

Practical report on psychological education in Miyagi prefecture

※Source: Japanese Society of Pediatric Psychiatry and Neurology. *Pediatric Psychiatry and Neurology*, Vol. 56, No. 1, 19–23 (2016)

Miyagi Disaster Mental Health Care Center (MDMHCC)

Naru Fukuchi

Key words: psychological education, Great East Japan earthquake, relaxation

Introduction

I do not conduct general medical examinations in child psychiatry in his present role but focuses exclusively on developing support for parents and children in disaster areas. Therefore, those who receive support are those who consult a specialized organization due to a particular medical condition, but rather parents and children living with stressors in the community. In this paper I would like to report on parent-child camp projects^{1, 2} that target these residents, and also consider future psychological training/education after a disaster.

I. Camp overview

In principle, a total of five meetings for elementary school students were held from July 2011 to the present, January 2015. I created a leaflet introducing the program, visited an elementary school that suffered great damage, and distributed it at the school with the approval of the respective local board of education. We took the children by themselves to a campsite away from the afflicted area and offered a series of programs that included psychological education. By incorporating psychological education into the program, we aimed to provide accurate knowledge about disasters, help participants understand the workings of their own minds, and offer an approach that will allow them not to be overwhelmed by anxiety. For parents, we set up a separate venue close to the meeting place where we provided programs including professional lectures, relaxation activities, and individual consultations.

II. Contents of psychological education

As for the content of this pediatric psychological education program, in the first and third sessions children drew pictures using a picture story show (*kamishibai*), and in the fourth and fifth sessions they used a toy to practice breathing and muscle relaxation techniques. The details of this program are described below.

1. Drawing using a picture-story show (reference 1)

We presented a picture-story show that made it easy for the children to express their feelings through shapes and colors, and then asked them to make drawings with colored pencils and crayons reflecting their feelings. After drawing, we had them show each other their pictures, discuss the question of whether they could add anything to make the pictures more fun, and then go back and add to their pictures.

2. Breathing using toys and muscle relaxation techniques (reference 2)

I attempted to convey abdominal breathing using a blow pipe and muscle relaxation techniques. They breathed in deeply through the pipe and exhaled little by little so that the ball continued to hover over the pipe, and by practicing this repeatedly they naturally engaged in abdominal breathing.

III. Evaluation and results

We conducted a preliminary survey by mail prior to families' participation in the program in order to grasp each family's situation in the aftermath of the disaster and the children's mental and physical conditions. After the program was concluded, a questionnaire was once again given to both parents and children. Only children completed the Post-Traumatic Stress Symptoms for Children-15 (PTSSC-15) before and after the camp.³ Changes in participants' psychological state before and after camp participation are shown in Fig. 1. In general, PTSSC-15 scores were 23 or higher for PTSD, indicating a high risk for

depression, but 54 children (53.5%) were judged to be high risk before the camp. Since a control group was not established, it is not possible to compare the effects overall, but except for the fourth session, PTSSC-15 scores tended to decrease post-intervention.

Project background

In this program for children, one static program, two dynamic programs, and three ceremonial programs were devised in an alternating progression to provide a smooth sequence in a short period of time. Because psychological education was conducted after play involving intense physical exercise, it was observed that some children were not able to readily switch over to psychological education because of their elevated moods. These children were paired with staff members in a slightly darkened room, where they were able to gradually regain their concentration. Because the target age group for this camp was broad, it is possible that in some cases the content was not well suited to their ages. For example, some younger children who were not able to understand the intention of the picture story show activity tended to mimic the drawings that were depicted in the teaching session. Also, in the exercise with blow pipes, because lung capacity varies with age, younger children had to blow as hard as they could just to get the ball to float. In the future we will also need to adjust the content of the picture story show according to age and to change the type of toy used for the breathing technique (pinwheel, bubble ball, paper balloon, etc.).

