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Volunteer experiences in community housing during the Great Hanshin-Awaji Earthquake, Japan

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Abstract The recovery phase of disasters is long term and the victims require intensive support. Experiences in disasters can be traumatic and affect people physically and psychologically. Recovery is not only about the rebuilding of infrastructure in the affected area but also about the rehabilitation of people and the rebuilding of their life. The importance of long-term mental health care after disasters has been emphasized in the literature and the authors' volunteer participation during the Japanese Great Hanshin-Awaji earthquake in 1995 reinforced its importance. This article reports on the authors' experiences as health professional volunteers caring for dislocated people living in temporary housing after the earthquake, when *kodokushi* (death alone and, initially, unnoticed) and alcoholism claimed the life of some of these people.

Key words disasters, earthquakes, Japan, mental health, volunteering.

INTRODUCTION

The recovery phase of people affected by disasters is long term, extending ≤ 10 years after the event in many cases, and the victims need intensive support. Experiences in disasters can be traumatic and affect people not only physically but psychologically, socially, and economically. Therefore, recovery is not just about the rebuilding of infrastructure in the affected area, but is also about the rehabilitation of individuals and the process of rebuilding their life. The importance of long-term mental health care has been emphasized particularly for these people (Valentine & Smith, 2002). This article reports on our experiences as health professionals volunteering to assist dislocated people living in temporary housing after the Great Hanshin-Awaji earthquake in Japan in 1995. At the time of the earthquake, the first author was working at a local hospital and the second author was working at Kobe City Junior College of Nursing (later Kobe City College of Nursing).

Our participation in volunteering during disasters reinforced for us the importance of psychological recovery, although it has been 14 years since the south-eastern area of Hyogo felt the impact of a massive earthquake on 17 January 1995. It was early morning (05.46 hours) when the earthquake (magnitude of 7.2) hit the southern part of Hyogo Prefecture; we were both in bed. We recall that we were shaken by a severe trembling after we heard the ground rumbling and we felt that our beds were in the air. We could not figure out what was happening. As a result of massive swings in our surroundings, we thought we would die. After this very first experience of the earthquake, we were shocked to see and hear tragic situations in Kobe. When the second author woke up, she found broken glasses and furniture in her house and she could see fires around her house. The hospital in which the first author was working was full of injured people and patients transferred from hospitals that could not function or accommodate patients due to their damage. She believed that working at the hospital as a nurse was the best thing that she could do at the time. The second author also wanted to do something to help people and she decided to do volunteer work, joining the volunteering society after meeting Ms Nakano at Kobe City Junior College of Nursing in 2002.

There was immense damage during this earthquake: 6437 people died, 43 792 people were injured, and 104 906 houses were destroyed. In addition, > 140 000 houses were significantly damaged (Kobe City Department of Fire and Emergency, 1995).

VOLUNTEERING TO ASSIST WITH COMMUNITY HOUSING FOR VICTIMS

During the immediate period after the earthquake, the staff members at the College of Nursing were busy assuring the students' safety and rescheduling the school program. However, the infrastructure damage in Kobe made it difficult for the students to come back to the College of Nursing; the final students in 1995 did not have a graduation ceremony. Many students were also victims of the earthquake. The teachers helped the students that were in the temporary shelters to study for the national licensure examination in March by visiting the shelters and consulting on the phone. For a couple of months after the earthquake, the teachers were occupied in securing the students' life (Kobe City Junior College of Nursing, 1995). The second author's College of Nursing colleagues were wondering if they could do something for dislocated people around the school.

We recall that the first process for the volunteers after the disaster was to organize themselves into groups to be responsible for vulnerable people. The group members consisted of nursing school teachers with broad experience in nursing. After the organization of these groups, tasks were allocated to each member. Disaster victims were provided with temporary housing in many places in Hyogo Prefecture until permanent housing became available. This temporary accommodation, called *kasetu* in Japanese, was built in parks and schoolyards in Hyogo Prefecture. Our desire was for temporary houses to be built in the College of Nursing yard, as the number of gray-

colored houses was increasing in the parks and spare spaces around the college. At the time, Ms Nakano, the Director of the College of Nursing, espoused the philosophy: "We will do all we can do." The Volunteering Society at the college was formed 5 months after the earthquake to promote the health of elderly residents in *kasetu* and to prevent *kodokushi* (death alone and, initially, unnoticed). On 26 July 1995, the first resident moved into *kasetu* in the grounds of the College of Nursing. Eventually, there were six flats with 34 units in our grounds, which accommodated dislocated people until June 1999 (Kobe City Junior College of Nursing, 1999).

At the beginning, health professional volunteers (from the College of Nursing) were responsible for the continuity of care while the elderly residents were relocated to temporary houses. Each group was responsible for three temporary housing complexes. A leader was allocated to each complex and then these groups led smaller volunteer groups involving nursing students. The volunteer group had activities with residents once per month, as well as regular meetings among the health professional volunteers themselves. From the beginning of February, 2730 houses were available, with a total of 32 346 houses provided later in the year (Kobe Law Society, 1997). The priority for *kasetu* was given to the households with an elderly or disabled family member or to those consisting of a single parent (mother) with children.

