthquake to experience being on the side of providing support. One of the major goals was to train supporters in the community and circulate human resources.

Table 2. Overview of children's program

1. Bus transfer
2. Icebreaker
3. Group work
   Participants were divided into groups of five to six, "today's goals" were set, and they were presented to one another.
4. Cooking practice
   Cooking practice was conducted with the support of the staff. Dishes included curry rice, boiled potatoes, and hot dogs. There was also a session for making emergency food.
5. Meals
6. Break
7. Outdoor recreation
   We asked school teachers and boy scouts to oversee the activities, and we set activities where the participants played physically demanding games.
8. Psychoeducation and relaxation
   We conducted psychoeducation using picture-story shows, and we explained how the mind and body work, as well as coping methods. We then conducted drawing, breathing methods, and yoga.
9. Group work
   In groups, they reviewed "today's goals" that were set at the beginning of the session.
10. Bus transfer

Participants: Among the children who previously participated in the camp project and were already junior high school or high school students, those in families who responded that they would like to receive information about similar events in the future were contacted.

Implementation content: The participants were gathered on a different day than the day the camp was held, and a training program was provided. We discussed and decided on the contents of the cooking practice on the day of the camp, and set some time to cook with everyone. Additionally, assuming a situation where older students would support the younger children, the international human support guideline "Psychological First Aid for Children (PFA)" was reconstructed into a junior high school and high school version, and training was provided by professional trainers (Save the Children Japan).

III. Results and discussion

Across all 10 sessions, a total of 174 children (86 boys and 88 girls) participated. The average number of participants per session was 17.4 people, and the average age of the participants was 8.5 years (SD = 1.90). Among the participants, 42 (27.1%) had a "house completely destroyed," 32 (18.4%) "had a near-death experience," 51 (29.3%) reported the "death of a loved one," and 45 (25.9%) "witnessed the tsunami." Many children had a traumatic experience from the earthquake disaster. Indeed, 81 children who exceeded the PTSSC-15 cutoff score of 23 points and 21 children with psychiatric symptoms that required some kind of treatment were referred to a specialized medical institution at the appropriate time. Illnesses included PTSD and depression caused by the earthquake disaster itself. Moreover, many children had developmental disorders, such as attention-deficit hyperactivity disorder and autism spectrum disorder.

The psychoeducation of children was re-examined and revised every two to three sessions. At the beginning of the program, we sought to ensure that the children would be able to come into contact with the earthquake disaster experience in a way that would be familiar to them and without excessive exposure, ensuring that they would be allowed to express various emotions. However, we observed that some children had difficulty listening to explanations and working according to instructions due to hyperarousal. From the fourth session onwards, we reduced the learning elements and restructured the format to mainly relaxation. We prepared yoga mats for the number of people involved, paired the staff with children, and introduced breathing methods and muscle relaxation methods using toys such as blow-up pipes and paper balloons (Document 1). These relaxation sessions became a regular routine and a familiar program for children who repeatedly participated. In each session, the contents needed to be reset according to the children's current situation. We constantly monitored the recovery status of the community. It was important to reflect on the support side. If there was a strong desire to control the children (i.e., desire to have them do things properly), then the program tended to become over-structured, and the children would be forced to spend time in a rigid manner.

(Moving indoors after moving the body by playing outside. Conducted after wiping sweat and rehydrating)

Instructor: So, from now, we will try to calm down a bit and be quiet. From now, we will study the heart. What we will study today is to breathe in and out, and strain and relax. Please form a pair of a child and an adult. Take one yoga mat each and sit on the floor.

Instructor: We had a lot of fun today. How are you all feeling now?
⇒ Children: “fun,” “tired,” “I want to go home”

Instructor: Okay, how does everybody’s body feel?
⇒ Children: “sweaty,” “my heart is pounding,” “out of breath,” “it hurts if I get hit”

Instructor: Your body reacts when you do something fun, exciting, angry, or remember something bad.

Instructor: I will hand a toy to everybody. First, please play with this.
(blow-up pipes distributed to each person)
⇒ Children: “what is this,” “I’ve seen this before,” “it’s in candy stores”

Breathing method instruction
Instructor: To blow the ball well, you need to take a deep breath and blow little by little. Let’s practice this. As you inhale, expand your belly and breathe out slowly. This is called abdominal breathing. (practice abdominal breathing in pairs with a staff member)

Instructor: Now, imagine a ball floating in the air in your mind. This time, without using a pipe, close your eyes and let the ball float in your head. Lie on your back on the yoga mat. The room will be darkened, and you should do this quietly.