The greatest outcome obtained through this camp was thought to be local solidarity and the sense of security that accompanied it. Groups associated with the project ranged from volunteer groups, various sports clubs in the area, boy scouts, and student volunteers, among others. Children were connected with various people in the area, and they sometimes consulted staff who had taken care of them when they were in trouble. Among these children, there were cases in which the medical treatment facility for which the author was responsible sent children who required specialized care for temporary treatment at a hospital. In addition, a number of children participated in the program several times, which became an opportunity for them to get together once a year, and, because of their knowledge of the program, they were also able to act as leaders. Staff who returned to participate more than once were able to experience the reward of supporting the growth of children in the community and witnessing their growth and development during each camp session. In this way the camp functioned as a place that connected children in the community, their parents, and various professionals.

Conclusion

As time goes on, children with an awareness of the disaster are less likely to participate, and the psychological education included in the program needs to be changed so that it can be applied to everyday life. There is a similar tendency among parents to avoid programs concerning stress after the disaster, and instead to seek consultation on topics such as developmental disorders. The difficulty of mental health after disasters is that the needs of the community change over time, and supporters must accurately grasp these changes and provide assistance according to what is needed at the time. It seemed necessary to disseminate more general stress coping strategies for local children who lived with stress but may never have visited a medical care setting.

References

- 1) Fukuchi Naru, Murai Asako. The practice of support for children in disaster areas. *The Japanese Journal of Hospital and Community Psychiatry*, Vol. 55, No. 1, 56–58 (2012).
- 2) Igarashi Takashi (Research Representative). A Study on Post-Disaster Mental Support for Children. 2013 Summary and Research Assignment Report (2014).
- 3) Tominaga Yoshiki, Takahashi Satoshi, Yoshida Ryuzo, et al. The creation and validity of the Post-Traumatic Symptom Scale for Children (PTSSC15) child in children admitted to children's facilities and students suffering from bullying. *Journal of Human Development and Clinical Psychology*, Vol. 8, 29–36 (2002).

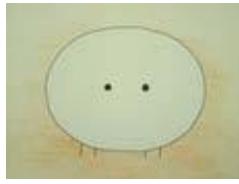
Source 1: A teaching method of drawing with use of a picture story show
(Original concept: Fukuchi; image: Akiko Miyake)

1



Characters of various shapes and colors lined up beside a boy.

2



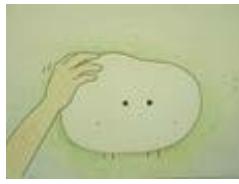
A character that is as plain as possible, colorless, just a circle with hands and feet. Leader: "My name is "Koro." My shape and color changes with different feelings."

3



A scene in which "Koro" is inside a boy's body. Leader: "I am inside of Taro."

4



A scene in which "Koro's" head is gently stroked. Leader: "When you treat me gently . . ."

5



He appears with a vivid aqua blue color and a gentle peaceful expression." Leader: "This is how I look, and this is the color I turn. When do you all become like this?"

6



A scene in which he is being shaken violently to recall an earthquake. Leader: "When I am surprised. . ."

7



He appears with a distorted shape, red and dark colors, and a bewildered expression. Leader: "This is how I look, and this is the color I turn. When do you all become like this?"

8



Taro appears again. In this scene his body is relaxed. Leader: "When Taro relaxes, Koro will also have a peaceful color and a peaceful shape. Now let's draw how Koro looks inside of each of you."

Source 2 Methods for teaching breathing and muscle relaxation techniques

(Children were moved inside after active outdoor play. The activity was carried out after helping them to wipe away sweat and supplying them with water.)

- Leader: "Now I am going to calm myself down. Now we are going to study our own minds. What we are learning today has to do with breathing in and out, and how to tense and relax our muscles. Please get into pairs of one child and one adult. Each pair please take a yoga mat, and let's sit down on the floor."
- Leader: "I have done a lot of fun things today. How do you feel now?"
⇒ Children: "That was fun," "I'm tired," "I want to go home."
- Leader: "How is your body doing?"
⇒ Children: "I got sweaty," "My heart is pounding," "I'm out of breath," "I bumped myself and it hurts."
- Leader: "The body responds when you do something fun, do something exciting, get angry, or remember something you didn't like."
- Leader: "I will give toys to everyone. First let's try playing with this." (Distributes a blow pipe to each person.)
⇒ Children: "What is this?" "I've seen these before," "They have these in sweet shops."

