

## DISASTER PREPAREDNESS FOR CONTINENCE PROBLEM IN OLDER ADULTS

### Hypothesis / aims of study

In recent years, devastating disasters took a heavy toll on many parts of the country, including a major earthquakes or flood damages in Japan. It is one of the important issues how to help and support elderly person in refuge life. There would be several medical problems such as urinary incontinence, urinary tract infection, faecal problem and skin trouble in prolonged life as evacuees because of inadequate toilet and water supply after major disaster, especially in elderly. The aim of this study is to assess the attitude of citizens for disaster preparedness toward elimination problem.

### Study design, materials and methods

We are giving seminars on several issues of continence care for citizens once a month. We run a public program for them November 2009, taking up "Continence care in elderly". This program brought together 230 people, and we requested the participants to respond to a questionnaire in order to assess the attitude on continence preparedness for disasters. The questionnaire included questions on their interests about disaster prevention and continence care, medical problems of elimination of them or their families, special care for those problems and their preparedness for disaster in action.

### Results

A total of 156/230 questionnaires were returned. Of the respondents to the questionnaire, 11(7.0%) were 40 years and younger, 3 (1.3%) were fifties, 40 (25.6%) were sixties and 98 (62.9%) were 70 years and older. 64(41.0%) answered they were interested in both of disaster prevention and continence care. 130(83.3%) answered "I think it is important to handle toilet problem in disaster". Table 1 shows their continence problem. Only 46(29.5%) consulted medical services despite high prevalence of the problem. Table 2 shows their disaster preparedness in action. 50(32.0%) prepared foods and drinkable water, and 35 (22.4%) prepared daily life water. Meanwhile only 13(8.3%) prepared portable toilet and 15 (9.6%) prepared absorbent products for adult. The rate of disaster preparedness on continence care revealed low.

### Interpretation of results

The questionnaire revealed that the rate of disaster preparedness on continence care is low, even though many of residents are associated with high morbidity of continence problem. It is possible they have inadequate basic knowledge of continence care.

### Concluding message

Immediately after the earthquake, a number of problems related to medical care became apparent. Severe damage of infrastructure aggravates toilet activities for many evacuees, especially for elderly people. Urinary incontinence or bowel dysfunction have negative impact on the quality of life (QOL) during life recovery processes after disaster and affect sanitation. Despite the frequent experiences of large-scale disaster, they have not prepared adequately for their elimination. Continence care also should be more informed and educated for public as disaster preparedness.

Table1: Continence problem

Q: Do you have any elimination problem? (multiple answers allowed)	
None	21(13.5%)
Pollakisuria	94(60.3%)
Urinary incontinence	56(35.9%)
Urinary difficulty	15(9.6%)
Constipation	28(17.9%)
Faecal incontinence	6(3.8%)
Diarrhea	14(9.0%)
Flatus incontinence	20(12.8%)
Familial problem	12(7.7%)

Table2: Disaster preparedness in action

Q: What are you preparing for disasters in action? (multiple answers allowed)	
Store foods and drinkable water	50(32.0%)
Securing furniture (cabinets, bookcases, shelves to the wall, etc.)	46(29.5%)
Store daily life water stock	35(22.4%)
Keep fire extinguisher	32(20.5%)
Plan for contacting with my family if separated during a disaster	19(12.2%)
Prepare extra prescription medication	0(0.0%)
Prepare portable toilet	13(8.3%)
Prepare absorbent products for adult	115(9.5%)

<b>Specify source of funding or grant</b>	<b>None</b>
<b>Is this a clinical trial?</b>	<b>No</b>
<b>What were the subjects in the study?</b>	<b>HUMAN</b>
<b>Was this study approved by an ethics committee?</b>	<b>Yes</b>
<b>Specify Name of Ethics Committee</b>	<b>Ethics Committee of Komaki City Hospital</b>
<b>Was the Declaration of Helsinki followed?</b>	<b>Yes</b>
<b>Was informed consent obtained from the patients?</b>	<b>Yes</b>