TRAUMATIC AFTER-EVENTS: ALCOHOLISM AND *KODOKUSHI*

There were 157 cases of *kodokushi* in temporary housing in Hyogo over 1 year, of which 115 were men, with 80% of these between the ages of 40 and 60 years (Anonymous, 1997). Forty percent of the deaths were due to liver failure associated with alcohol abuse. The association between alcoholism and gender in middle-aged men was already understood in Japan before the earthquake (Kadota, 1993; Shimizu & Tomita, 2003), but the traumatic event seemed to accelerate this excessive drinking behavior and, consequently, the number of deaths associated with liver failure doubled. Ueno (1997) also pointed out the strong association between alcoholism and lifestyle after the earthquake, especially among middle-aged men. The other residents at risk in temporary housing were the elderly people, who made up more than half of the total number of victims in the earthquake (Kobe City Department of Fire and Emergency, 1995). The Kobe Law Society (1997) surveyed the demographics of 48 300 households living in *kasetu*. Households with a member aged > 65 years made up 41.8% of households, while 51.2% of households had a single member aged > 65 years, and 39.9% of households had two members > 65 years old. Moreover, 42% of all residents were aged > 60 years, with 19.3% > 70 years, 11% between 65 and 69 years, and 11.7% between 60 and 64 years. These statistics emphasize the vulnerability of the elderly residents that were acutely displaced, in all meanings of the word, by the temporary housing system. Kuroda and Sakai (2008) emphasized the isolating characteristic of *kasetu* and pointed out the health risks likely to occur during this phase.

The majority of victims moved out from the shelters to temporary housing at ~ 2–6 months after the earthquake (Kobe Law Society, 1997). In this period, the victims needed to adapt to new environments, new housing, and a new location and to also begin to re-establish their life. During this phase, the victims were more likely to experience worsening chronic diseases and illness associated with stress (Sakai & Kikuchi, 2008).

Later research by Ikeda *et al.* (2002) investigated the changes in health concerns of the residents since 1996. The diet and activities of daily living were of greatest worry to them during the first year after the earthquake, but had changed 1 year later to more social concerns, such as obtaining a degree of privacy while in their temporary housing. Moreover, 3 years later, the residents' concerns were associated more with problems around communication in these temporary houses.

The *kasetu* closed in 2000 due to permanent housing becoming available (Anonymous, 2000). After moving into permanent housing, the residents responded in a survey that they felt safer in these houses, but that they felt loneliness due to leaving the communities they had joined in the vicinity of the *kasetu* (Ikeda *et al.*, 2002). At this time, the residents still suffered from psychological stress, such as feeling lonely after the earthquake. The primary purpose of the volunteering was to support and promote residents' self-care. Regular visits to *kasetu* to assess residents' self-care capability was important because the volunteers could provide advice and referral if the residents were found to have negative views on self-care or showed some signs of concerns and worries relating to their health status. Ms Nakano commented that "… the regular group approach supported the activities of daily living, especially people with chronic illness and elderly and people who live alone at *kasetu*". Thus, consistent and regular involvement for the dislocated residents was important. The nurses who were involved in these activities and who also were disaster victims healed by sharing their stories and experiences with the residents (Ikeda, 1999).

Recovery from these experiences of loss takes a long time. For some, the level of loss gradually reduces, but never disappears. In fact, these losses are known to have an association with the physical symptoms experienced in the postdisaster period (van den Berg *et al*., 2009).

CONTINUING THE ROLE OF HEALTH PROFESSIONAL VOLUNTEERS

Volunteer work at the temporary housing locations lasted for 4.5 years, after which the residents moved to permanent housing at Happy Active Town Kobe. This is a symbolic project of renovation after the Great Hanshin-Awaji Earthquake, using "Happy Active Town" to represent earnest wishes to make the area affected by the earthquake now filled with happiness and vitality. Smaller-scale volunteer work continues to this day at the new location.

Since the recovery phase starts when a disaster occurs, health professionals need to be mobilized quickly for recovery activities. Health professional volunteers are an important resource after disasters. Kuroda and Sakai (2008) described the objectives of their volunteer work

during relief activities in order to prevent *kodokushi* among the elderly residents and people with a disability after the earthquake. Although their volunteer teams worked in other temporary housing areas in Hyogo Prefecture, considering the number of temporary housing sites and the number of people affected, there is no doubt that more volunteers were needed to support the health maintenance of the communities in the prefecture.

Networking with other volunteer groups and with other health professionals is an essential element of volunteer work (Morishita *et al.*, 2002). Our colleagues today still keep in contact with public health nurses and general practitioners in order to exchange residents' information and to make reports on their health status. Another asset of the health professional volunteer is the ability to assess residents' health status to inform care planning, supportive care, and treatment.

CONCLUSION

Health professional volunteer work played an important role after the 1995 earthquake in Hyogo, Japan. The volunteer organization that we were involved in especially focused on activities to maintain and promote the health of the elderly people who were relocated to *kasetu* after the earthquake. The recovery phase of the disaster, especially during the period covered by the volunteers, was an intense one, especially for those psychologically affected victims who were still suffering from their loss of family members, property, friends, and community. During this phase, the efficient use of the professional knowledge and skills of the volunteers for the maximum benefit of those who were affected by the disaster was important. Health professional volunteers potentially lead other volunteer groups by organizing and networking between such groups. Further investigation of the role of health professional volunteers in the recovery phase after disasters is essential.

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