Muscle relaxation method instruction
Instructor: Next, we’ll use our bodies a bit. The key is to strain and then relax. While lying down, make fists with both your hands. Then put more and more force into your fists. Put some force into your shoulders… this time, relax all at once, and just let go. Okay, now we’ll repeat this.

Combining breathing and muscle relaxation
Instructor: Try to breathe in and out three times, and try to strain and relax three times.

Instructor: How is everybody’s body feeling?
⇒ Children: “I’m already sleepy,” “I’m hungry,” “I want to go to the bathroom”

Instructor: Everybody’s mind and body are connected. Let’s try to do this when we get excited, remember bad things, get frustrated, or nervous.

We did not set a caregiver program in the first session. However, when the children were handed over to their caregivers after the end of the session, many questions were asked about the behavior of the children in the household, and we learned that some families had trouble dealing with the children. The caregiver questionnaires after the end of the session also indicated the desire for a program aimed at the caregivers. Therefore, we set up a separate venue near the place where the children gathered, and from the second session onwards, we provided a caregiver program. This was a package of lectures, relaxation, and individual consultations. Professionals such as the authors regularly visited most of the elementary schools that the children attended, and many of the caregivers had already met before the camp. The caregivers were aware that their children had psychiatric symptoms, and many families participated in the camps seeking evaluations. Specialists visiting places close to the residents and interacting with them in ways other than medical care, such as camps, may reduce caregivers' anxieties.

We obtained the cooperation of the staff who operated the sessions by reaching out to not only the staff of the MDMHCC but also a wide range of specialists with whom we have daily clinical connections. We were also able to obtain the cooperation of not only specialists, but also local university students, NPO groups, boy scouts, and other local residents. We also set up opportunities to provide training in advance for staff who lacked specialized knowledge. This process helped us provide psychological support to parents and children living in the disaster-affected area and had the secondary effect of building community ties. For the eighth to tenth sessions, we recruited volunteers among junior high school and high school students who had participated in past camps, and they participated as staff members after we provided them with preliminary training. We provided "Psychological First Aid for Children (PFA)" by restructuring it for junior high school and high school students—we conducted lectures and set roles and dialogues, and repeated roleplays. Although the number of junior high school and high school students who participated was low at eight students, the fact that children who were once on the receiving end of support had grown up and now experienced the position of providing support was meaningful from the perspective of fostering human resources in the community.

Conclusion

This was a project that was continued with a certain degree of momentum; we could not sufficiently structure it, in part owing to the hyperarousal in the children after the disaster. Thus, we could not verify the effectiveness of the program. In the beginning, we wanted to provide children with a place to play and learn to overcome crises. However, those of us who provide support were able to learn the importance of being in contact with children in places other than a clinical setting, create connections within the community, and experience the circulation of people who provide support in that community.

There are many natural disasters in Japan, and there is a need to prepare for disasters that are equivalent to the Great East Japan Earthquake in the future. We hope that this attempt will provide pointers for overcoming a crisis in a community.

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Summary

Psychoeducation for Caregivers and Children in Camps after the Great East Japan Earthquake and Tsunami

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The Great East Japan Earthquake (GEJE) with a magnitude of 9.0 on the Richter scale hit the Pacific coast of northeast Japan on March 11, 2011. The disaster caused tremendous damage and traumatized a large number of people, including thousands of children. While most of these children showed psychological symptoms of trauma, many could not receive appropriate care because of a lack of mental health professionals in rural areas. To cope with this situation, we held single-day camps, followed by continuous, culturally appropriate psychoeducation, facilitated for children who experienced the disaster. We explained how emotions are formed by picture story and did abdominal breathing using a blowing pipe in the psychoedu,cational session. The program of the camps should be set according to the recovery phase of their communities. Some of the participants, who had psychological symptoms due to the disasters, could receive appropriate treatment through the camps. It is possible that community bonding plays a vital role in community-wide mental health recovery, regardless of whether formal mental health resources exist or not.