<Teaching the breathing technique>

- Leader: "To get the ball to float, I have to take a deep breath and then let it out little by little. Let's try practicing this. When you breathe in, let your belly fill with air, and then slowly breathe out. This is called abdominal breathing."
(Pair with staff and practice abdominal breathing.)
- Leader: "Now I am imprinting in my mind the image of the ball floating. Next time, without using the pipe, I will close my eyes and in my head I will get the ball to float. Let's lie down on our backs on the yoga mats, let's darken the room, and now let's quietly try it."

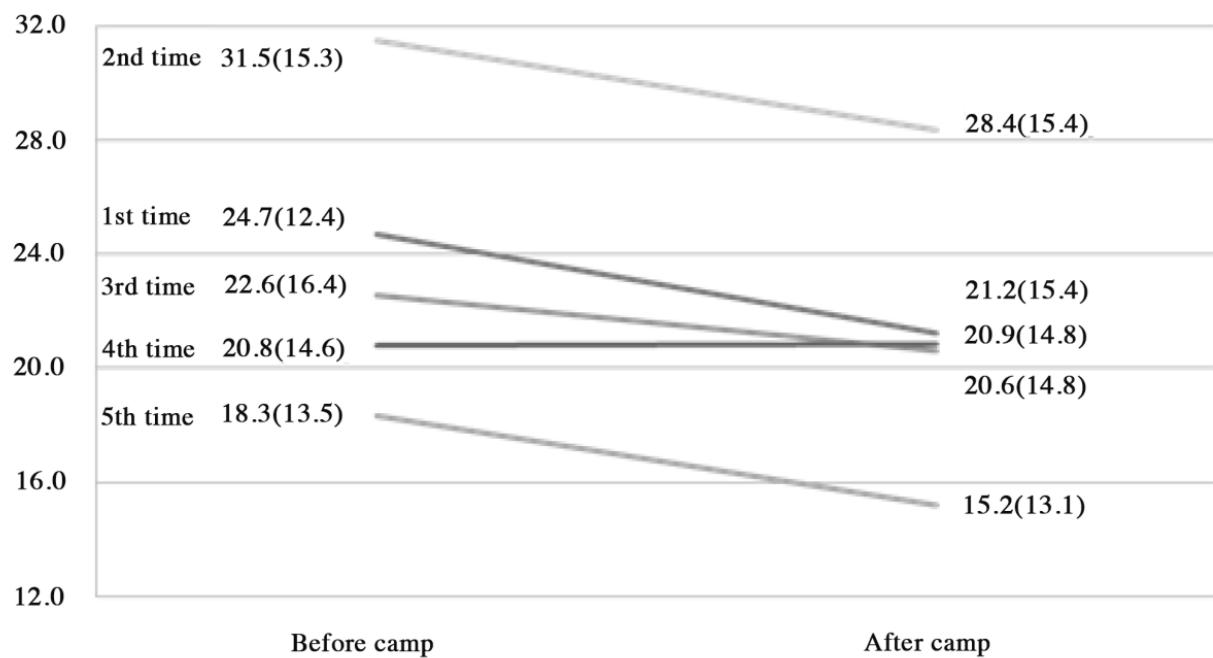
<Teaching the muscle relaxation technique>

- Leader: "Next I will use my body a little bit. The point of what we are doing is to tense and relax your body. Still lying down, let's try tensing both arms. Now put a little more strength into it. Tense your shoulders . . . Now, all at once, let your body relax completely. Good. Let's do it again."

<Bringing together the breathing and muscle relaxation techniques>

- Leader: "Let's try breathing in and breathing out three times, and then tensing and relaxing our muscles three times."
- Leader: "How is your body doing?"
⇒ Children: "I am sleepy," "I am hungry," "I have to go to the bathroom."
- Leader: "Your feelings and your body are connected. Let's do this when you feel excited, when you remember something you don't like, when you feel frustrated or your heart is pounding."

Fig. 1. Change in average value for PTSSC-15 before and after camp



In both cases, no significant difference was observed in the paired *t*-test.